LIVERMORE
CALIFORNIA

CITY COUNCIL

AGENDA
MONDAY, JULY 22, 2024

REGULAR MEETING – 7:00 PM

CLOSED SESSION 6:00 PM

MEETING PARTICIPATION INFORMATION CAN BE FOUND AT THE END OF THE AGENDA

CIVIC CENTER MEETING HALL
CITY COUNCIL CHAMBERS
1016 S. LIVERMORE AVENUE

CITY OF LIVERMORE YOUTUBE CHANNEL:
https://www.youtube.com/c/CityofLivermoreCalifornia

TV29:
Comcast TV Channel 29
tv29live.org

John P Marchand, Mayor
Robert W Carling, Vice Mayor
Ben Barrientos, Council Member
Evan Branning, Council Member
Brittni Kiick, Council Member

1. CLOSED SESSION - 6:00 PM

- Roll Call
- Opportunity for the the Public to Address City Council Regarding Closed Session Items
- Adjourn to Closed Session

Note: This Closed Session my be continued to the end of the Regular Meeting.

1.1 Conference with Legal Counsel - Anticipated Litigation. To meet with legal counsel pursuant to Government Code sections 54956.9(d)(2) and (e)(2) because there is significant exposure to litigation against the City based on existing facts and circumstances. (One Case.)

Facts and circumstances related to an accident, disaster, incident, or transactional occurrence that might result in litigation against the City and that are known to a potential plaintiff or plaintiffs

1.2 Conference with Legal Counsel - Existing Litigation. To meet with legal counsel pursuant to Government Code section 54956.9(d)(1) to discuss litigation that has been formally initiated. (Two cases)

Alameda County Taxpayers' Association Inc, et al. v. Livermore, Alameda County Superior Court Case No. 23CV047436
Alameda County Taxpayers' Association Inc, et al. v. Livermore, Alameda County Superior Court Case No. 24CV058036

1.3 Conference with Real Property Negotiator. To meet with Paul Spence Assistant City Manager and Andy Ross Economic Development Manager, the City's negotiators pursuant to Government Code section 54956.8, regarding the sale and purchase of real property at Assessor's Parcel No. 99B-5300-2-13. The City's negotiators may negotiate with Stephen Wawryk and Danielle Davenport on behalf of Western Title Insurance Company. The instructions will concern price and terms of payment.

1.4 Conference with Real Property Negotiator. To meet with Paul Spence Assistant City Manager and Andy Ross Economic Development Manager, the City's negotiators pursuant to Government Code section 54956.8, regarding the sale and purchase of real property at Assessor's Parcel No. 903-10-1. The City's negotiators may negotiate with Stephen Wawryk and Danielle Davenport on behalf of Livermore Venture Partners LP. The instructions will concern price and terms of payment.

1.5 Conference with Real Property Negotiator. To meet with Paul Spence Assistant Manager and Andy Ross Economic Development Manager, the City's negotiators pursuant to Government Code section 54956.8, regarding the purchase and sale of real property at Assessor's Parcel No. 99-100-19-8. The City's negotiators may negotiate with Joe Owens and Steve Jackson, on behalf of Johnny L. Moore & Brett M. Pieretti. The instructions will concern price and terms of payment.

1.6 Conference with Real Property Negotiator. To meet with Paul Spence Assistant Manager and Andy Ross Economic Development Manager, the City's negotiators pursuant to Government Code section 54956.8, regarding the purchase and sale of real property at Assessor's Parcel No. 99B-5680-14. The City's negotiators may negotiate with Jim Arnold, on behalf of Jeanne

Moghadam Trust. The instructions will concern price and terms of payment.

1.7 Conference with Real Property Negotiator. To meet with Paul Spence Assistant Manager and Andy Ross Economic Development Manager, the City's negotiators pursuant to Government Code section 54956.8, regarding the purchase and sale of real property at Assessor's Parcel Ns. 099B-5500-001-10 and 099B-5500-002-5. The City's negotiators may negotiate with real estate staff members for, and on behalf of, the San Francisco Bay Area Rapid Transit (BART) District. The instructions will concern price and terms of payment.

2. CALL TO ORDER

ROLL CALL

Council Member Ben Barrientos
Council Member Evan Branning
Council Member Brittni Kiick
Vice Mayor Robert W. Carling
Mayor John Marchand

PLEDGE OF ALLEGIANCE

REPORT OF ACTION TAKEN IN CLOSED SESSION

3. PROCLAMATIONS AND PRESENTATIONS

3.1 Livermore Housing Authority annual update presented by Sarah Ramler, Executive Director, Livermore Housing Authority.

Recommendation:
Staff recommends City Council accept the Livermore Housing Authority annual update.

Staff Report

4. OPEN FORUM

- In conformance with the Brown Act, no City Council action can occur on items presented during Open Forum.
- To provide public comment in person, please submit a speaker card. When your name is called, walk to the lectern to address City Council.
- Comments are limited to a maximum of 3 minutes per person, per item. The Mayor may reduce the amount of time based on the number of persons wishing to speak.
- Comments are limited to one comment per person per item regardless of format or time submitted (this includes email and e-comment submissions prior to the meeting as well as live comments during the meeting).
- Open Forum will conclude after 30 minutes; however, if there are additional speakers, Open Forum will reconvene before the meeting adjourns.

5. CONSENT CALENDAR

Consent Calendar items are considered routine and are acted upon by the City Council with a single action. Members of the audience wishing to provide public input must submit a speaker

card found at the entrance of the Council Chambers. A speaker is limited to a single comment with a maximum of three minutes for the entire Consent Calendar. If Consent Calendar items are pulled for discussion by the City Council, a speaker will be allowed one comment per item, on the items pulled for discussion and a separate comment for the remaining Consent Calendar. The one comment limit applies regardless of format or time submitted (this includes email and e-comment submissions prior to the meeting as well as live comments during the meeting).

5.1 Approval of draft minutes - June 24, 2024 Regular Meeting

Recommendation:
Staff recommends the City Council approve the draft minutes.

Staff Report
Attachments:
1. DRAFT 2024-06-24

5.2 Approval of draft minutes - July 8, 2024 Regular Meeting.

Recommendation:
Staff recommends the City Council approve the draft minutes.

Staff Report
Attachments:
1. DRAFT 2024-07-08

5.3 Resolution dedicating a Public Utility Easement (PUE) to the public over a portion of City owned land within a portion of Stockmen's Park and authorizing the City Manager to execute the PUE to serve the designated Commercial Use Areas adjacent to Stockmen's Park.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to dedicate a Public Utility Easement (PUE) over City property within a portion of Stockmen's Park.

Staff Report
Attachments:
1. Site Location Plan
2. Resolution
3. Exhibit A - Public Utility Easement

5.4 Resolution to summarily vacate a portion of public right-of-way along South Livermore Avenue and authorizing execution of quitclaim deeds to accommodate the approved Blacksmith Square Expansion project.

Recommendation:
Staff recommends the City Council adopt a resolution summarily vacating a portion of right-of-way for public highway purposes along South Livermore Avenue approximately 0.4 feet in width, for a total of 67.461 square feet of right-of-way and authorize the City Manager to

quitclaim the right-of-way to Maroon Bear, a California Limited Partnership and Blacksmith Square LLC, a California Limited Liability Company (Property Owners).

Staff Report
Attachments:
1. Vicinity Map
2. Resolution
3. Exhibit A - Plat and Legal Description
4. Exhibit B - Quitclaim Deed, Blacksmith Square LLC
5. Exhibit C - Quitclaim Deed - Maroon Bear

5.5 Resolution authorizing the City Manager to execute the first amendment to the Amended and Restated Disposition, Development, and Loan Agreement between the City of Livermore and 2205 Railroad Avenue LLC for a downtown hotel.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute the first amendment to the Amended and Restated Disposition, Development, and Loan Agreement between the City of Livermore and 2205 Railroad Avenue LLC for a downtown hotel.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - First Amendment

5.6 Resolution authorizing the execution of an agreement with Michael Baker International, Inc. for services to support the administration of the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program in a not-to-exceed amount of $400,000, a term ending June 30, 2029, and appropriating $400,000 over five years from the Housing Trust Fund.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the execution of an agreement with Michael Baker International, Inc. for services to support the administration of the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program in a not-to-exceed amount of $400,000, a term ending June 30, 2029, and appropriate $400,000 over five years from the Housing Trust Fund.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement

5.7 Resolution authorizing the change of the General Partner for 2891 Carmen, L.P., owner of the Carmen Avenue Apartments from Satellite AHA Development, Inc. to ABODEHD 2891 CARMEN LLC, to streamline property management and service delivery.

Recommendation:

Staff recommends that the City Council adopt a resolution authorizing the City Manager to approve ABODEHD 2891 CARMEN LLC as the new General Partner in the 2891 Carmen, L.P., California limited partnership for the Carmen Avenue Apartments to streamline property management and service delivery once Abode oversees all aspects of the partnership.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Approval for General Partner Change
3. Exhibit B - Agreement to Withdraw and Transfer Partnership Interest

5.8 Resolution authorizing the execution of a second amendment to the Memorandum of Understanding between the City of Livermore, Alameda County, and Livermore Sanitation, Inc. to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1 and to determine no further action under CEQA is required.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute a second amendment to the Memorandum of Understanding between the City of Livermore, Alameda County, and Livermore Sanitation, Inc. to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1 and to determine that no further action under CEQA is required.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Second Amendment

5.9 Resolution authorizing the execution of agreements with GSW Construction, Inc. and Platinum Pipeline, Inc. for on-call construction services for City water, sewer, and storm drain systems for a three-year term in an amount not-to-exceed $2,400,000.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute agreements with Platinum Pipeline, Inc. and GSW Construction, Inc. for on-call construction services for City water, sewer, and storm drain systems for a three-year term in an amount not-to-exceed $2,400,000.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement - GSW
3. Exhibit B - Agreement - Platinum Pipeline

5.10 Resolution awarding and authorizing the execution of an agreement with Environmental Logistics, Inc. for services to remove, clean, and dispose of hazardous and non-hazardous materials for a three-year term in an amount not-to-exceed $775,000.

Recommendation:
Staff recommends the City Council adopt a resolution awarding and authorizing the execution of an agreement with Environmental Logistics, Inc. for services to remove, clean, and dispose of hazardous and non-hazardous materials for a three-year term in an amount not-to-exceed $775,000.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement

5.11 Resolution appropriating $4,300,000 in Wastewater Enterprise Funds in FY 2024-25 for the repair and relocation of the Livermore Sole-Use Treated Wastewater Pipeline

Recommendation:
Staff recommends that the City Council adopt a resolution appropriating $4,300,000 in wastewater enterprise funds in FY 2024-25 for the repair and relocation of the Livermore sole-use treated wastewater pipeline.

Staff Report
Attachments:
1. Resolution

5.12 Resolution authorizing the issuance of a purchase order to Petersen Cat for a Weiler P65 Paver in an amount not-to-exceed $143,554 and an appropriating $143,554 from the Fleet Internal Service Fund to purchase the Paver.

Recommendation:
Staff recommends that the City Council adopt a resolution authorizing the execution of a purchase order with Peterson Cat for a replacement asphalt paver in a not-to-exceed amount of $143,554 and appropriating $143,554 from the Fleet Internal Service Fund.

Staff Report
Attachments:
1. Sourcewell Contract #060122-WLR
2. Peterson Caterpillar Quotation
3. Resolution

5.13 Resolution authorizing execution of an agreement with NFP Retirement, Inc. for consultant services pertaining to the City's Deferred Compensation Plans in an amount not-to-exceed $208,000, and a term ending June 30, 2029.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute the agreement with NFP Retirement, Inc. for consultant services pertaining to the City's Deferred Compensation Plans in an amount not-to-exceed $208,000, and a term ending June 30, 2029.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement

5.14 Resolution authorizing the execution of an agreement with Eide Bailly, LLP for auditing services in an amount not-to-exceed $360,000 for fiscal years 2023-24 and 2024-25.

Recommendation:
Staff recommends that the City Council adopt a resolution authorizing the City Manager to execute an agreement with Eide Bailly, LLP for auditing services in an amount not-to-exceed $360,000 for fiscal years 2023-24 and 2024-25.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement

5.15 Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.

Recommendation:
The Commission for the Arts and staff recommend the City Council adopt a resolution approving the applications and authorizing the execution of the following Project and Program Grant Agreements:

1. Livermore Pride, in the amount of $10,000 for Art Programming at the 5th Annual Livermore Pride Fest.
2. Livermore Valley Opera (LVO), in the amount of $10,000 for LVO's Education and Community Engagement Program.
3. Thomasin Dewhurst Fine Art, in the amount of $10,000 for a visual arts collaboration between Arts and Science in the form of a mural project and event.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Livermore Pride Agreement
3. Exhibit B - Livermore Valley Opera Agreement
4. Exhibit C - Thomasin Dewhurst Fine Art Agreement

5.16 Resolution authorizing the execution of an agreement with All City Management Services, Inc. to provide crossing guard services for a five-year term, in an amount not-to-exceed $1,516,644.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute an agreement with All City Management Services, Inc. to provide crossing guard services in

an amount not-to-exceed $1,516,644 for a five-year term for the period July 1, 2024, through June 20, 2029.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Agreement

5.17 Resolution authorizing acceptance of funds in the amount of $64,074, for a State of California Department of Alcoholic Beverage Control grant in Fiscal Year 2024-25 and authorizing the City Manager to execute the grant agreement.

Recommendation:
Staff recommends the City Council adopt a resolution:
1. Authorizing acceptance of funds, in the amount of $64,074, for a State of California Department of Alcoholic Beverage Control grant in Fiscal Year 2024-25;
2. Authorizing the City Manager to execute the grant agreement; and
3. Approving a supplemental appropriation of $64,074 in the Police Department's budget to support the execution of the grant.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Grant Agreement

5.18 Resolution establishing fees for a concealed carry weapons (CCW) permit and appropriating $15,000 of the fee revenue to cover the costs to implement the CCW permit program.

Recommendation:
Staff recommends the City Council adopt a resolution approving the listed rates for obtaining a concealed carry weapon (CCW) permit and appropriating $15,000 of the fee revenue to cover the costs to implement the CCW permit program.

Staff Report
Attachments:
1. Resolution

5.19 Resolution authorizing the City Manager to execute all documents and forms for the City to participate in settlement agreements for the National Prescription Opiate Litigation.

Recommendation:
Staff recommends the City Council adopt a resolution authorizing the City Manager to execute all documents and forms necessary for the City of Livermore to participate in settlement agreements for the National Prescription Opiate Litigation.

Staff Report
Attachments:
1. Resolution

5.20 Rescind Resolution 170-82 designating Tri-Valley Community Television Corporation as the official body to receive cable television funds.

Recommendation:
Staff recommends that the City Council rescind Resolution 170-82 as it does not conform with current practices and is unnecessary to the management of Public, Education, and Government (PEG) funds.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Resolution 170-82

5.21 Resolution of continued local emergency in response to impacts from a series of severe storm events last year.

Recommendation:
Staff recommends the City Council adopt a resolution of continued local emergency in response to impacts from a series of severe storm events last year.

Staff Report
Attachments:
1. Resolution

5.22 THIS ITEM WAS CONTINUED FROM THE JULY 8, 2024 CITY COUNCIL MEETING.
Resolution accepting the recommendation of the Altamont Landfill Open Space Committee to authorize the City's grant request, finding the acquisition of the Hartford Hills Property is categorically exempt from CEQA, authorizing the City Manager to enter into a Purchase and Sale Agreements for open space land, and appropriating funds from the Dougherty Valley Settlement Agreement account. Location: Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2).

Recommendation:
Staff recommends the City Council adopt separate resolutions to:

1. Accept the recommendation of the Altamont Landfill Open Space Committee to authorize the City of Livermore's grant requests for the Hartford Hills Property (in the amount of $980,000); and determine that the Altamont Landfill Open Space Committee’s recommended expenditure of Open Space Account funds is not a project under California Environmental Quality Act (CEQA) Guidelines section 15378.
2. Determine the acquisition is categorically exempt from CEQA in accordance with CEQA Guidelines Section 15313, which exempts acquisitions of lands to preserve the land in its natural condition.
3. Authorize the City Manager to enter into a Purchase and Sale Agreement and execute all documents necessary to acquire the Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2); and
4. Appropriate funds from the Dougherty Valley Settlement Agreement (Fund 925) for the amount of $980,000 to acquire the Hartford Hills Property (82 acres – APNs: 902-9-3-1,

902-9-3-2).

Staff Report

Attachments:

1. Financial Analysis
2. Property Acquisitions Map
3. Location Map - Hartford Hills Property
4. Planning Commission Meeting Minutes
5. Letter to Citizens for Balanced Growth
6. Resolution - Hartford Hills Concurrence of Funds
7. Resolution - CEQA Hartford Hills Property
8. Resolution - Hartford Hills Authorizing City Manager
9. Exhibit A - Planning Commission Resolution
10. Exhibit B - Hartford Hills Purchase and Sale Agreement
11. Resolution - Hartford Hills Acquisition Funding

5.23 Resolution authorizing an agreement with Attitude Aviation Inc. for the use of airport property for equipment, materials, and vehicle storage, for a term up to five years and a Base Rental Rate of $21,582 per year.

Recommendation:

Staff recommends the City Council adopt a resolution authorizing the City Manager to sign an agreement with Attitude Aviation Inc. for the use of airport property for equipment, materials, and vehicle storage, for a term up to five years and a Base Rental Rate of $21,582 per year.

Staff Report

Attachments:

1. Resolution
2. Exhibit A - Agreement

6. PUBLIC HEARINGS

Comments are limited to one comment per person per item regardless of format or time submitted (this includes email and e-comment submissions prior to the meeting as well as live comments during the meeting).

6.1 Public Hearing to consider protests related to the non-payment of solid waste, recycling, and organics handling services provided by Livermore Sanitation for collection on the County Assessor tax roll.

Recommendation:

Staff recommends the City Council hold a Public Hearing to:

1. Consider protests related to the non-payment of solid waste, recycling, and organics services;
2. Adopt a resolution overruling protests and confirm the 2022 and 2023 assessments if applicable; and,
3. Direct staff to forward a finalized copy of the assessment report to the County Tax Assessor.

Staff Report

Attachments:

1. Resolution
2. Exhibit A - Assessment List

6.2 Hearing to consider a request for a Vesting Tentative Tract Map, Site Plan Design Review, Development Agreement, Consistency Determination, Conditional Use Permit, Master Sign Program Amendment, and Development Code amendment to develop vacant land located southwest of the Portola Avenue and Isabel Avenue intersection with for-sale residential townhome and condominium units and for-rent apartments with mixed commercial and office uses and a public park and public plazas, known as Isabel Crossing.

Recommendation:

The Planning Commission and staff recommend the City Council take the following actions:

1. Adopt a resolution adopting an Addendum to the Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report, in accordance with the California Environmental Quality Act.
2. **Introduce an ordinance** and waive the first reading approving Development Code Amendment (DCA) 24-001;
3. Adopt a resolution approving Specific Plan Amendment (SPPA) 24-001;
4. **Introduce an ordinance** and waive the first reading approving Development Agreement (DA) 22-001;
5. Adopt a resolution approving Subdivision (SUB) 22-008, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Master Sign Plan Amendment (MSP) 24-001; the proposed Master Plan; the Alternative Affordable Plan; the requested Density Bonus Waivers and Incentive/Concessions; and the No Net Loss findings;
6. Direct the Planning Manager to file a Notice of Determination, in accordance with the provisions of the California Environmental Quality Act, subject to Project approval; and
7. Direct the City Clerk to record the Development Agreement, in accordance with the provisions of the California Government Code, subject to Project approval.

Staff Report

Attachments:

1. Memo - Staff Analysis - Isabel Crossing
2. Memo - Utilities and Infrastructure - Isabel Crossing
3. Map - Location - Isabel Crossing
4. Map - Transportation Infrastructure - Isabel Crossing
5. Map - Existing Land Use
6. State Law - No Net Loss Summary
7. Policy - Housing Element Sites Inventory Excerpt
8. Policy - Master Planning - Isabel Neighborhood Specific Plan
9. Study - Kosmont Economic Analysis
10. Letter - Density Bonus Request
11. Letter - LVJUSD
12. Letters - Public Support

13. Draft Minutes - Planning Commission Meeting
14. Resolution - CEQA
15. Exhibit A - Planning Commission CEQA Resolution
16. Exhibit B - Specific Plan EIR Addendum
17. Exhibit C - Addendum Appendix Volume A
18. Exhibit D - Addendum Appendix Volume B
19. Ordinance - Development Code Amendment
20. Exhibit A - PC Development Code Resolution
21. Exhibit B - Livermore Development Code Text Amendment
22. Resolution - Specific Plan Amendment
23. Exhibit A - Planning Commission Specific Plan Amendment Resolution
24. Exhibit B - Specific Plan Map Amendment
25. Exhibit C - Specific Plan Text Amendment
26. Ordinance - Development Agreement
27. Exhibit A - Planning Commission Development Agreement Resolution
28. Exhibit B - Development Agreement
29. Resolution - Project
30. Exhibit A - Planning Commission Project Resolution
31. Exhibit B - Planning Commission Consistency Determination Resolution
32. Exhibit C - Architectural Plans
33. Exhibit D - Landscape Plans
34. Exhibit E - Civil Plans
35. Exhibit F - Proposed Master Plan
36. Exhibit G - Conditions of Approval

7. MATTERS FOR CONSIDERATION

Comments are limited to one comment per person per item regardless of format or time submitted (this includes email and e-comment submissions prior to the meeting as well as live comments during the meeting).

7.1 Resolution adopting 180-day wait period exception to hire retired annuitant, Nancy Dias, former Human Resources Manager, in accordance with Government Code section 7522.56 of the Public Employees' Retirement Law.

Recommendation:
Staff recommends that the City Council adopt a resolution approving the hiring of retired annuitant, Nancy Dias, former Human Resources Manager, in accordance with Government Code section 7522.56 of the Public Employees' Retirement Law.

Staff Report
Attachments:
1. Resolution
2. Exhibit A - Offer Letter with Enclosures

8. COUNCIL COMMITTEE REPORTS AND MATTERS INITIATED BY CITY MANAGER, CITY ATTORNEY, AND COUNCIL MEMBERS

9. ADJOURNMENT

To a Regular City Council meeting on Monday, September 9, 2024 at 7:00 pm, Civic Center Meeting Hall, City Council Chambers, 1016 S. Livermore Avenue.

10. SUPPLEMENTAL MATERIALS

10.1 Supplemental materials received prior to the meeting.

Staff Report
Attachments:
1. Supplemental Materials

10.2 Supplemental materials received at the meeting.
Staff Report
Attachments:
1. Additional Material Received

11. HOW TO PARTICIPATE IN YOUR CITY COUNCIL MEETING

You can participate in the meeting in a number of ways:

Open Forum is an opportunity for the public to speak regarding items not listed on the agenda. Speakers are limited to a maximum of 3 minutes per person. To address the City Council in person, you must submit a speaker card to the City Clerk prior to the start of that item. Please note that the City Council is prohibited by State law from taking action on any items that are not listed on the agenda. However, if your item requires action, the City Council may place it on a future agenda or direct staff to work with you and/or report to the City Council on the issue.

Public Hearings - The topic of the hearing is typically summarized by staff, followed by a presentation by the applicant, and questions from the City Council. The Mayor will then open the hearing to the public and offer an opportunity for public comments. Speakers are limited to a maximum of 3 minutes per person. To address the City Council in person, you must submit a speaker card to the City Clerk prior to the start of the presentation of the item.

Other Agenda Items are also open for public input including Consent Calendar or Matters for Consideration items. These comments are also subject to the 3-minute limit.

Special Meetings, Workshops - The public will have the opportunity to address the City Council regarding the item that is the subject of the special meeting or workshop. Public comments are limited to a maximum of 3 minutes per person.

Platforms to Participate in Meetings:

Submission of Comments Prior to the Meeting:

Email Comments may be submitted by the public to the City Clerk's Office (cityclerk@LivermoreCA.gov). Items received no later than 12:00 pm on the day of the meeting will be provided to the City Council and available on the City website prior to the meeting. These items will NOT be read into the record.

eComments may be submitted by the public using the eComment link here. Comments may be up to 1000 characters in length and will be accepted up until 4:00 pm the day of the meeting. These items will NOT be read into the record and are viewable by the City Council and the public upon submittal.

Submission of Comments During the Meeting:

Speakers are limited to a maximum of 3 minutes per person. To submit a comment you must complete a speaker card for each item. Speaker cards are available in the Civic Center Meeting Hall lobby. Indicate on the card the item number you wish to comment on and submit the card directly to the City Clerk prior to the start of the item. Please note that the City Council is prohibited by State law from taking action on any items that are not listed on the agenda. However, if your item requires action, the City Council may place it on a future agenda or direct staff to work with you and/or report to the City Council on the issue.

The City will be using YouTube and TV29 as two tools to provide the public access to view City Council meetings. No public comment will be accepted via YouTube.

TV29: tv29live.org Comcast Cable 29

YouTube: http://youtube.com/c/CityofLivermoreCalifornia

If you would like to deliver written materials to the City Council as part of your public comment, please provide 10 copies to the City Clerk with your speaker card.

The **City Council Agenda and Agenda Reports** are prepared by City staff and are available for public review on Tuesday evening, six days prior to the City Council meeting in the Civic Center Library, 1188 South Livermore Avenue, Livermore, and at the City Clerk's Office, 1052 South Livermore Avenue, Livermore. The Agenda is also available on the City's website, http://LivermoreCA.gov/agenda.

Under Government Code §54957.5, any **supplemental material** distributed to the members of the City Council after the posting of this agenda will be available for public review in the City Clerk's Office, 1052 South Livermore Avenue, Livermore, and included in the agenda packet available on the City's web site at http://LivermoreCA.gov/agenda.

PURSUANT TO TITLE II OF THE AMERICANS WITH DISABILITIES ACT (CODIFIED AT 42 UNITED STATES CODE SECTION 12101 AND 28 CODE OF FEDERAL REGULATIONS PART 35), AND SECTION 504 OF THE REHABILITATION ACT OF 1973, THE CITY OF LIVERMORE DOES NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, RELIGION, NATIONAL ORIGIN, ANCESTRY, SEX, DISABILITY, AGE OR SEXUAL ORIENTATION IN THE PROVISION OF ANY SERVICES, PROGRAMS, OR ACTIVITIES. TO ARRANGE AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PUBLIC MEETING, PLEASE CONTACT THE ADA COORDINATOR AT ADACOORDINATOR@LIVERMORECA.GOV OR CALL (925) 960-4170 (VOICE) OR (925) 960- 4104 (TDD) AT LEAST THREE (3) BUSINESS DAYS IN ADVANCE OF THE MEETING.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 3.1**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Livermore Housing Authority annual update presented by Sarah Ramler, Executive Director, Livermore Housing Authority.

RECOMMENDED ACTION

Staff recommends City Council accept the Livermore Housing Authority annual update.

SUMMARY

DISCUSSION

ATTACHMENTS

Prepared by: Debbie Elam
Acting City Clerk

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.1**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Approval of draft minutes - June 24, 2024 Regular Meeting

RECOMMENDED ACTION

Staff recommends the City Council approve the draft minutes.

SUMMARY

DISCUSSION

ATTACHMENTS

1. DRAFT 2024-06-24

Prepared by: Debbie Elam
Acting City Clerk

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

LIVERMORE
CALIFORNIA

CITY COUNCIL
JUNE 24, 2024

REGULAR MEETING

1. NONE

2. CALL TO ORDER – The meeting of the City Council was called to order by Mayor John Marchand at 7:00 pm, held in person at 1016 S. Livermore Avenue and YouTube.

ROLL CALL – Present: Mayor John Marchand, Vice Mayor Robert W. Carling, and Council Members, Ben Barrientos, Evan Branning and, Brittni Kiick.

PLEDGE OF ALLEGIANCE

3. PROCLAMATIONS AND PRESENTATIONS

3.1 Proclamation declaring July 28 through August 4, 2024, as Play Ball Week presented to Kathleen Minser, Little League World Series Marketing & Media Director.

Mayor Marchand presented a proclamation to Kathleen Minser, Little League World Series marketing & Media Director declaring July 28 through August 4, 2024, as Play Ball Week.

4. OPEN FORUM

The Mayor reordered the agenda moving Open Forum after item 7.2

5. CONSENT CALENDAR

Mayor Marchand opened the public comment period.

There were no speakers, and the public comment period was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER KIICK AND CARRIED ON A 5-0 VOTE, THE CITY COUNCIL APPROVED THE CONSENT CALENDAR.

5.1 Introduce an ordinance and waive the first reading revising Municipal Code Chapter 2.68, Contracts and Purchasing, to change contract approval authorities, add department head contract and purchasing responsibilities, add solicitation

procedures for professional services contracts, and other miscellaneous revisions.

5.2 Resolution 2024-093 authorizing execution of a first amendment to the agreement with Precision Emprise, LLC, dba Precision Concrete Cutting for on-call concrete cutting services increasing the not-to-exceed contract amount from $500,000 to $1,000,000 and extending the term of the agreement to December 30, 2027.

5.3 Resolution 2024-094 authorizing execution of a fourth amendment to the agreement with Watry Buehler Collaborative, LLP increasing the not-to-exceed amount from $1,792,800 to $2,091,800 for additional engineering services during construction associated with the Livermore Village Parking Garage Construction Project 586003.

5.4 Resolution 2024-095 authorizing the following actions for the Resurfacing and Sidewalk Improvements Project composed of the Street Resurfacing 2022 Project 2022-01, Sidewalk Repair 2023 Project 2023-02, and ADA Access Ramps 2021 Project 2021-07: Reject the Bid Proposal from apparent lowest bidder, Mountain Cascade Inc., finding the bid to be incomplete and nonresponsive, authorize supplemental appropriations in FY 2024-25, and award a construction agreement to A. Teichert & Son, Inc., dba Teichert Construction in an amount of $4,178,975.

5.5 Resolution 2024-096 authorizing approving Final Tract Map 8657; authorizing execution of a Subdivision Improvement Agreement for the Triad Drive East Development (Amarone); and accepting on behalf of the public all real property offered for dedication within the Final Tract Map 8657 except for the certain easements which City Council reserves the right to accept at a future date.

5.6 Resolution 2024-097 authorizing execution of an agreement with Holloway Environmental Solutions, LLC for Biosolids Hauling and Disposal Services in an amount not-to-exceed $2,288,790, a term ending June 30, 2027, and an appropriation increase of $103,430 to the Sewer Fund Operating Budget for FY 2024-25.

5.7 Resolution 2024-098 authorizing execution of an agreement for services with Kemira Water Solutions, Inc. for the supply and delivery of ferric chloride for use at the Water Reclamation Plant in an amount not-to-exceed $200,000.

5.8 Resolution 2024-099 authorizing execution of an agreement with Gigantic Idea Studio, Inc. to assist with recycling and organics diversion outreach campaign services for the term of July 1, 2024, to June 30, 2026, in the amount not-to-exceed $215,000.

5.9 Resolution 2024-100 authorizing execution a purchase order to Baker & Taylor Books for purchases of library books and related materials in FY 2024-25, in an amount not-to-exceed $240,000.

5.10 Resolution 2024-101 authorizing execution a purchase order to OverDrive

for the licensing of e-books, audiobooks, and electronic periodicals, in an amount not-to-exceed $140,000.

5.11 Resolution 2024-102 adopting the Police Tow Service Franchise Fee Schedule.

5.12 Resolution 2024-103 authorizing execution of an agreement with NBS Government Finance Group to provide services in administering the City's Assessment Districts, Community Facilities Districts, and Continuing Disclosures in an amount not-to-exceed $350,000 for a five-year term.

5.13 Resolution 2024-104 amending the City of Livermore Salary Plan dated July 2024 to reflect salary increases for the Livermore Management Group, Livermore Police Management Association, Police Chief, Management Confidential, and Confidential Employees in accordance with California Code of Regulations, Title 2, Section 570.5.

6. PUBLIC HEARINGS

6.1 Hearing to receive and consider all evidence and reports regarding the adoption of a Master Fee Schedule. The Master Fee Schedule establishes fees for City services. The fee resolution and accompanying justification includes new, increased, and decreased fees into one document.

Recommendation: Staff recommended the City Council adopt a resolution adopting the City's Master Fee Schedule, incorporating certain fee changes and superseding resolution 2023-128.

Finance Manager Eric Petersen presented the staff report.

Mayor Marchand opened the public hearing.

There were no speakers, and the hearing was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER KIICK AND CARRIED ON A 5-0 VOTE, THE CITY COUNCIL ADOPTED THE FOLLOWING RESOLUTION:

Resolution 2024-105 adopting the Master Fee Schedule incorporating certain fee changes for services provided and superseding Resolution 2023-128.

6.2 Hearing to on Police Department Tow Franchise Proposals for RFP & Q No. 4262 to grant a non-exclusive tow franchise agreement, for a five-year term, from July 1, 2024 - June 30, 2029

Recommendation: Staff recommended the City Council authorize the City Manager to grant a non-exclusive tow franchise agreement, for a five-year term, commencing July 1, 2024, and ending June 30, 2029, in substantial conformance to Exhibit A to the resolution to the following companies: 1. Action Road Solutions

DBA Jack James Tow Service, 2.Central Towing & Transport, LLC,3. ITN Holdings, LLC DBA First Street Tow, 4. Golden State Fleet Services, and 5. Norm's Tow Service.

Police Captain John Reynolds presented the staff report.

Mayor Marchand opened the public hearing.

Jeff Ruckteschler provided a comment.

Jeff Pawloski provided a comment.

Suzy Pawloski provided a comment.

Alan Cerro provided a comment.

There were no more speakers, and the hearing was closed.

ON THE MOTION OF COUNCIL MEMBER KIICK, SECONDED BY COUNCIL MEMBER BARRIENTOS CARRIED ON A 4-1 VOTE, WITH COUNCIL MEMBER BRANNING VOTING AGAINST, THE CITY COUNCIL ADOPTED THE FOLLOWING RESOLUTION AND DIRECTED STAFF TO MEET WITH THOSE BUSINESSES THAT WANT TO PROCURE THE REQUIRED EQUIPMENT AND PARTICIPATE IN A FUTRE RFP. IN ADDITION, STAFF WAS DIRECTED TO REVIEW THE ORDINANCE SECTION REGARDING SUBCONTRACTING AND PROVIDE AN UPDATE AT A FUTRE MEETING.

Resolution 2024-106 granting non-exclusive tow franchises.

7. MATTERS FOR CONSIDERATION

7.1 Appointment of Council Members to the City Council Subcommittee on Advisory Bodies for the period of July 1, 2024 - December 31, 2024.

Recommendation: Staff recommended the Mayor appoint two Council Members to serve on the City Council Subcommittee on Advisory Bodies for the period of July 1, 2024 - December 31, 2024, with the City Council's approval.

Mayor Marchand opened the public comment period.

There were no speakers, and the public comment period was closed.

ON THE MOTION OF MAYOR MARCHAND, SECONDED BY VICE MAYOR CARLING AND CARRIED ON A 5-0 VOTE, THE CITY COUNCIL APPOINTED MAYOR MARCHAND AND COUNCIL MEMBER KIICK TO THE SUBCOMMITTEE ON ADVISORY BODIES

7.2 Certification of referendum petition against Resolution No. 2022-085, action to either repeal the resolution, or call for an election for the voters to

approve or set aside the legislative acts in the resolution for the construction of and improvements to Veterans Park, and consideration of a companion resolution ratifying the Amended and Restated Disposition, Development and Loan Agreement with Eden Housing, Inc.

Recommendation: Staff recommended the City Council:
1. Adopt a resolution accepting the Alameda County Registrar of Voter's certification of sufficiency of the signatures on the referendum petition against Resolution No. 2022-085; and,
2. Take one of the following actions as provided by the Elections Code:
Livermore City Council Agenda June 24, 2024
Option 1: Adopt a resolution repealing Resolution No. 2022-085; or,
Option 2: Adopt a resolution calling for an election to place Resolution No. 2022-085 on the ballot for the voters to approve or set aside the legislative acts in the resolution for the construction of and improvements to Veterans Park; requesting that the Alameda County Registrar of Voters conduct the election; and establishing dates for ballot measure arguments.
3. Staff further recommends the City Council adopt a companion resolution to ratify, reaffirm, and readopt the terms and conditions in the Amended and Restated Disposition, Development and Loan Agreement with Eden Housing, Inc., other than for construction of and improvements to Veterans Park, and to acknowledge that the agreement remains in effect as of the date it was signed.

City Attorney Jason Alcala presented the staff report.

Mayor Marchand opened the public comment period.

Michelle Cornell-Davis provided a comment.

Linda Mandolini provided a comment.

Chris Scarborough provided a comment.

Greg Rogowski provided a comment.

Sherri Souza provided a comment.

Jim Johnson provided a comment.

Barbara Lymberis provided a comment.

Owen Brovont provided a comment.

Tom Soules provided a comment.

Tom Ramos provided a comment.

Richard Ryon provided a comment.

Rick Edson provided a comment.

Greg Scott provided a comment.

Alexis Ashley provided a comment.

Julie provided a comment.

Alan Burnham provided a comment.

Jan Brovont provided a comment.

Nancy Keenan provided a comment.

Jean King provided a comment.

Doug Mann provided a comment.

Trish Munro provided a comment.

Adam Feidy provided a comment.

Jeff Kaskey provided a comment.

Loretta Kaskey provided a comment.

Lori Souza provided a comment.

David Kent provided a comment.

Darcie Kent provided a comment.

Terry Land provided a comment.

Michael Ferrucci provided a comment.

David Jonas provided a comment.

Valerie Jonas provided a comment.

Alan Marling provided a comment.

Chance Boreczky provided a comment.

Matt Regan provided a comment.

Tim Sbranti provided a comment.

David Best provided a comment.

Joe Clark provided a comment.

John Steinbuch provided a comment.

Andrew Sabey provided a comment.

Jasid Qalandarzada provided a comment.

Karl Wente provided a comment.

There were no more speakers, and the public comment period was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY VICE MAYOR CARLING AND CARRIED ON A 4-1 VOTE, WITH COUNCIL MEMBER BARRIENTOS VOTING AGAINST THE CITY COUNCIL ADOPTED THE FOLLOWING RESOLUTIONS:

Resolution 2024-107 accepting the Alameda County Registrar of Voters certification as the sufficiency of signatures on the Referendum Petition Against Resolution No. 2022-085.

Resolution 2024-108 repealing Resolution No. 2022-085.

Resolution 2024-109 accompanying the action taken by the City Council in response to the Referendum Petition Against Resolution No. 2022-085, and to ratify, reaffirm, and readopt the Amended and Restated Disposition Development and Loan Agreement approved by that resolution, with the exception of the legislative acts approving the construction of and improvements to Veterans Park and to acknowledge the agreement otherwise remains in effect from the date it was signed.

4. OPEN FORUM

Mayor Marchand opened the public comment period.

Greg Scott provided a comment.

Karl Wente provided a comment.

There were no more speakers, and the public comment period was closed.

8. COUNCIL COMMITTEE REPORTS AND MATTERS INITIATED BY CITY MANAGER, CITY ATTORNEY, STAFF AND COUNCIL MEMBERS

THE MAYOR AND CITY COUNCIL MEMBERS PROVIDED A SUMMARY OF RECENTLY ATTENDED EVENTS AND MEETINGS IN ADDITION TO THE INFORMATION PROVIDED IN THE SUPPLEMENTAL PACKET. COUNCIL MEMBERS WHO DID NOT PROVIDE A SUMMARY IN THE SUPPLEMENTAL PACKET ARE INCLUDED BELOW.

Quest Science Center, Vice Mayor Carling noted his attendance at a Q&A event on June 13, 2024.

Tri-Valley Conservancy, Vice Mayor Carling noted his attendance at an event celebrating 30 years of the Conservancy on June 13, 2024.

Goodness Village, Vice Mayor Carling noted his attendance at a fundraiser on June 15, 2024.

City of Livermore, Vice Mayor Carling noted his attendance at the staff Ice Cream Social on June 20, 2024.

Livermore Area Recreation and Park District, Vice Mayor Carling noted his attendance at the Wine Down in the Grove fundraiser on June 22, 2024.

9. ADJOURNMENT – at 10:14 pm to a Regular City Council Meeting on Monday, July 8, 2024, at 7:00 pm, Civic Center Meeting Hall, City Council Chambers, 1016 S. Livermore Avenue.

APPROVED: _____
JOHN P. MARCHAND, MAYOR

ATTEST: _____
DEBORAH L. ELAM, ACTING CITY CLERK

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.2**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Approval of draft minutes - July 8, 2024 Regular Meeting.

RECOMMENDED ACTION

Staff recommends the City Council approve the draft minutes.

SUMMARY

DISCUSSION

ATTACHMENTS

1. DRAFT 2024-07-08

Prepared by: Debbie Elam
Acting City Clerk

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

LIVERMORE
CALIFORNIA

CITY COUNCIL
JULY 8, 2024

REGULAR MEETING

1. NONE

2. CALL TO ORDER – The meeting of the City Council was called to order by Mayor John Marchand at 7:00 pm, held in person at 1016 S. Livermore Avenue and YouTube.

ROLL CALL – Present: Mayor John Marchand, and Council Members Ben Barrientos and Evan Branning.

Absent: Vice Mayor Robert W. Carling and Council Member Kiick

PLEDGE OF ALLEGIANCE

3. PROCLAMATIONS AND PRESENTATIONS

3.1 Reappointment of Peggy Schimmelman as Poet Laureate for a two-year term.

Recommendation: The Commission for the Arts and staff recommended the City Council confirm the reappointment of Peggy Schimmelman as Poet Laureate for a two-year term starting July 1, 2024, and ending on June 30, 2026.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER BARRIENTOS AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL CONFIRMED THE RE-APPOINTMENT OF PEGGY SCHMIMMELMAN AS POET LAUREATE.

4. OPEN FORUM

Mayor Marchand opened the public comment period.

Norman Phillips provided a comment.

Quinten Piening provided a comment.

Jill Weeber provided a comment.

Cheryl Robinson provided a comment.

Paul Penley provided a comment.

Cathryn M. Villasenor provided a comment.

Charles Henze provided a comment.

Mark Zulim provided a comment.

Wayne Hankins provided a comment.

Mike Kellett provided a comment.

Gerald Pechenuk provided a comment.

Greg Scott provided a comment.

John Stein provided a comment.

Alan Marling provided a comment.

There were no more speakers, and the public comment period was closed.

5. CONSENT CALENDAR

Item 5.5 was removed from the Consent Calendar for separate discussion and action.

Mayor Marchand opened the public comment period for the remaining Consent Calendar.

Item 5.6 **Alan Marling** provided a comment.

There were no more speakers, and the public comment period was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER BARRIENTOS AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL APPROVED THE CONSENT CALENDAR WITH THE EXCEPTION OF ITEM 5.5.

5.1 Approval of draft minutes for June 10, 2024

5.2 **Adoption of Ordinance 2159** revising Municipal Code Chapter 2.68, Contracts and Purchasing, to change contract approval authorities, add department head contract and purchasing responsibilities, add solicitation procedures for professional services contracts, and other miscellaneous revisions.

5.3 **Resolution 2024-110** authorizing supplemental appropriations in the amount of $3,584,000 from the Water Resources Replacement fund and $1,195,000 from the Sewer Connection Fees fund to FY 2023-24, and authorizing

execution of a second amendment to the engineering services agreement with Carollo Engineers increasing the not-to-exceed contract amount from $4,910,499 to $5,881,720 and extending the term to December 31, 2026, for additional construction management and engineering services during construction of the Water Reclamation Plant (WRP) Primary and Secondary Treatment Improvements Project 2019-31.

5.4 Resolution 2024-111 authorizing delegation of authority to the City Manager to award a construction contract, in an amount not-to-exceed $1,000,000, for the 2023 Storm Damage Repair Projects S202300A and S202300P for repairs at one site along Arroyo Las Positas and two sites along Arroyo Mocho.

5.6 Resolution 2024-112 authorizing an agreement with the County of Alameda Probation Department, accepting funding for the term of July 1, 2024 - June 30, 2026, for Horizons Family Counseling to provide mental health-related services and programs in an amount not-to-exceed $1,502,000.

5.7 Resolution 2024-113 establishing the Appropriations Limit consistent with State law for FY 2024-25.

Mayor Marchand opened the public comment period for item 5.5.

Item 5.5 Michael Ferrucci provided a comment.

Item 5.5 Diana Roberts provided a comment.

Item 5.5 Jean King provided a comment.

There were no more speakers, and the public comment period was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER BARRIENTOS, AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL APPROVED THE GREENVILE PROPERTY PORTION OF CONSENT CALENDAR ITEM 5.5, CONTINUED THE HARTFORD PROPERTY PORTION OF THE ITEM TO THE JULY 22, 2024 CITY COUNCIL MEETING, AND DIRECTED CITIZENS FOR BALANCED GROWTH TO MEET WITH STAFF BY FRIDAY, JULY 12, 2024.

5.5 Resolution 2024-114 accepting the Altamont Landfill Open Space Committee's recommendation to expend funds in the amount of $1,284,000 for the purchase of Greenville Road property (125.5-ACRES) in eastern Alameda County (APN: 99B-5685-12).

Resolution 2024-115 finding that the acquisition of the Greenville Road property (125.5 ACRES – APN 99B-5685-12) is exempt from the provisions of the California Environmental Quality Act.

Resolution 2024-116 authorizing the City Manager to execute Purchase and Sale Agreement for the acquisition of the Greenville Road property (125.5

ACRES – APN 99B-5685-12).

Resolution 2024-117 appropriating funds from the Open Space and Acquisition and Management Account (Fund 642) for the amount of $856,000 to acquire the Greenville Road property (125.5 ACRES – APN:99B-5685-12).

6. PUBLIC HEARINGS

6.1 Hearing to consider a request for Vesting Tentative Tract Map and Site Plan Design Review to develop vacant land located southwest of the Portola Avenue and Tranquility Circle intersection with a for-sale residential condominium project, known as Shea Aura.

Recommendation: The Planning Commission and staff recommended the City Council:

1. Adopt a resolution finding that the project is exempt under the California Environmental Quality Act, in accordance with California Government Code Section 65457 and CEQA Guidelines Section 15182 (c), Projects Pursuant to a Specific Plan, and California Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183, Projects Consistent with a Community Plan, General Plan, or Zoning; and
2. Adopt a resolution approving Vesting Tentative Tract Map (VTTM) 8612 – Subdivision (SUB) 21-007 and Site Plan Design Review (SPDR) 21-006, together with the requested Density Bonus waivers and incentive/concession, subject to the attached Conditions of Approval; and
3. Direct the Planning Manager to file a Notice of Exemption, in accordance with the provisions of the California Environmental Quality Act, subject to project approval.

Assistant Planner Shannon Pagan presented the staff report.

Project Applicant Dave Best provided comments.

Mayor Marchand opened the public hearing.

Jean King provided a comment.

There were no more speakers, and the hearing was closed.

ON THE MOTION OF COUNCIL MEMBER BARRIENTOS, SECONDED BY COUNCIL MEMBER BRANNING AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL ADOPTED THE FOLLOWING RESOLUTIONS:

Resolution 2024-118 finding that the Shea Aura development is exempt from the provisions of the California Environmental Quality Act.

Resolution 2024-119 approving Vesting Tentative Trat Map (VTTM) 8612 – Subdivision (SUB) 21-007 and Site Plan Design Review (SPDR) 21-006 subject to conditions of approval for the Shea Aura Development.

6.2 Public hearing for the confirmation of the levy of assessments for the City's Landscape Maintenance Districts for FY 2024-25.

Recommendation: Staff recommended the City Council:

1. Conduct a public hearing for the confirmation of the annual levy of assessments for the City's Landscape Maintenance Districts for FY 2024-25.
2. Upon closure of the public hearing, staff recommended the City Council adopt a resolution confirming the annual levy of assessments for the City's Landscape Maintenance Districts and directing actions with respect thereto for FY 2024-25.

Acting Public Works Manager Marisa Gan presented the staff report.

Mayor Marchand opened the public hearing.

There were no speakers, and the hearing was closed.

ON THE MOTION OF COUNCIL MEMBER BRANNING, SECONDED BY COUNCIL MEMBER BARRIENTOS AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL ADOPTED THE FOLLOWING RESOLUTION:

Resolution 2024-120 confirming the annual levy of assessments for Landscape Maintenance District for Fiscal Year 2024-2025 and directing actions with respect thereto.

7. MATTERS FOR CONSIDERATION

7.1 Approval of the City Council 2025 Meeting Calendar.

Recommendation: Staff recommended the City Council approve the 2025 Meeting Calendar. Staff is prepared to make adjustments if a Council Member identifies a scheduling or holiday conflict to ensure all members of the Council can participate in meetings.

Acting City Clerk Debbie Elam presented the staff report.

Mayor Marchand opened the public comment period.

There were no speakers, and the public comment period was closed.

ON THE MOTION OF COUNCIL MEMBER BARRIENTOS, SECONDED BY COUNCIL MEMBER BRANNING AND CARRIED ON A 3-0 VOTE, THE CITY COUNCIL APPROVED THE CITY COUNCIL 2025 MEETING CALENDAR.

8. COUNCIL COMMITTEE REPORTS AND MATTERS INITIATED BY CITY MANAGER, CITY ATTORNEY, STAFF AND COUNCIL MEMBERS

THE MAYOR AND CITY COUNCIL MEMBERS PROVIDED A SUMMARY OF RECENTLY ATTENDED EVENTS AND MEETINGS IN ADDITION TO THE INFORMATION PROVIDED IN THE SUPPLEMENTAL PACKET. COUNCIL MEMBERS WHO DID NOT PROVIDE A SUMMARY IN THE SUPPLEMENTAL PACKET ARE INCLUDED BELOW.

City Council directed staff to direct the General Plan Advisory Committee to provide feedback on including planting additional trees, edible crops, pollinator crops, and water conservation in their future Design Guidelines.

9. ADJOURNMENT – at 8:36 pm to a Regular City Council Meeting on Monday, July 22, 2024 at 7:00 pm, Civic Center Meeting Hall, City Council Chambers, 1016 S. Livermore Avenue.

APPROVED: _____
JOHN P. MARCHAND, MAYOR

ATTEST: _____
DEBORAH L. ELAM, ACTING CITY CLERK

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.3**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: Resolution dedicating a Public Utility Easement (PUE) to the public over a portion of City owned land within a portion of Stockmen's Park and authorizing the City Manager to execute the PUE to serve the designated Commercial Use Areas adjacent to Stockmen's Park.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to dedicate a Public Utility Easement (PUE) over City property within a portion of Stockmen's Park.

SUMMARY

The Downtown Plan includes cultural and commercial uses adjacent to Stockmen's Park. The placement of these uses is intended to activate and complement the space, but not overshadow Stockmen's Park.

City of Livermore (City) staff has been working with Blacksmith Square LLC (Developer) and reviewing their building permit applications for their Blacksmith Square Expansion project located within the commercial use parcels adjacent to Stockmen's Park. As part of the City's review of the permit plans it was determined that the Developer needs to route power and communication utilities just outside their western boundary on City Property in order to serve their development. To have these public utilities routed on city property, the utility companies require an easement for access to install and maintain their services. Staff proposes dedicating a PUE over City Property within a portion of Stockmen's Park adjacent to the western boundary of the designated Commercial Use areas in order to accommodate this requirement. The location of the proposed PUE is shown in Attachment 1. The ultimate use of this area in the approved Downtown Development Plan is a pedestrian pathway with decorative pavement between the new Blacksmith Square building and the future science center. The proposed PUE does not impact this future use.

Therefore, staff recommends the City Council adopt a resolution to dedicate a Public Utility Easement (PUE) over City Property within a portion of Stockmen's Park and authorize the City Manager to execute the PUE as depicted in the exhibits to the resolution. The City Clerk is authorized to accept the easement

per Resolution 1-65.

DISCUSSION

In 1962 the City and the Livermore Stockmen's Rodeo Association (Stockmen's Association) entered into an agreement for the Development of the Rodeo Grounds and Sunken Garden Area as a Civic Center and Parks and Recreation Area (Agreement), which authorized the City's acquisition of an approximately 33-acre property located south of Pacific Avenue and to the north and east of Livermore Avenue known as the Civic Center property. The Agreement required the completion and dedication of a public park commemorating the contributions of the Stockmen and those who served in the armed forces of the United States.

The City and the Stockmen's Association have since amended the Agreement. In 2018 the agreement was amended to include a public park called Stockmen's Park, a park easement designating certain portions as a "Cultural Facility Area" and other portions as "Commercial Use Areas" for the development of facilities such as a black box theater, a science and society center, open space support, and development of commercial uses such as the expansion of Blacksmith Square. Minor adjustments were made in 2022 to the Stockmen's Park easement boundaries in conformance with slight parcel boundary modifications needed to facilitate the development of the Downtown Plan and its commercial use area for the Blacksmith Square expansion project and the cultural uses area for the Black Box Theater project.

On December 22, 2022, Blacksmith Square LLC (Developer) acquired the City owned property located within the Commercial Use Areas of the easement.

On October 26, 2023, the Developer applied for and the City approved entitlements for a proposed expansion of Blacksmith Square development within the Commercial Use Area.

On November 6, 2023, the Developer applied for building permits for their expansion project. As part of the City's review of the permit plans it was determined that the Developer needs to route power and communication utilities just outside their western boundary on City property in order to serve their development.

Staff proposes to dedicate a PUE over City Property within a portion of Stockmen's Park adjacent to the western boundary of the designated Commercial Use areas. The PUE is needed to allow for required public utilities to serve the approved expanded Blacksmith Square Development within the designated Commercial Use Area.

FISCAL AND ADMINISTRATIVE IMPACTS

The PUE would not result in additional fiscal or administrative impacts and would help facilitate implementation of developing the Commercial Use Area within the Downtown Plan.

COMMUNITY PILLAR

4: Inclusive and Inviting Spaces and Places

GOAL

3: Continue to implement the Downtown Specific Plan

ATTACHMENTS

1. Site Location Plan
2. Resolution
3. Exhibit A - Public Utility Easement

Prepared by: Mike Pato
Management Analyst II

Approved by:

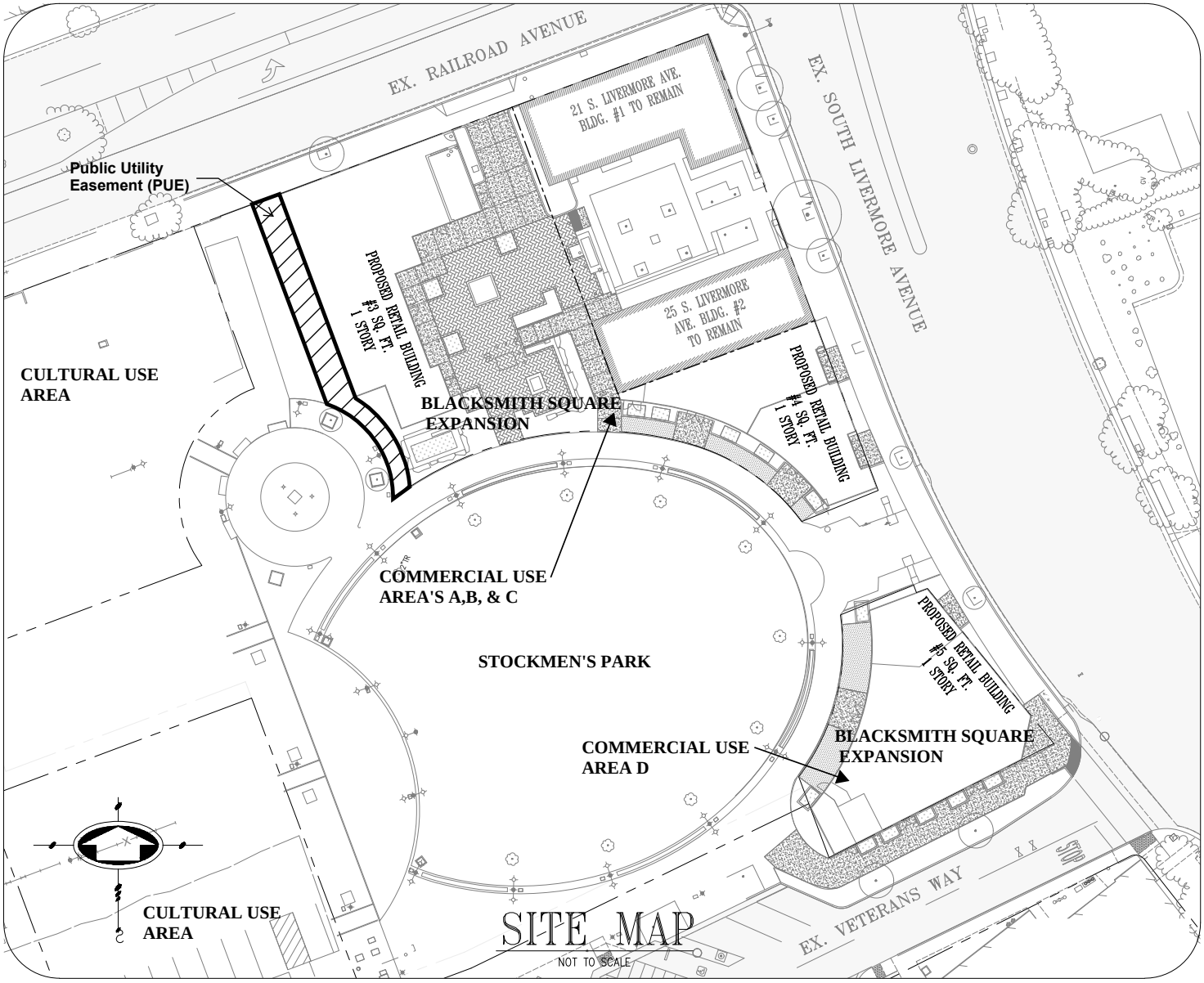


Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director



SITE LOCATION PLAN

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION DEDICATING A PUBLIC UTILITY EASEMENT (PUE) TO THE PUBLIC OVER A PORTION OF CITY OWNED LAND WITHIN A PORTION OF STOCKMEN'S PARK AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE PUE TO SERVE THE DESIGNATED COMMERCIAL USE AREAS ADJACENT TO STOCKMEN'S PARK

In 1962 the City of Livermore ("City") and the Livermore Stockmen's Rodeo Association ("Stockmen's Association") entered into an agreement for the Development of the Rodeo Grounds and Sunken Garden Area as a Civic Center and Parks and Recreation Area ("Agreement"), which authorized the City's acquisition of an approximately 33-acre property located south of Pacific Avenue and to the north and east of Livermore Avenue known as the Civic Center property. The Agreement required the completion and dedication of a public park commemorating the contributions of the Stockmen and those who served in the armed forces of the United States.

The City and the Stockmen's Association have since amended the Agreement. In 2018 the agreement was amended to include a public park called Stockmen's Park, a park easement designating certain portions as a "Cultural Facility Area" and other portions as "Commercial Use Areas" for the development of facilities such as a black box theater, a science and society center, open space support, and development of commercial uses such as the expansion of Blacksmith Square. Minor adjustments were made in 2022 to the Stockmen's Park easement boundaries in conformance with slight parcel boundary modifications needed to facilitate the development of the Downtown Plan and its commercial use area for the Blacksmith Square expansion project and cultural uses area for the Black Box Theater project.

On December 22, 2022, Blacksmith Square LLC (Developer) acquired the City owned property located within the Commercial Use Areas of the easement.

On October 26, 2023, the Developer applied for and the City approved entitlements for a proposed expansion of Blacksmith Square development within the Commercial Use Area.

On November 6, 2023, the Developer applied for building permits for their expansion project. As part of the City's review of the permit plans it was determined that the Developer needs to route power and communication utilities just outside their western boundary on City property in order to serve their development. To have these public utilities routed on City property, the utility companies require an easement for access to install and maintain their services. The location of the proposed PUE does not impact the ultimate use of this area in the approved Downtown Development Plan, which is decorative pavement between the new Blacksmith Square building and the future science center.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Authorizes the City Manager to Dedicate a Public Utility Easement (PUE) over City Property within a portion of Stockmen's Park, attached hereto as Exhibit A; and

2. Authorizes the City Manager to take all necessary steps to execute all necessary documents to execute the Public Utility Easement.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

Exhibit A - Public Utility Easement

RECORDING REQUESTED BY:
City of Livermore

AND WHEN RECORDED MAIL DOCUMENTS AND TAX STATEMENTS TO:
City Clerk
City of Livermore
1052 S. Livermore Ave
Livermore, CA 94550

Space above for Recorder's use

The undersigned grantor(s) declare(s):
City Transfer Tax $0.00
Recording Fees $0.00, Exempt per Government Code §§ 6103, 27383
Documentary Transfer Tax $0.00, Exempt per Rev. & Tax Code § 11911 (Consideration is less than $100)
Survey Monument Fee $ 0.00
( ) computed on full value of property conveyed, or
( ) computed on full value of liens and encumbrances remaining at the time of sale.
Location: (X) City of Livermore, ( ) Unincorporated area

APN: Portion of 098-0289-031-00 **Reference No.:** CB230001

EASEMENT GRANT DEED

For a good and valuable consideration, receipt of which is hereby acknowledged, the **City of Livermore, a Municipal Corporation ("Grantor")** hereby grants to the **Public ("Grantee")** certain interest in real property on, over, across, and under the following described Grantor's real property situated in the City of Livermore, County of Alameda, State of California, more particularly described in respective Exhibit "A" and as shown on Exhibit "B" attached hereto, and for the following easement use:

Public Utility Easement

A perpetual, assignable, non-exclusive easement for installation, construction, inspection, removal, replacement and maintenance of gas pipeline, and electric cables, communication cables utilities and related appurtenances, and also right of ingress to and egress from the easement on City Parcel.

See attached respective Exhibit "A" for legal description and Exhibit "B" for plat.

Signatory on next page

GRANTOR:

CITY OF LIVERMORE

Dated: _____ By:_____
City Manager, Marianna Marysheva
[notary acknowledgement required]

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
) ss
County of _____)

On _____, before me,_____,
(Name of Notary)

notary public, personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
(Notary Signature)

EXHIBIT "A"
PUBLIC UTILITY EASEMENT

A NON-EXCLUSIVE EASEMENT, FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND THEIR APPURTENANCES, INCLUDING THE RIGHT TO ENTER FOR SAID INSTALLATION AND MAINTENANCE OF SAID PUBLIC UTILITIES, DESCRIBED AS FOLLOWS:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

BEING A PORTION OF PARCEL B, AS SAID PARCEL IS DELINEATED AND SO DESIGNATED ON PARCEL MAP 11239., FILED FOR RECORD MAY 24, 2022, IN BOOK 354 OF PARCEL MAPS AT PAGES 95-97, IN THE OFFICE OF THE COUNTY RECORDER OF ALAMEDA COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF RAILROAD AVENUE AT THE NORTHEAST CORNER OF PARCEL B AS SHOWN ON SAID PARCEL MAP (354 PM 95); THENCE SOUTHEASTERLY ALONG THE EASTERLY LINE OF PARCEL B SOUTH 20°30'00" EAST, 75.54 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 40.00 FEET AND TO WHICH BEGINNING A RADIAL LINE BEARS NORTH 31°56'36" EAST; THENCE SOUTHEASTERLY 37.09 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 53°07'43"; THENCE LEAVING SAID EASTERLY LINE ALONG A RADIAL LINE SOUTH 85°04'19" WEST, 7.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 33.00 FEET AND TO WHICH BEGINNING A RADIAL LINE BEARS SOUTH 85°04'19" WEST; THENCE NORTHWESTERLY 37.11 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 64°26'01"; THENCE NORTHWESTERLY ALONG A NON-RADIAL LINE NORTH 20°30'00" WEST, 75.07 FEET TO A POINT ON THE SOUTHERLY LINE OF RAILROAD AVENUE AND THE NORTHERLY LINE OF PARCEL B (354 PM 95); THENCE EASTERLY ALONG THE COMMON LINE NORTH 69°30'00" EAST, 10.00 FEET TO THE **POINT OF BEGINNING**.

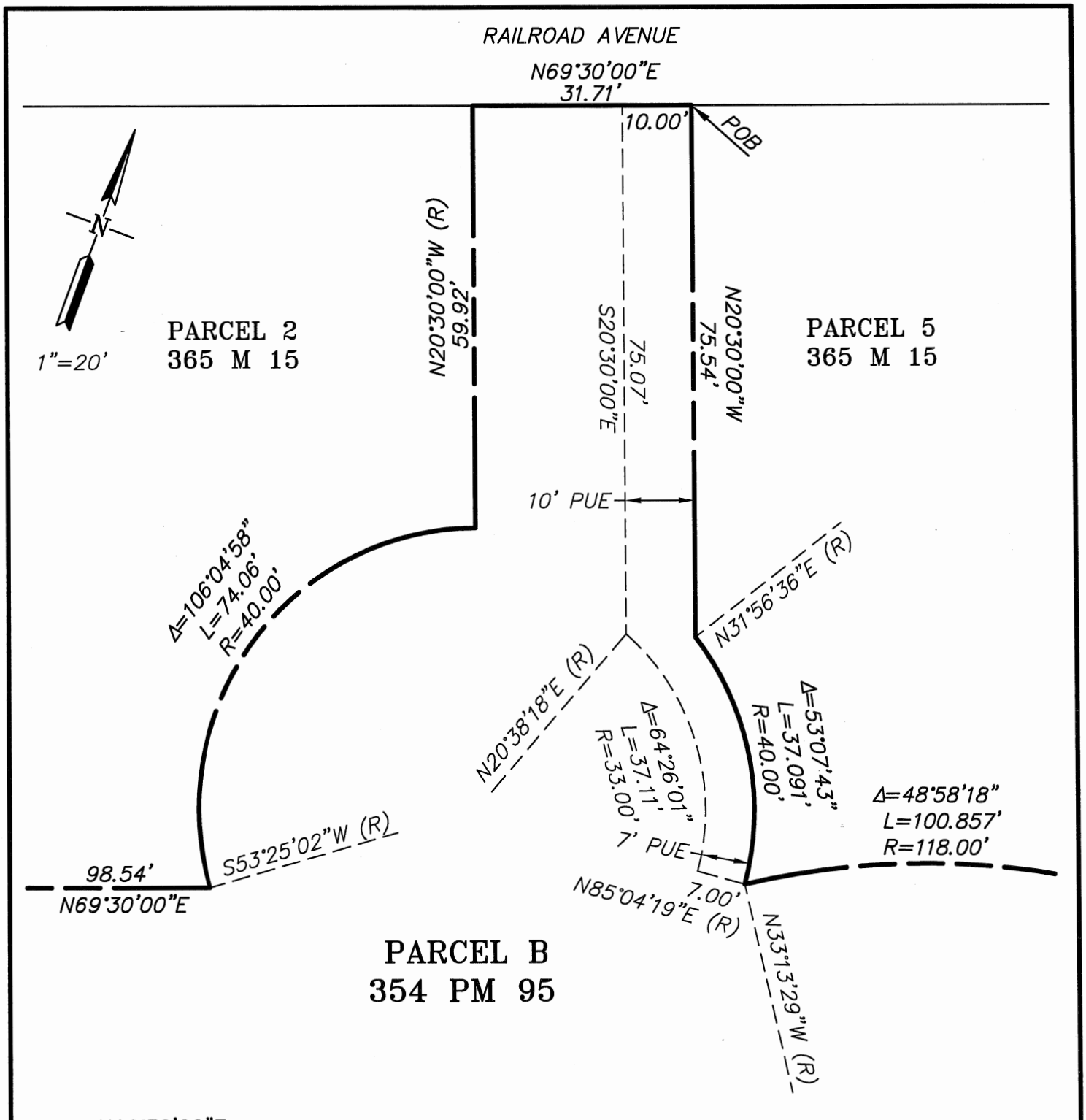
CONTAINING 1,012 SQUARE FEET, MORE OR LESS

ATTACHED HERETO IS A PLAT ENTITLED EXHIBIT "B" WHICH BY THIS REFERENCE IS MADE A PART HEREOF.

PREPARED BY:

DARRYL A. ALEXANDER P.L.S. 5071





ALEXANDER & ASSOCIATES INC.
SURVEYORS – PLANNERS – ENGINEERS
147 OLD BERNAL AVENUE, SUITE 10
PLEASANTON, CALIFORNIA
(925) 462–2255 (925) 462–8092 FAX

EXHIBIT "B"
PLAT TO ACCOMPANY
LEGAL DESCRIPTION
CITY OF LIVERMORE
ALAMEDA COUNTY CALIFORNIA

JOB NO.:	21381
FILE NO.:	PUE 8X11
DATE:	DEC 2023
SHEET NUMBER:	TOTAL SHEETS:
1	1

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.4**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: Resolution to summarily vacate a portion of public right-of-way along South Livermore Avenue and authorizing execution of quitclaim deeds to accommodate the approved Blacksmith Square Expansion project.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution summarily vacating a portion of right-of-way for public highway purposes along South Livermore Avenue approximately 0.4 feet in width, for a total of 67.461 square feet of right-of-way and authorize the City Manager to quitclaim the right-of-way to Maroon Bear, a California Limited Partnership and Blacksmith Square LLC, a California Limited Liability Company (Property Owners).

SUMMARY

Staff proposes to vacate a portion of right-of-way located along South Livermore Avenue as described in the Plat and Legal Descriptions in Exhibit A to the resolution. This vacation is required to eliminate the existing building encroachments caused by architectural elements and allow for the future new building expansions in accordance with the approved Blacksmith Square Expansion project. The Blacksmith Square Expansion project includes approximately 13,000 square feet of new commercial space, which will help to create the pedestrian-friendly shopping environment approved in the Downtown Core Concept Plan. This portion of right-of-way is no longer needed because the existing walkway created outside the existing building envelopes and the proposed new buildings meet the city's downtown pedestrian pathway standards and requirements. Therefore, the City can summarily vacate the right-of-way along South Livermore Avenue and authorize execution of the quitclaim deeds releasing the right-of-way to the Property Owners, as depicted in the Exhibits B and C to the resolution.

DISCUSSION

On October 24, 2022, the City Council adopted Resolution 2022-177 authorizing an Amended and Restated Disposition and Development Agreement (DDA) with Red Bear Property Management, Inc. for development of downtown commercial uses. Under the amended and adopted DDA, Red Bear Property Management, Inc. will develop approximately 13,000 square feet of new commercial retail space

consistent with the City Council's approved Downtown Core Concept Plan. This development is known as the Blacksmith Square Expansion project.

On October 4, 2023, the City initiated an application for Consistency Determination (CD) 23-005 to vacate a small portion of public right-of-way located within South Livermore Avenue to accommodate the existing and proposed buildings in Blacksmith Square. The existing buildings in Blacksmith Square, as well as an area of proposed new building expansions, encroach beyond their respective parcel boundaries and extend into the right-of-way along South Livermore Avenue. Expanding Blacksmith Square as envisioned in the approved Downtown Core Concept Plan requires vacation of the right-of-way and a quitclaim of the area of encroachment to the property owners.

Government Code Section 65402(a) requires that if a General Plan has been adopted, no real property or easements used for public purposes shall be acquired or disposed of until the location, purpose, and extent of such acquisition or disposition has been reported upon by the planning agency (e.g. Planning Commission) as to conformity with its adopted General Plan. This includes vacation of public right-of-way needed for public purposes in whole or in part.

On December 5, 2023, the Planning Commission adopted a resolution approving Consistency Determination (CD) 23-005, finding the City's vacation of a portion of public right-of-way located on South Livermore Avenue is no longer needed for public highway purposes and that the vacation of this portion of right-of-way is consistent with the General Plan.

FISCAL AND ADMINISTRATIVE IMPACTS

The financial burden to maintain this unused public right-of-way in a safe condition is greater than its public value. By vacating the property, the City eliminates the need to maintain the property and reduces associated liability resulting in a minor financial benefit to the City.

COMMUNITY PILLAR

4: Inclusive and Inviting Spaces and Places

GOAL CATEGORY

3: Continue to implement the Downtown Specific Plan

ATTACHMENTS

1. Vicinity Map
2. Resolution
3. Exhibit A - Plat and Legal Description
4. Exhibit B - Quitclaim Deed, Blacksmith Square LLC
5. Exhibit C - Quitclaim Deed - Maroon Bear

Prepared by: Mike Pato
Management Analyst II

Approved by:



Marianna Marysheva
City Manager

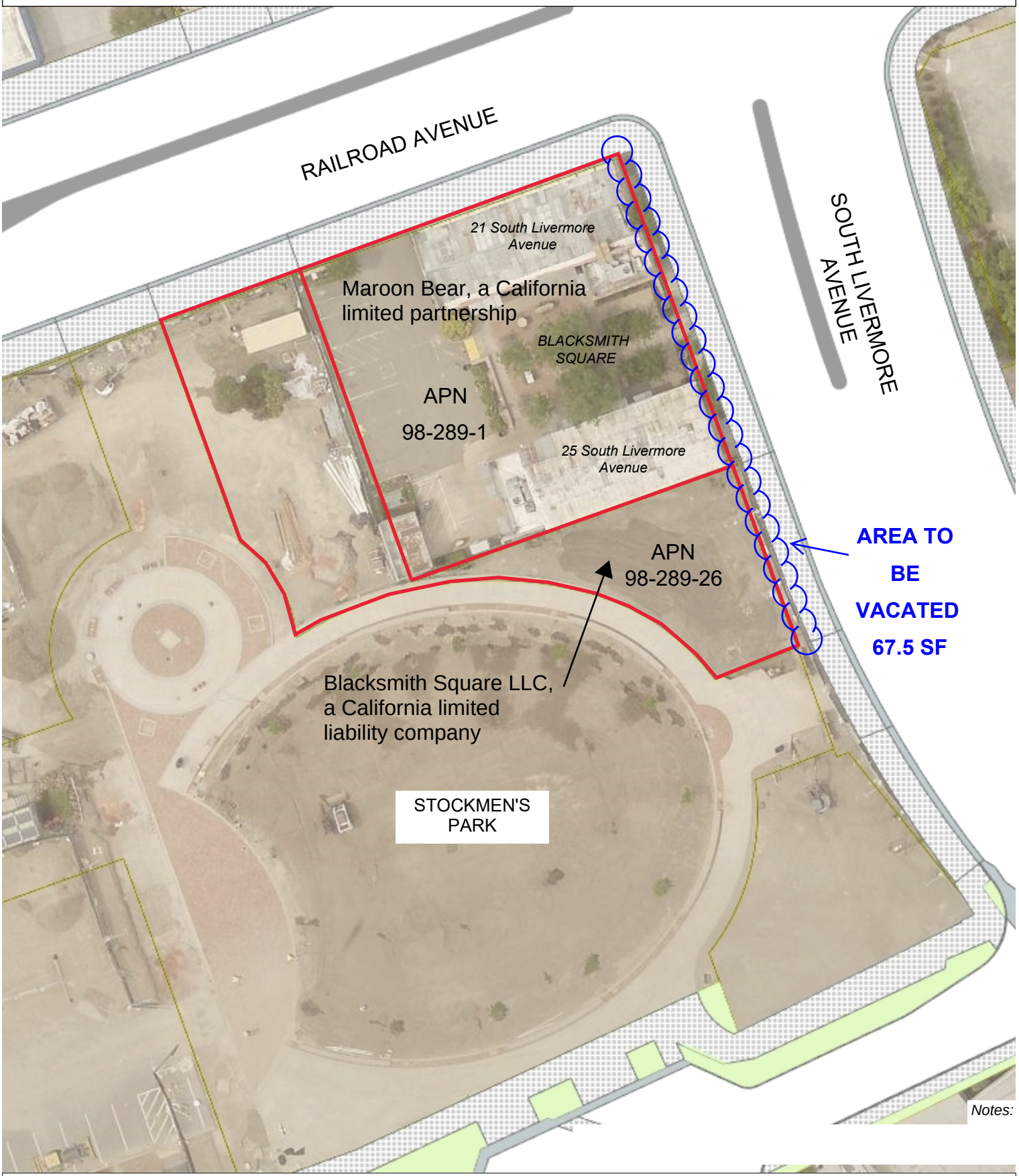
Fiscal Review by:



Tina Olson
Administrative Services Director

LIVERMORE
CALIFORNIA

ATTACHMENT 1



Notes:

83.3 0 41.67 83.3 Feet

NAD_1983_2011_StatePlane_California_III_FIPS_0403_
Livermore IT, GIS Services

Scale: 1: 500

This map is based on City of Livermore GIS Information and reflects the most current information at the time of this printing. The map is intended for reference purposes only and the City and its staff is not responsible for errors.

Prepared:
11/16/2023
4:01:38 PM

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL
TO:

CITY CLERK
CITY OF LIVERMORE
1052 S. LIVERMORE AVENUE
LIVERMORE, CA 94550

EXEMPT FROM FILING FEES
PURSUANT TO GOV.
CODE § 27383

Space Above This Line for Recorder's Use Only

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION TO SUMMARILY VACATE A PORTION OF PUBLIC RIGHT-OF-WAY ALONG SOUTH LIVERMORE AVENUE AND AUTHORIZING EXECUTION OF QUITCLAIM DEEDS TO ACCOMMODATE THE APPROVED BLACKSMITH SQUARE EXPANSION PROJECT

On October 24, 2022, the City Council adopted Resolution 2022-177 authorizing an Amended and Restated Disposition and Development Agreement ("DDA") with Red Bear Property Management, Inc. for development of downtown commercial uses. Under the amended and adopted DDA, Red Bear Property Management Inc. will develop approximately 13,000 square feet of new commercial retail space consistent with the City Council's approved Downtown Core Concept Plan, known as the Blacksmith Square Expansion project.

On October 4, 2023, the City of Livermore ("City") initiated an application for Consistency Determination (CD) 23-005 to vacate a small portion of public right-of-way located within South Livermore Avenue to accommodate the existing and proposed buildings in Blacksmith Square. The existing buildings in Blacksmith Square, as well as an area of proposed building expansion, encroach beyond their respective parcel boundaries and extend into the public right-of-way along South Livermore Avenue. Expanding Blacksmith Square as envisioned in the approved Downtown Core Concept Plan requires vacation of the right-of-way and a quitclaim of the area of encroachment to the property owner.

The vacation of a small portion of public right-of-way is necessary to implement the Blacksmith Square Expansion project consistent with the City Council's approved Downtown Core Concept Plan. Portions of the existing historic and non-historic buildings in Blacksmith Square, and an area of planned new building expansion, encroach beyond their respective parcel boundaries and extend into the public right-of-way along South Livermore Avenue by approximately 0.4 feet for a total of 67.461 square feet. Expanding Blacksmith Square as envisioned in the approved Downtown Core Concept Plan requires vacation of the right-of-way and a quitclaim of the area of encroachment to the Maroon Bear, a California Limited Partnership and Blacksmith Square LLC, a California Limited Liability Company.

Streets and Highways Code section 8334, et seq., allow the legislative body of a local agency to summarily vacate excess right-of-way of a street or highway not required for street or highway purposes.

Staff recommended and the Planning Commission made a General Plan consistency finding on December 5, 2023, affirming that the vacation of a portion of right-of-way along South Livermore Avenue would be consistent with the General Plan and adopted a resolution approving Consistency Determination (CD) 23-005.,

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that to the extent the quitclaim of the easement to be vacated constitutes a project pursuant to the California Environmental Quality Act ("CEQA"), this action is exempt from CEQA pursuant to 14 California Code of Regulations, section 15061 because it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment and the area to be vacated is being substituted for in a manner that adequately maintains the function of the right-of-way and consistency with City Standards.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby:

1. Vacates a portion of public right-of-way located along South Livermore Avenue, as shown and described in Exhibit A, attached hereto, and described below.

   The public right-of-way vacated includes a small portion of the existing sidewalk (approximately 67 square feet). This portion of right-of-way is not useable or accessible as it is situated underneath the brick facades of the existing buildings in Blacksmith Square and under the new building as part of the Blacksmith Square Expansion Project and is no longer needed at its current location (Streets and Highways Code section 8334).

2. Directs the City Clerk to file a certified copy of this resolution of vacation with associated legal description with the Alameda County Recorder's Office.

3. Authorizes that from and after the date this resolution is recorded, the small portion of public right-of-way is vacated and no longer constitutes public right-of-way for street or highway purposes.

4. Authorizes the City Manager to sign on behalf of the City of Livermore, the Quitclaim Deed, attached hereto as Exhibit B, to convey to Blacksmith Square LLC, a California Limited Liability Company, and the Quitclaim Deed, attached hereto as Exhibit C, to convey to Maroon Bear, a California Limited Partnership.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

Exhibit A – Plat & Legal Description
Exhibit B – Quitclaim Deed, Blacksmith Square LLC
Exhibit C – Quitclaim Deed, Maroon Bear

EXHIBIT "A"
LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

A PORTION OF SOUTH LIVERMORE AVENUE, VARIABLE WIDTH, AS SHOWN ON THE MAP OF TRACT 8574 AS FILED DECEMBER 23, 2020, IN BOOK 365 OF MAPS AT PAGES 15 THROUGH 19, OFFICIAL RECORDS OF ALAMEDA COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE STREET MONUMENT LOCATED AT THE INTERSECTION OF SOUTH LIVERMORE AVENUE AND RAILROAD AVENUE AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15); THENCE SOUTH 20°30'00" EAST, 35.150 FEET ALONG THE MONUMENT LINE OF SOUTH LIVERMORE AVENUE; THENCE LEAVING SAID MONUMENT LINE SOUTH 69°30'00" WEST, 40.060 FEET TO A POINT ON THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE; THENCE SOUTH 20°30'00" EAST, 106.412 FEET ALONG THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE TO THE NORTHEAST CORNER OF PARCEL 5 AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15) AND BEING THE **POINT OF BEGINNING**; THENCE SOUTHEASTERLY ALONG THE COMMON LINE OF SOUTH LIVERMORE AVENUE AND PARCEL 5 (365 M 15) SOUTH 20°30'00" EAST, 62.242 FEET THENCE LEAVING SAID COMMON LINE NORTH 69°30'00" EAST, 0.40 FEET; THENCE NORTH 20°30'00" WEST, 62.242 FEET; THENCE SOUTH 69°30'00" WEST, 0.40 FEET TO THE **POINT OF BEGINNING**.

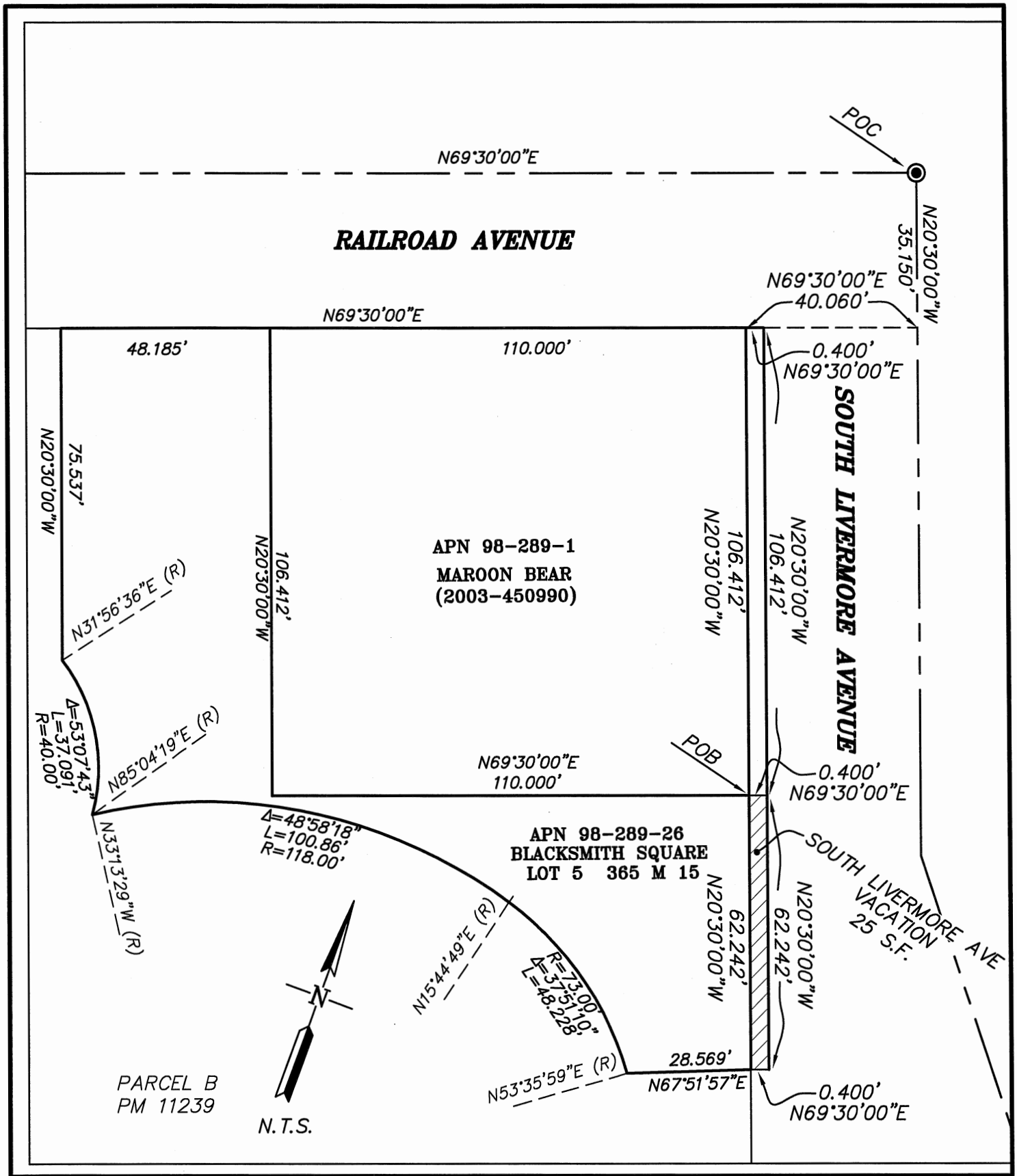
CONTAINING 25 SQUARE FEET, MORE OR LESS

ATTACHED HERETO IS A PLAT ENTITLED EXHIBIT "B" WHICH BY THIS REFERENCE IS MADE A PART HEREOF.

PREPARED BY:

DARRYL A. ALEXANDER P.L.S. 5071





ALEXANDER & ASSOCIATES INC.
SURVEYORS – PLANNERS – ENGINEERS
147 OLD BERNAL AVENUE, SUITE 10
PLEASANTON, CALIFORNIA
(925) 462-2255 (925) 462-8092 FAX

EXHIBIT "B"
PLAT TO ACCOMPANY
LEGAL DESCRIPTION
CITY OF LIVERMORE
ALAMEDA COUNTY CALIFORNIA

JOB NO.:	21381
FILE NO.:	EXB VACATION
DATE:	JUNE 2024
SHEET NUMBER:	1
TOTAL SHEETS:	1

EXHIBIT "A"
LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

A PORTION OF SOUTH LIVERMORE AVENUE, VARIABLE WIDTH, AS SHOWN ON THE MAP OF TRACT 8574 AS FILED DECEMBER 23, 2020, IN BOOK 365 OF MAPS AT PAGES 15 THROUGH 19, OFFICIAL RECORDS OF ALAMEDA COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE STREET MONUMENT LOCATED AT THE INTERSECTION OF SOUTH LIVERMORE AVENUE AND RAILROAD AVENUE AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15); THENCE SOUTH 20°30'00" EAST, 35.150 FEET ALONG THE MONUMENT LINE OF SOUTH LIVERMORE AVENUE; THENCE LEAVING SAID MONUMENT LINE SOUTH 69°30'00" WEST, 40.060 FEET TO THE **POINT OF BEGINNING,** SAID POINT BEING ON THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE AT THE NORTHEASTERLY CORNER OF THAT CERTAIN PARCEL GRANTED TO MAROON BEAR, A CALIFORNIA LIMITED PARTNERSHIP, AS RECORDED AUGUST 1, 2003, UNDER SERIES NO. 2003450990, OFFICIAL RECORDS OF ALAMEDA COUNTY, THENCE SOUTHEASTERLY ALONG THE COMMON LINE OF SOUTH LIVERMORE AVENUE AND MAROON BEAR (2003450990) SOUTH 20°30'00" EAST, 106.412 FEET (AS SHOWN ON SAID MAP) TO THE SOUTHEASTERN CORNER OF MAROON BEAR (2003450990); THENCE LEAVING SAID COMMON LINE NORTH 69°30'00" EAST, 0.40 FEET; THENCE NORTH 20°30'00" WEST, 106.412 FEET; THENCE SOUTH 69°30'00" WEST, 0.40 FEET TO THE **POINT OF BEGINNING**.

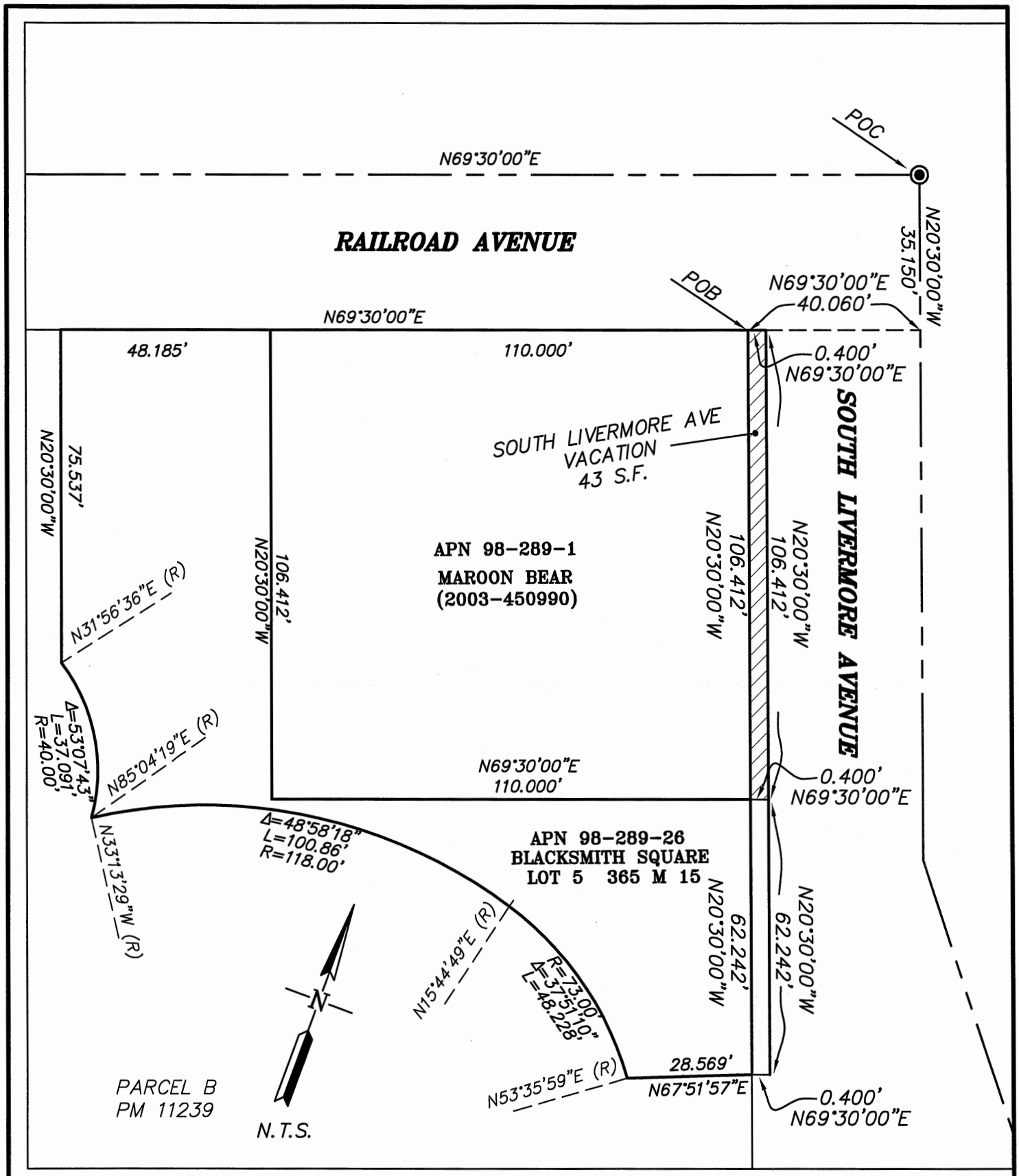
CONTAINING 43 SQUARE FEET, MORE OR LESS

ATTACHED HERETO IS A PLAT ENTITLED EXHIBIT "B" WHICH BY THIS REFERENCE IS MADE A PART HEREOF.

PREPARED BY:

DARRYL A. ALEXANDER P.L.S. 5071





ALEXANDER & ASSOCIATES INC.
SURVEYORS – PLANNERS – ENGINEERS
147 OLD BERNAL AVENUE, SUITE 10
PLEASANTON, CALIFORNIA
(925) 462-2255 (925) 462-8092 FAX

EXHIBIT "B"
PLAT TO ACCOMPANY
LEGAL DESCRIPTION
CITY OF LIVERMORE
ALAMEDA COUNTY CALIFORNIA

JOB NO.:	21381
FILE NO.:	EXB VACATION
DATE:	JUNE 2024
SHEET NUMBER:	1
TOTAL SHEETS:	1

RECORDING REQUESTED BY:
AND
WHEN RECORDED MAIL TO:

City Clerk
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550

ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

SAME AS ABOVE

The Undersigned grantor(s) declare(s):
CITY TRANSFER TAX $0.00
DOCUMENTARY TRANSFER TAX $ Release of easement
SURVEY MONUMENT FEE $0.00
R&T Code 11911 Value or consideration is less than $100
Computed on the consideration or value or property conveyed; OR computed on the consideration or value less liens or encumbrances remaining at time of sale.

APN's
098-0289-26 (portion)

Exempt from filing fees per Government Code Section §§ 27383 & 6103

QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CITY OF LIVERMORE, a Municipal Corporation, "Grantor,"

hereby remises, releases and quitclaims to Blacksmith Square LLC, a California Limited Liability Company, ("Grantee") all right, title, and interest in and to those certain portions of a non-exclusive right-of-way located in the City of Livermore (City), County of Alameda, State of California on the real property held by Blacksmith Square LLC, and more particularly identified in Exhibit A and Exhibit B (Legal Description and Plat). This Quitclaim Deed is executed, delivered, and accepted for the purpose of terminating the Quitclaimed right-of-way.

By recording this Quitclaim Deed, Grantee agrees to release and indemnify the Grantor from any and all liability associated with or arising out of the past, current, or future use of the Quitclaimed right-of-way, except to the extent caused by the sole negligence or willful misconduct of the City, its agents, or its employees.

SEE EXHIBITS "A" and "B" ATTACHED HERETO AND MADE A PART HEREOF

GRANTOR:

City of Livermore, a municipal corporation

_____ Date:_____

Signature:
By: Marianna Marysheva
Its: City Manager

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
) ss
County of _____)

On _____, before me,_____,
(Name of Notary)

notary public, personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
(Notary Signature)

EXHIBIT "A"
LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

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COMMENCING AT THE STREET MONUMENT LOCATED AT THE INTERSECTION OF SOUTH LIVERMORE AVENUE AND RAILROAD AVENUE AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15); THENCE SOUTH 20°30'00" EAST, 35.150 FEET ALONG THE MONUMENT LINE OF SOUTH LIVERMORE AVENUE; THENCE LEAVING SAID MONUMENT LINE SOUTH 69°30'00" WEST, 40.060 FEET TO A POINT ON THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE; THENCE SOUTH 20°30'00" EAST, 106.412 FEET ALONG THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE TO THE NORTHEAST CORNER OF PARCEL 5 AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15) AND BEING THE **POINT OF BEGINNING**; THENCE SOUTHEASTERLY ALONG THE COMMON LINE OF SOUTH LIVERMORE AVENUE AND PARCEL 5 (365 M 15) SOUTH 20°30'00" EAST, 62.242 FEET THENCE LEAVING SAID COMMON LINE NORTH 69°30'00" EAST, 0.40 FEET; THENCE NORTH 20°30'00" WEST, 62.242 FEET; THENCE SOUTH 69°30'00" WEST, 0.40 FEET TO THE **POINT OF BEGINNING**.

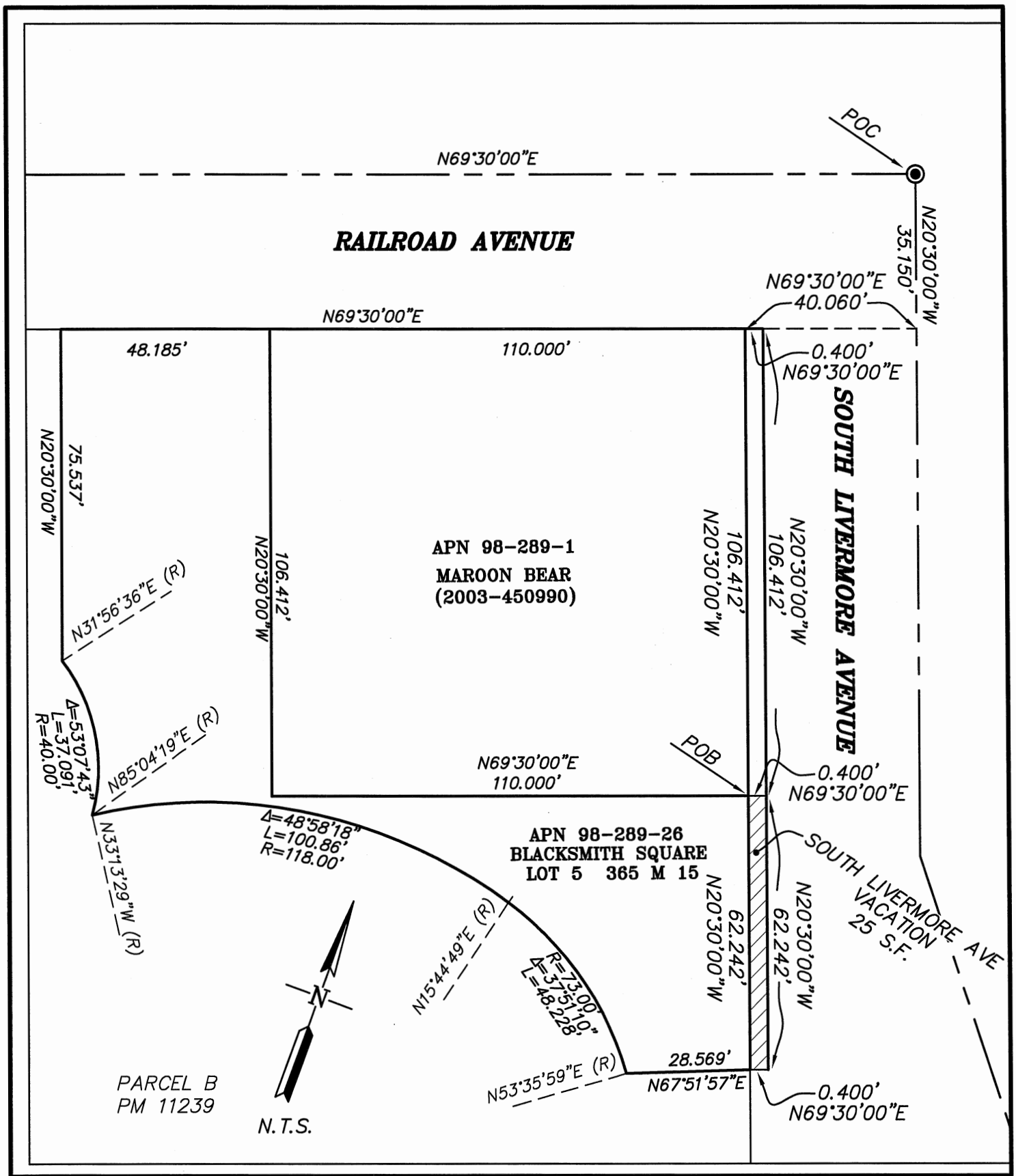
CONTAINING 25 SQUARE FEET, MORE OR LESS

ATTACHED HERETO IS A PLAT ENTITLED EXHIBIT "B" WHICH BY THIS REFERENCE IS MADE A PART HEREOF.

PREPARED BY:

DARRYL A. ALEXANDER P.L.S. 5071





ALEXANDER & ASSOCIATES INC.
SURVEYORS – PLANNERS – ENGINEERS
147 OLD BERNAL AVENUE, SUITE 10
PLEASANTON, CALIFORNIA
(925) 462-2255 (925) 462-8092 FAX

EXHIBIT "B"
PLAT TO ACCOMPANY
LEGAL DESCRIPTION
CITY OF LIVERMORE
ALAMEDA COUNTY CALIFORNIA

JOB NO.:	21381
FILE NO.:	EXB VACATION
DATE:	JUNE 2024
SHEET NUMBER:	1
TOTAL SHEETS:	1

RECORDING REQUESTED BY:
AND
WHEN RECORDED MAIL TO:

City Clerk
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550

ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

SAME AS ABOVE

The Undersigned grantor(s) declare(s):
CITY TRANSFER TAX $0.00
DOCUMENTARY TRANSFER TAX $ Release of easement
SURVEY MONUMENT FEE $0.00
R&T Code 11911 Value or consideration is less than $100
Computed on the consideration or value or property conveyed; OR computed on the consideration or value less liens or encumbrances remaining at time of sale.

APN's
098-0289-01 (portion)

Exempt from filing fees per Government Code Section §§ 27383 & 6103

QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CITY OF LIVERMORE, a Municipal Corporation, "Grantor,"

hereby remises, releases and quitclaims to Maroon Bear, a California limited partnership, ("Grantee") all right, title, and interest in and to those certain portions of a non-exclusive right-of-way located in the City of Livermore (City), County of Alameda, State of California on the real property held by Maroon Bear, a California limited partnership and more particularly identified in Exhibit A and Exhibit B (Legal Description and Plat). This Quitclaim Deed is executed, delivered, and accepted for the purpose of terminating the Quitclaimed right-of-way for public highway purposes.

By recording this Quitclaim Deed, Grantee agrees to release and indemnify the Grantor from any and all liability associated with or arising out of the past, current, or future use of the Quitclaimed right-of-way, except to the extent caused by the sole negligence or willful misconduct of the City, its agents, or its employees.

SEE EXHIBITS "A" and "B" ATTACHED HERETO AND MADE A PART HEREOF

GRANTOR:

City of Livermore, a municipal corporation

_____ Date:_____

Signature:
By: Marianna Marysheva
Its: City Manager

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of _____)
County of _____)

On _____ before me, _____, Notary Public (here insert name and title of the officer), personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"
LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

A PORTION OF SOUTH LIVERMORE AVENUE, VARIABLE WIDTH, AS SHOWN ON THE MAP OF TRACT 8574 AS FILED DECEMBER 23, 2020, IN BOOK 365 OF MAPS AT PAGES 15 THROUGH 19, OFFICIAL RECORDS OF ALAMEDA COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE STREET MONUMENT LOCATED AT THE INTERSECTION OF SOUTH LIVERMORE AVENUE AND RAILROAD AVENUE AS SHOWN ON SAID MAP OF TRACT 8574 (365 M 15); THENCE SOUTH 20°30'00" EAST, 35.150 FEET ALONG THE MONUMENT LINE OF SOUTH LIVERMORE AVENUE; THENCE LEAVING SAID MONUMENT LINE SOUTH 69°30'00" WEST, 40.060 FEET TO THE **POINT OF BEGINNING,** SAID POINT BEING ON THE WESTERLY LINE OF SOUTH LIVERMORE AVENUE AT THE NORTHEASTERLY CORNER OF THAT CERTAIN PARCEL GRANTED TO MAROON BEAR, A CALIFORNIA LIMITED PARTNERSHIP, AS RECORDED AUGUST 1, 2003, UNDER SERIES NO. 2003450990, OFFICIAL RECORDS OF ALAMEDA COUNTY, THENCE SOUTHEASTERLY ALONG THE COMMON LINE OF SOUTH LIVERMORE AVENUE AND MAROON BEAR (2003450990) SOUTH 20°30'00" EAST, 106.412 FEET (AS SHOWN ON SAID MAP) TO THE SOUTHEASTERN CORNER OF MAROON BEAR (2003450990); THENCE LEAVING SAID COMMON LINE NORTH 69°30'00" EAST, 0.40 FEET; THENCE NORTH 20°30'00" WEST, 106.412 FEET; THENCE SOUTH 69°30'00" WEST, 0.40 FEET TO THE **POINT OF BEGINNING**.

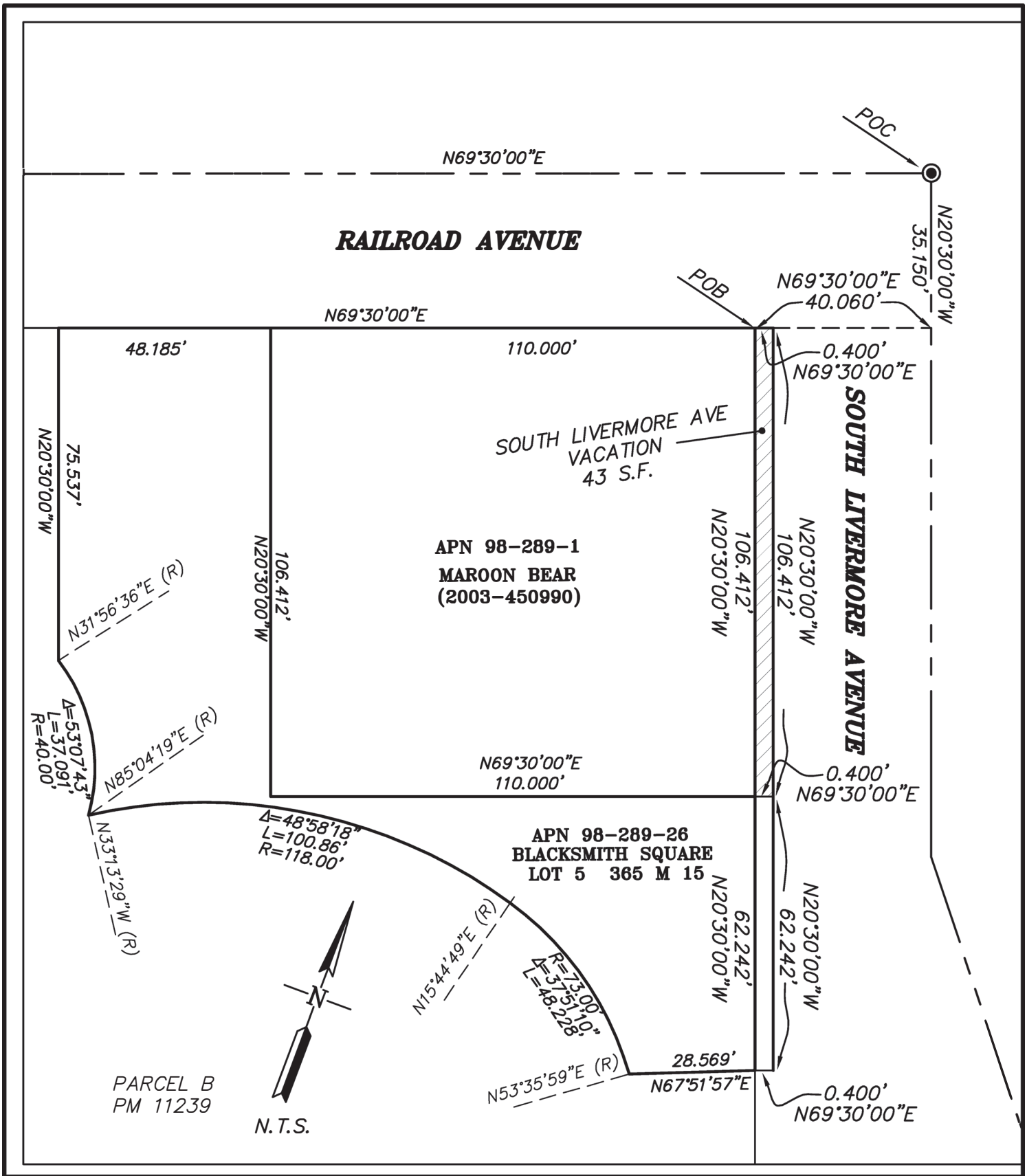
CONTAINING 43 SQUARE FEET, MORE OR LESS

ATTACHED HERETO IS A PLAT ENTITLED EXHIBIT "B" WHICH BY THIS REFERENCE IS MADE A PART HEREOF.

PREPARED BY:

DARRYL A. ALEXANDER P.L.S. 5071





ALEXANDER & ASSOCIATES INC.
SURVEYORS – PLANNERS – ENGINEERS
147 OLD BERNAL AVENUE, SUITE 10
PLEASANTON, CALIFORNIA
(925) 462-2255 (925) 462-8092 FAX

EXHIBIT "B"
PLAT TO ACCOMPANY LEGAL DESCRIPTION
CITY OF LIVERMORE
ALAMEDA COUNTY CALIFORNIA

JOB NO.:	21381
FILE NO.:	EXB VACATION
DATE:	NOV 2023
SHEET NUMBER:	1
TOTAL SHEETS:	1

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.5**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brandon Cardwell, Innovation and Economic Development Director

SUBJECT: Resolution authorizing the City Manager to execute the first amendment to the Amended and Restated Disposition, Development, and Loan Agreement between the City of Livermore and 2205 Railroad Avenue LLC for a downtown hotel.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute the first amendment to the Amended and Restated Disposition, Development, and Loan Agreement between the City of Livermore and 2205 Railroad Avenue LLC for a downtown hotel.

SUMMARY

The proposed amendment to the Amended and Restated Disposition, Development, and Loan Agreement (DDLA) between the City of Livermore (City) and 2205 Railroad Avenue LLC (Developer) for a downtown hotel modifies the performance schedule to allow the Developer more time to deliver the hotel, as well as modifies several sections of the Definitions and payment terms to be internally consistent with the modified schedule. The amendment further modifies the DDLA to identify a series of steps to be taken if the Developer fails to meet the deadlines set forth in the new performance schedule.

The original Disposition and Development Agreement approved by the City Council in 2018 called for commencement of construction in June 2020 and opening of the hotel in December 2021. However, a series of referenda and initiative challenges caused significant delays to the hotel project and led to cost increases that necessitated the removal of underground parking as identified in the amended and restated DDLA approved by Council in January 2022.

Additionally, the COVID-19 pandemic had a damaging effect on tourism and business travel, which has resulted in reduced demand for new hotel development. Following the pandemic, a prolonged period of economic inflation has resulted in increased costs for materials, labor, and capital, which has further challenged the Developer's ability to deliver the hotel, and the related payments, in accordance with the original Schedule of Performance.

DISCUSSION

Background

On July 27, 2016, the City entered into an Exclusive Negotiating Rights Agreement (ENRA) with Presidio to establish procedures and standards for the negotiation of a Purchase and Sale Agreement for disposition and development of a downtown hotel. The City Council extended the ENRA with Presidio throughout the public engagement and plan development process for the new Downtown Core plan. On February 26, 2018, the City Council adopted Resolution 2018-024 authorizing the execution of a Hotel Term Sheet with Presidio for the preparation of a Disposition and Development agreement for a downtown hotel.

On September 10, 2018, the City Council adopted Resolution 2018-154 approving Specific Plan Amendment 18-001 (the "September 2018 Amendments") to facilitate the phased implementation of the approved Downtown Plan and provisions to allow up to a four-story hotel. At this same meeting, the City Council adopted Resolution 2018-155 approving Downtown Design Review for a four-story, 133-room hotel on the southeast corner of Railroad and South Livermore Avenue.

On October 11, 2018, the City received a referendum petition entitled "Referendum Against Portions of a Resolution Passed by the City Council Resolution No. 2018-154" (hereinafter "Referendum"). The Referendum challenged three portions of the September 2018 Amendments, specifically the amendments to Chapter 5 (Development Standards –Core), Chapter 7 (Circulation and Transportation), and Chapter 8 (Parking Standards).

On November 26, 2018, the City Council adopted Resolution 2018-200 accepting certification by the City Clerk as to the sufficiency of signatures on the Referendum. The Council's successive adoption of Resolution 2018-201 repealed the Specific Plan Amendments listed in the referendum petition (Chapters 5, 7 and 8) and confirmed that the remaining amendments to the Downtown Specific Plan approved by Resolution No. 2018-154 remain in effect.

The repeal of the September 2018 Amendments to Chapters 5, 7, and 8 necessitated several adjustments to the Downtown Plan. The adjustments included reduced building heights for the hotel and the L Street parking structure, requiring two-story buildings adjacent to Blacksmith Square, and an adjustment to the land use standards to accommodate additional surface parking. The remaining components of the Downtown Plan were consistent with the Specific Plan that existed before the September 2018 Amendments.

California Elections Code section 9241 provided that, until November 27, 2019 (one year from the actions taken to repeal), the City could not readopt the same amendments to Chapters 5, 7, and 8 that were challenged by the Referendum. However, the City could consider amendments to the same chapters within the one year repeal period, provided the amendments were different from the previous amendments and avoid the objections made to the previous amendments. On May 13, 2019, within the one-year time frame, the City Council readopted amendments to Specific Plan Chapters 5, 7, and 8, that were outside the Referendum's issues of concern, including provision of additional parking and the removal of the regional theater from the Downtown Specific Plan. Due to rising construction costs during the delay caused by the 2018 Referendum, the provision of between 70 to 150 parking spaces in a new public or private parking facility accessed from K Street was included in the project at that time as an alternative to an underground parking garage. Removal of the regional theater language was also included in the amendments to the Specific Plan that were not challenged.

On July 29, 2019, the City Council adopted Resolution 2019-137 accepting the City Clerk's certification that the petition entitled "Citizen's Initiative Changing Development Regulations in Downtown Livermore and Amending Regulations to Allow Housing at the Civic Center" contained the sufficient number of signatures required to qualify it for the ballot. On August 26, 2019, the City Council adopted Resolution 2019-142 calling for and giving notice of the holding of a general election for the submittal of an initiative petition entitled: "Citizen's Initiative Changing Development Regulations in Downtown Livermore and amending regulations to allow housing at the Civic Center" to the voters of the City of Livermore and consolidating that election with the general municipal election to be held Tuesday, November 3, 2020.

On July 22, 2019, the City Council introduced an ordinance approving a development agreement with 2205 Railroad Avenue LLC for the Wine Country Hotel at the Bankhead project (Development Agreement 19-001). The ordinance was adopted as Ordinance No. 2089 on second reading by the City Council on July 29, 2019.

On August 28, 2019, a referendum petition entitled "Referendum Against Ordinance No. 2089 Passed by the City Council (Development Agreement 19-001)" was filed with the City Clerk, seeking to repeal the ordinance.

On September 20, 2019, the Alameda County Registrar of Voters certified the sufficiency of the signatures for that referendum.

On October 14, 2019, the City Council adopted Resolution No. 2019-162, calling for and giving notice of holding a special municipal election to be held on March 3, 2020, for the purpose of submitting Ordinance No. 2089, approving a development agreement for the Wine Country Hotel at the Bankhead project (Development Agreement 19-001), to the voters for approval. That ballot measure was designated Measure P on the ballot for the March 3, 2020 election.

On March 3, 2020, Livermore voters passed Measure P by over a 2/3 majority vote in favor - approving the development agreement between the City and Presidio to build the downtown hotel. On May 11, 2020, the City Council readopted the Specific Plan Amendments to Chapters 5, 7, and 8 that were challenged by the Referendum, with the exception of the amendments related to the boutique hotel site at the southeast corner of Railroad Avenue and South Livermore Avenue. At the same meeting, City Council directed staff to return with another Specific Plan Amendment to reintroduce the hotel amendments.

On October 26, 2020, the City Council adopted Resolution 2020-179 approving another Downtown Specific Plan Amendment to reestablish the four-story height limit for the hotel and enable implementation of the approved boutique hotel consistent with the approved Downtown Plan.

On January 10, 2022, the City Council adopted Resolution number 2022-008 authorizing execution of an Amended and Restated Disposition, Development and Loan Agreement with the Developer, which included a site acquisition loan in the amount of $1,923,750 for the acquisition of 2080 Railroad Avenue to serve as parking. The resolution also authorized a supplemental appropriation in the amount of $1,923,750 from the General Fund to be directed to the site acquisition loan described in the DDLA. The Amended and Restated DDLA also established a new timeline for the hotel project, with construction expected to commence no later than May of 2024.

Amendment to the Amended and Restated DDLA

The proposed first amendment to the Amended and Restated DDLA would make two significant changes to the agreement. The first change would modify the performance schedule to allow the Developer more time to deliver the hotel project; several additional sections of the DDLA would also be modified to maintain internal consistency with the new dates in the revised performance schedule. The second change to the DDLA identifies a new set of actions to be taken if the Developer falls out of compliance with the revised performance schedule. Those actions are described as follows.

In the event the Developer fails to achieve any milestone in the revised performance schedule, under the proposed amendment the Developer would be required to fund a market feasibility study performed by a consultant that is selected by the City. The intent of the study would be to determine if the hotel project is feasible under market conditions at the time of the study. If, based upon the market feasibility study, the City Manager determines the project is not feasible under current market conditions, each remaining deadline in the performance schedule shall be extended exactly one year.

If the Developer does not meet one or more of the extended deadlines of the performance schedule after the one-year extension, the City Manager shall have the sole discretion to require the Developer to conduct, at the Developer's sole expense, a second market feasibility study to determine whether the hotel project is feasible under market conditions at that time.

If, based upon the second market feasibility study, the City Manager determines the project is not feasible under current market conditions, the City shall have sole discretion to (1) require the Developer to meet and confer with the City to identify an alternative path forward for the Project, and (2) terminate this Agreement and all related agreements.

If, based upon either the first or second market feasibility study, the City Manager determines the project is feasible under current market conditions, the Developer must, within six months of the completion of the relevant market feasibility study, either (1) complete any and all actions that are at that time past due, (2) identify a new development partner, subject to the City's approval, to assist the Developer with coming into compliance with the performance schedule, or (3) sell the project to another developer subject to the City's approval. After the end of the six-month period, the City Manager, in her sole discretion, may grant one six-month extension to complete the action chosen under this subsection.

In the event the Developer does not fulfill its obligation under this section after the required time period, the City shall have the sole discretion to terminate this agreement and all related agreements. The City shall also retain the rights to use the Project plans and designs for future use, including with another developer, in exchange for a payment to Developer in an amount not to exceed the actual cost to the Developer of preparing the Project plans and designs, as shown by the Developer's business records.

FISCAL AND ADMINISTRATIVE IMPACTS

The proposed first amendment to the Amended and Restated DDLA would delay the repayment of the $1,923,750 loaned to the Developer for the purpose of acquiring additional parking, as well as the completion of payment for the $71,521 purchase price of the land.

COMMUNITY PILLAR

4: Inclusive & Inviting Spaces & Places

GOAL

3: Continue to Implement the Downtown Specific Plan

ATTACHMENTS

1. Resolution
2. Exhibit A - First Amendment

Prepared by: Brandon Cardwell
Innovation and Economic Development Director

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF THE FIRST AMENDMENT TO THE AMENDED AND RESTATED DISPOSITION AND DEVELOPMENT AGREEMENT WITH 2205 RAILROAD AVENUE LLC FOR A DOWNTOWN HOTEL

On October 1, 2018, the City of Livermore ("City") and 2205 Railroad Avenue LLC, a Delaware limited liability company (the "Developer"), entered into a Disposition, Development and Loan Agreement ("DDLA") for the purchase of the City-owned parcels located on the southeast corner of South Livermore Avenue and Railroad Avenue in downtown Livermore and development of the parcels for a hotel project.

On August 22, 2022, the City and Developer entered into an Amended and Restated Disposition, Development and Loan Agreement ("Amended and Restated DDLA"), which replaced the original DDLA.

The COVID-19 pandemic had a damaging effect on tourism and business travel, which has resulted in reduced demand for new hotel development. Following the pandemic, a prolonged period of economic inflation has resulted in increased costs for materials, labor, and capital, which has further challenged the Developer's ability to deliver the hotel, and the related payments, in accordance with the Schedule of Performance of the Amended and Restated DDLA.

To account for these challenges, the City and Developer desire to enter into a First Amendment to the Amended and Restated Disposition, Development and Loan Agreement to modify the Schedule of Performance of the Amended and Restated DDLA and the associated sections and exhibit documents in the Amended and Restated DDLA affected by the modified Schedule of Performance.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore, that it hereby authorizes the City Manager, or her designee, to execute the First Amendment to the Amended and Restated Disposition, Development and Loan Agreement between the City and 2205 Railroad Avenue LLC, attached hereto as Exhibit A.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A - Agreement

EXHIBIT A

FIRST AMENDMENT TO THE
AMENDED AND RESTATED DISPOSITION, DEVELOPMENT AND LOAN AGREEMENT
by and between
CITY OF LIVERMORE
and
2205 RAILROAD AVENUE LLC

THIS FIRST AMENDMENT TO THE AMENDED AND RESTATED DISPOSITION, DEVELOPMENT AND LOAN AGREEMENT is made as of this ____ day of _____, 2024, by and between the City of Livermore, a municipal corporation (the "City"), and 2205 Railroad Avenue LLC, a Delaware limited liability company (the "Developer"), with reference to the following facts, purposes, and understandings.

RECITALS

A. On October 1, 2018, the City and Developer entered into a Disposition, Development and Loan Agreement ("DDLA"). The DDLA contains terms and conditions for the purchase and development of the City-owned parcels located on the southeast corner of South Livermore Avenue and Railroad Avenue in downtown Livermore (APNs: 098-0407-031-00; 098-0407-033-00) (hereinafter "Hotel Parcel")).

B. On August 22, 2022, the City and Developer entered into an Amended and Restated Disposition, Development and Loan Agreement ("Amended and Restated DDLA"), which replaced the original DDLA.

C. Under the Amended and Restated DDLA, Developer purchased the Hotel Parcel from the City on October 21, 2022, for the construction on the Hotel Parcel of a four-story approximately 65,000-75,000 square foot Hotel, to be constructed to a standard comparable to one of the Brands identified in the Hotel Standards and containing between 125-135 hotel rooms, approximately 1,400-2,000 square feet of economically viable meeting space, a roof-top deck, and related hotel amenities and improvements. Under the requirements of the purchase agreement, the Developer is required to make a final payment in the amount of $64,368.90 by December 31, 2025.

D. The Amended and Restated DDLA additionally provided for the City to provide a short-term Site Acquisition Loan to the Developer to assist in financing the Developer's acquisition of the parcel located on the northwest corner of Railroad Avenue and North K Street in downtown Livermore, commonly known as 2080 Railroad Avenue (APN 098-0282-009-00) (hereinafter "Parking Parcel"), to be used as a valet parking lot to meet the City's parking requirements for the Hotel. Under the requirements of the site acquisition loan, the Developer is required to make a final payment in the amount of $1,923,750 plus interest at a rate of 3.5% by December 31, 2025.

E. The COVID-19 pandemic had a damaging effect on tourism and business travel, which has resulted in reduced demand for new hotel development. Following the pandemic, a prolonged period of economic inflation has resulted in increased costs for materials, labor, and capital, which has further challenged the Developer's ability to deliver the Hotel, and the related payments, in accordance with the Schedule of Performance.

F. The City and Developer desire to enter into this First Amendment to the Amended and Restated Disposition, Development and Loan Agreement ("Agreement") to modify the Schedule of Performance of the Amended and Restated DDLA and the associated sections and exhibit documents in the Amended and Restated DDLA affected by the modified Schedule of Performance. The Developer and the City have completed items 1 through 12 of the attached modified Schedule of Performance on time per the original schedule of performance and this completion is reflected in the attached Schedule of Performance. All terms of the Amended and Restated DDLA remain in full force and effect unless explicitly amended by this agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the City and Developer hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Article 1, Section 1.1(b) under Definitions is hereby amended to read as follows: "Agreement" shall mean this Amended and Restated Disposition Development and Loan Agreement and this First Amendment to the Amended and Restated Disposition Development and Loan Agreement, collectively."

2. Article 1, Section 1.1(tt) under Definitions is hereby amended to read as follows: "Promissory Note" shall mean the amended Promissory Note executed by the Developer to satisfy the Site Acquisition Loan for the Parking Parcel under the terms set forth in this Agreement. A form of the amended Promissory Note is attached to this Agreement as Exhibit K-1."

3. Article 1, Section 1.1(yy) under Definitions is hereby amended to read as follows: "Schedule of Performance" shall mean the amended schedule of actions to be taken by the Parties pursuant to this Agreement to achieve the disposition of the Property to the Developer and the construction of the Project, as the same components of the same may be extended pursuant to this Agreement. The amended Schedule of Performance is attached to this Agreement as Exhibit N-1."

4. Article 1, Section 1.2 Exhibits is hereby amended as follows:

   Exhibit A-1. Amended Legal Description and Plat of Hotel Parcel shall replace

   Exhibit A.

   Exhibit K-1. Amended Promissory Note shall replace Exhibit K.

Exhibit N-1. Amended Schedule of Performance shall replace Exhibit N.

The following additional Exhibits are documents that have been executed or recorded since the original DDLA and are hereby added to the Agreement for recordkeeping purposes:

Exhibit R. Recorded Grant Deed
Exhibit S. Executed Lease and Operating Agreement for the Parking Parcel
Exhibit T. Recorded Memorandum of DDLA
Exhibit U. Recorded Parcel Map 10969
Exhibit V. Executed Temporary Parking Lease for Hotel Parcel

All Exhibits amended or added under this section are attached to and incorporated into this Agreement. All Exhibits not explicitly amended by this Agreement remain in full force and effect.

5. Article 3, Section 3.2 Purchase Price is hereby amended to read as follows: "The purchase price for the Property shall be $71,521. The Developer shall pay a ten (10) percent deposit at the Close of Escrow and the remainder shall be paid no later than December 31, 2027.

6. Article 10, Section 10.3 Fault of Developer is amended to add subsection (c), which reads as follows:

"(c) Notice and Cure Option Specific to Developer Failure to Comply with Performance Schedule.

Upon the happening of an event of default described above in section 10.3(a)(2), the City shall have the sole discretion to require the Developer to conduct, at the Developer's sole expense, a Market Feasibility Study, the scope of which shall be determined by the City Manager. The City shall have the sole discretion to determine the individual(s) or firm(s) used to complete the Market Feasibility Study. The City Manager will use the Market Feasibility Study to determine whether, at the time of the Market Feasibility Study, the Project is feasible under current market conditions.

(1) If, based upon the Market Feasibility Study, the City Manager determines the project is not feasible under current market conditions, each remaining deadline in the Performance Schedule shall be extended exactly one year. If the Developer does not meet one or more of the extended deadlines of the Performance Schedule after the one-year extension, the City Manager shall have the sole discretion to require the Developer to conduct, at the Developer's sole expense, a second Market Feasibility Study to determine whether, at the time of the second Market Feasibility Study, the Project is feasible under current market conditions. The City shall have the sole discretion to determine the individual(s) or firm(s) to complete the second

Market Feasibility Study. If, based upon the second Market Feasibility Study, the City Manager determines the project is not feasible under current market conditions, the City shall have sole discretion to (1) require the Developer to meet and confer with the City to identify an alternative path forward for the Project, and (2) terminate this Agreement and all related agreements.

(2) If, based upon either the first or second Market Feasibility Study, the City Manager determines the project is feasible under current market conditions, the Developer must, within six months of the completion of the relevant Market Feasibility Study, either (1) complete any and all actions that are at that time past due, pursuant to the Performance Schedule, taking into account any applicable extensions, (2) identify a new development partner, subject to the City's approval, to assist the Developer with coming into compliance with the Performance Schedule, or (3) sell the Project to another developer subject to the City's approval. After the end of the six-month period, the City Manager, in her sole discretion, may grant one six-month extension to complete the action chosen under this subsection.

In the event the Developer does not fulfill its obligation under this section after the required time period, the City shall have the sole discretion to terminate this agreement and all related agreements. The City shall also retain the rights to use the Project plans and designs for future use, including with another developer, in exchange for a payment to Developer in an amount not to exceed the actual cost to the Developer of preparing the Project plans and designs, as shown by the Developer's business records.

Nothing in this section shall limit the City's right to pursue any other remedies available to it, by this Agreement, at law or in equity, upon the happening of any event described in section 10.3(a)."

7. Article 12, Section 12.3 Loan term is hereby amended to read as follows:
"The term of the loan shall start on the date of loan dispersal and terminate no later than December 31, 2027."

8. Article 12, Section 12.6 Loan conditions to Disbursement is hereby amended to read as follows:
"Developer agrees to lease the Parking Parcel to the City at no cost for use as a temporary overflow public parking lot for a period of up to six years from the execution of the Lease and Operating Agreement for the Parking Parcel, or until construction of the Hotel is at least 40 percent complete, whichever is earlier. However, at a minimum, the City shall be permitted to use the Parking Parcel until September 30, 2026. The City may relinquish its use of the Parking Parcel prior to this time if it is no longer needed for temporary overflow parking. Once the City's right to use the property has lapsed, Developer may at any time submit a written

notice to the City that the lease will be terminated within 30 days to allow Developer to begin construction of permanent parking improvements.

9. Continuing Effect. Except as amended above, the Agreement remains in full force and effect.

WHEREFORE, the Parties have executed this First Amendment to the Amended and Restated DDLA as of the date first written above.

City:
City of Livermore, a municipal corporation

Date: _____

By: _____
Marianna Marysheva
Its: City Manager

APPROVED AS TO FORM

By: Katherine Mirannon
Deputy/Assistant/City Attorney

Developer:
2205 Railroad Avenue, LLC,
a Delaware limited liability company

Date: 7-8-2024

By: PresidioCo Holdings LLC,
a Delaware limited liability company,
its manager

By: _____

Name: Rikesh Patel

Title: Managing Member

CALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Alameda }

On July 8, 2024 (Date) before me, Deborah S. Davis Notary Public (Here Insert Name and Title of the Officer)

personally appeared Rikesh Patel (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DEBORAH S. DAVIS
Notary Public - California
Alameda County
Commission # 2357707
My Comm. Expires May 15, 2025

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Deborah S. Davis
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

©2019 National Notary Association

EXHIBIT A-1

LEGAL DESCRIPTION

EXHIBIT A

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LIVERMORE, IN THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1, PARCEL MAP 10969, FILED AUGUST 30, 2022, BOOK 356 OF MAPS, PAGE 42, ALAMEDA COUNTY RECORDS.

EXCEPTING THEREFROM:

THAT PORTION THEREOF LYING BELOW A DEPTH OF 500 FEET, MEASURED VERTICALLY, FROM THE CONTOUR OF THE SURFACE OF SAID PROPERTY, HOWEVER, GRANTOR, OR ITS SUCCESSORS AND ASSIGNS, SHALL NOT HAVE THE RIGHT FOR ANY PURPOSE WHATSOEVER TO ENTER UPON, INTO OR THROUGH THE SURFACE OF SAID PROPERTY OR ANY PART THEREOF LYING BETWEEN SAID SURFACE AND 500 FEET BELOW SAID SURFACE", AS RESERVED IN THE DEED FROM SOUTHERN PACIFIC TRANSPORTATION COMPANY, RECORDED DECEMBER 28, 1983, AS INSTRUMENT NO. 83-242907, OF OFFICIAL RECORDS.

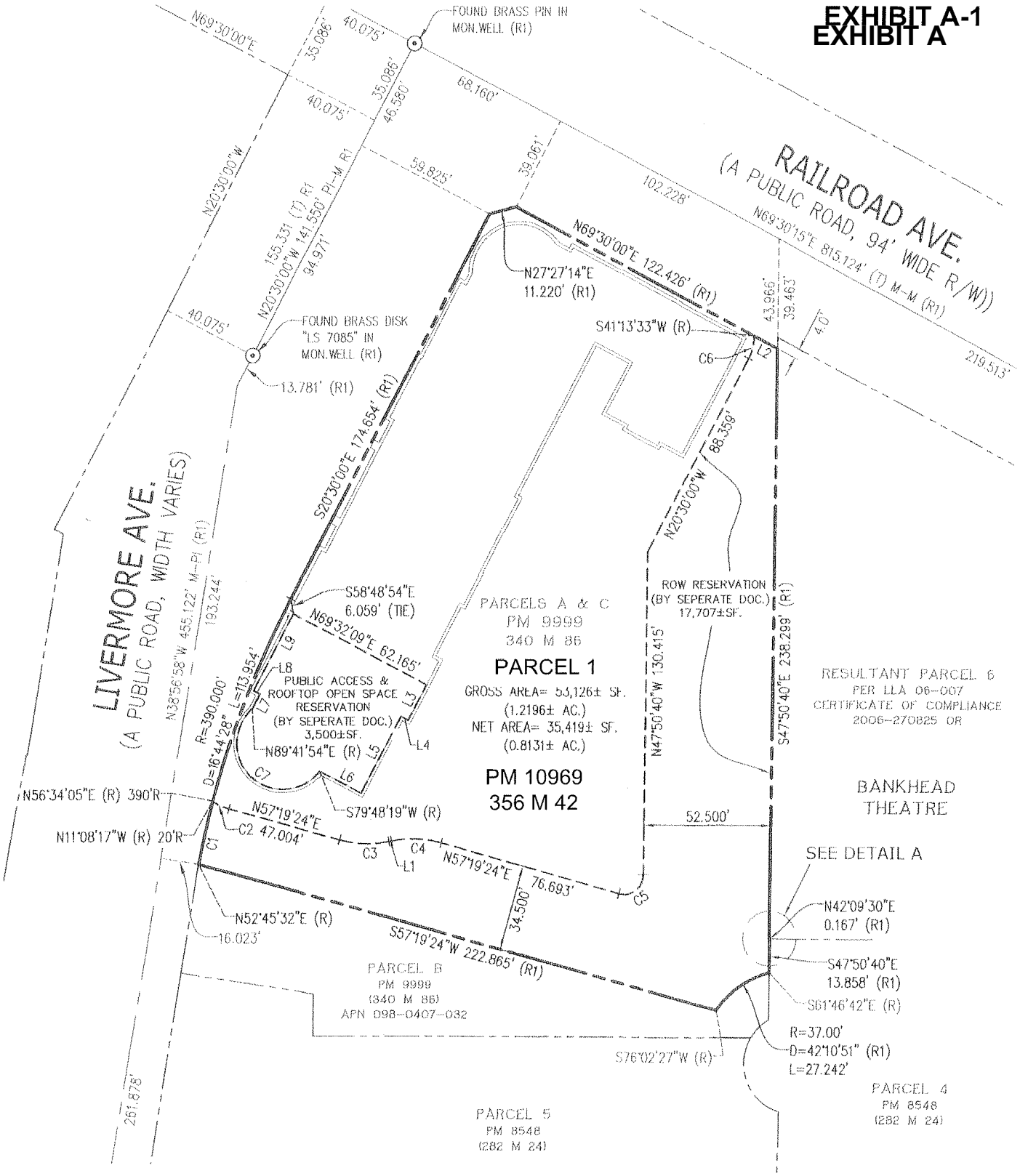
RESERVING THEREFROM:

AN EASEMENT FOR PUBLIC ROOFTOP ACCESS AND USE, UNDER, ON AND OVER THAT PORTION OF SAID PARCEL 1 DEPICTED UPON PARCEL MAP 10969 AS "PUBLIC ACCESS & ROOFTOP OPEN SPACE RESERVATION", FOR THE PURPOSES OF PUBLIC ACCESS AND OPEN SPACE USE OF SAID ROOFTOP, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OF THE PUBLIC FOR PEDESTRIAN ACCESS TO AND FROM SAID ROOFTOP AREA, AS FURTHER DESCRIBED AS FOLLOWS:

THE ROOFTOP PUBLIC OPEN SPACE AREA IS TO INCLUDE A MINIMUM OF 3,500 SQUARE FEET OF PUBLICLY ACCESSIBLE ROOFTOP SPACE WITH SEATING FOR AT LEAST 15 PEOPLE. THE ROOFTOP PUBLIC OPEN SPACE AREA IS BE LOCATED ON THE SOUTHERN SIDE OF THE ROOFTOP AREA AND IT WILL BE AVAILABLE FOR PUBLIC USE AT LEAST 6 DAYS EACH WEEK OF THE YEAR FROM 11 A.M. TO 8 P.M. IN ADDITION, PUBLIC USE OF THE ROOFTOP OPEN SPACE WILL BE AVAILABLE EACH YEAR FROM 9:00 A.M. TO 10:00 P.M. ON THE FOURTH OF JULY, FROM 9:00 A.M. TO 9:00 P.M. FOR THE WINTER HOLIDAY PARADE EVENT AND THE RODEO PARADE, AND FROM 11 A.M. TO 8 P.M. ON ALL OTHER HOLIDAYS.

APN: 098-0407-031-00 (AFFECTS A PORTION OF THE ABOVE DESCRIBED LAND)
098-0407-033-00 (AFFECTS THE REMAINDER OF THE ABOVE DESCRIBED LAND)

EXHIBIT A-1
EXHIBIT A



PLAT - PARCEL 1
PARCEL MAP 10969

LIVERMORE, CALIFORNIA

DATE	June 2024
SCALE	
BY	
JOB NO.	
SHEET	

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	N30°45'30"E	1.115'
L2	S69°30'00"W	11.024'
L3	S20°27'51"E	16.268'
L4	S69°32'09"W	3.332'
L5	S20°27'51"E	35.501'
L6	S69°30'18"W	19.222'
L7	N20°27'51"W	6.812'
L8	S69°32'09"W	3.000'
L9	N20°27'51"W	35.009'

CURVE TABLE			
CURVE #	RADIUS	DELTA	LENGTH
C1	390.000'	3°48'34"	25.929'
C2	20.000'	21°32'19"	7.518'
C3	45.000'	26°33'54"	20.864'
C4	45.000'	26°33'54"	20.864'
C5	8.000'	105°10'04"	14.684'
C6	19.000'	28°16'27"	9.376'
C7	19.042'	189°53'35"	63.109'

PLAT - PARCEL 1
PARCEL MAP 10969

LIVERMORE, CALIFORNIA

DATE	
SCALE	
BY	
JOB NO.	
SHEET	

NOTICE TO BORROWER:

THIS DOCUMENT CONTAINS PROVISIONS
RESTRICTING RESALE AND ASSUMPTIONS

AMENDED PROMISSORY NOTE

First Amendment to the Amended and Restated Disposition,
Development and Loan Agreement Hotel Parcel Loan

Principal Amount: $64,368.90 _____, 2024

APN 098-00407-031 & 033

FOR VALUE RECEIVED, the undersigned 2205 Railroad Avenue LLC, a Delaware Limited Liability Company ("Borrower") whose address is 262 Glorietta Boulevard, Orinda, California 94563, hereby promise(s) to pay to the order of the City of Livermore, a municipal corporation ("City"), at 1052 South Livermore Avenue, Livermore, California 94550, the principal amount of SIXTY-FOUR THOUSAND THREE HUNDRED SIXTY-EIGHT and 90/100 DOLLARS ($64,368.90), without any interest accrued thereon, as set forth in this Promissory Note ("Note").

Pursuant to that certain First Amendment to the Amended and Restated Disposition, Development and Loan Agreement ("DDLA") dated July 22, 2024, by and between City and Borrower (the "Developer"), the Developer agreed to construct a four-story approximately 65,000-75,000 square foot hotel containing between 125-135 rooms, approximately 1,400-2,000 square feet of economically viable meeting space, a roof-top deck and related hotel amenities and improvements (the "Project") on the Property (defined below) and agreed to satisfy a portion of the parking requirements identified in the conditions for approval for the Project on the Parking Parcel, as more particularly described in the DDLA.

In accordance with the DDLA, the property consists of the parcel located on the southeast corner of South Livermore Avenue and Railroad Avenue in downtown Livermore in the City of Livermore, Alameda County, California (APNs: 098-0407-031-00 and 098-0407-033-00) as more particularly described and depicted as Parcel 1 on Parcel Map 10969 and in Exhibit A attached hereto (the "Property" or "Hotel Parcel").

In accordance with the DDLA, the Borrower intends to purchase, develop, own, and operate the Project on the Hotel Parcel. Pursuant to the DDLA and its terms and conditions for the loan, the City has made a loan to Borrower in the original principal amount of SIXTY-FOUR

THOUSAND THREE HUNDRED SIXTY-EIGHT AND 90/100 DOLLARS ($64,368.90) to fund the acquisition of the Hotel Parcel (the "Hotel Parcel Loan").

This Note is made and delivered pursuant to and in conjunction with the DDLA entered into by and between the City and Borrower dated as of even date herewith. All capitalized terms not otherwise defined in this Note shall have the meanings set forth in the DDLA.

1. Borrower's Obligation. This Note evidences the Borrower's obligation to pay the City the Principal Amount, as that term is subsequently defined, loaned to the Borrower by the City to finance the Hotel Parcel for the Project, as set forth in the DDLA. As a condition of receiving the Principal Amount, the Borrower promises and agrees to comply with all terms and conditions of this Note.

2. Principal. The principal amount of this Note, $64,368.90 ("Principal Amount"), loaned to the Borrower by the City to finance the purchase of the Hotel Parcel for the Project, as set forth in the DDLA.

3. Interest. There shall be no interest due on the Note.

4. Term. The entire indebtedness evidenced by this Note shall be repaid to the City no later than December 31, 2026; unless otherwise terminated for infeasibility in accordance with the DDLA.

5. No Assumption. Except as may be otherwise set forth in this Agreement and the DDLA, this Note shall not be assumable by the successors and assigns of Borrower without the City's prior written consent.

6. Security. This Note is secured by that certain Deed of Trust and Assignment of Rents executed concurrent with this Note and recorded against the Hotel Parcel in the Official Records of Alameda County, wherein the Borrower is the Trustor, and the City is the Beneficiary (the "Security Instrument"). City shall be entitled to the benefits of the Security Instrument and shall have the right to enforce the covenants and agreements contained herein, in the Security Instrument, and in the DDLA executed by and between the Borrower and the City as a condition of the DDLA. Any restrictive covenants executed by and between City and Borrower as a condition of the DDLA shall remain effective for the full duration of those restrictions and shall survive repayment of this Note as set forth in the DDLA.

7. Repayment. The Borrower shall not be required to make any payments under this Note until such time as this Note becomes due and payable in full pursuant to the following sentence. This Note becomes due and payable in full on the earlier of: (a) the date of any Transfer, as defined in the DDLA not authorized by the City; (b) an Event of Default by Borrower which has not been cured as provided for in the DDLA; but in any event (c) no later than December 31, 2025. Any payments made by Borrower pursuant to this section shall

be applied to reduce the Principal Amount of the Hotel Parcel Loan. All payments by the Borrower shall be paid to the City in currency of the United States of America, which at the time of the payment is lawful for the payment of public and private debts.

All payments on this Note shall be made payable to the City of Livermore and shall be delivered to the City at 1052 South Livermore Avenue, Livermore, California, 94550, or to such other place as the City may from time-to-time designate.

All payments on this Note shall be without expense to the City, and the Borrower agrees to pay all costs and expenses incurred in connection with the payment.

8. Prepayment. At its option and without any premium or penalty, Borrower may pay all or a portion of the outstanding Principal Amount prior to the amount becoming due. The Borrower may make such prepayments at any time. All prepayments shall be applied by the City to reduce the amount of the outstanding Principal Amount owed under this Note.

9. Encumbrances. The Borrower shall not encumber either or both the Hotel Parcel or Parking Parcel, permit the covenancy, transfer, or encumbrance of either or both the Hotel Parcel or Parking Parcel, allow the placement of any liens, notes, or deeds on either or both the Hotel Parcel or Parking Parcel, or use either or both the Hotel Parcel or the Parking Parcel as security for any note or loan, without the City's prior written approval; provided, however, that the approval of encumbrances consistent with the approved financing plan included in the DDLA shall not be unreasonably withheld. Any written approval by the City shall be consistent with the requirements of Section 15 below.

10. Payment Acceleration. The Principal Amount of this Note, together with all accrued interest and other outstanding payments and penalties, shall become immediately due and payable upon the occurrence of any of the following events, each subject to any applicable notice and cure periods:

A. The Borrower fails to use the Hotel Parcel or Parking Parcel, or both, in accordance with the DDLA;
B. The Borrower fails to cure a default consistent with the requirements of Section 11 below;
C. The transfer of the Hotel Parcel, Parking Parcel, or this Note in violation of Section 13, and without the City's written approval consistent with the requirements of Sections 14 and 15 below;
D. The encumbrance of the Hotel Parcel or Parking Parcel, or both, in violation of Section 9, without the City's written approval consistent with the requirements of Sections 9 and 15; and
E. Borrower is found to be in Default of the DDLA.

11. Default – Notice & Opportunity to Cure. If in the City's sole discretion, the Borrower fails to observe or perform any condition contained herein, or take diligent action towards the cure or remedy of such event, for a period of thirty (30) days after written notice from the City specifying such failure and requesting that it be cured, such event shall be deemed a default and the City shall be entitled, and in addition to all other remedies provided by law or in equity, to compel specific performance by the Borrower of its obligations under this Note. Any investor, limited partner of Borrower or Borrower's assignee shall have the same notice and cure rights granted to Borrower, and any cure tendered by such investor shall be accepted or rejected on the same basis as if tendered by Borrower.

12. Default Rate. Upon the occurrence of an Event of Default, interest shall automatically be increased without notice to the rate of the lesser of ten percent (10%) per annum or the maximum rate permitted by law (the "Default Rate"); provided, however, if any payment due hereunder is not paid when due, the Default Rate shall apply to commence upon the due date for such payment. When Borrower is no longer in default, the Default Rate shall no longer apply. Notwithstanding the foregoing provisions, if the interest rate charged exceeds the maximum legal rate of interest, the rate shall be the maximum rate permitted by law. The imposition or acceptance of the Default Rate shall in no event constitute a waiver of a default under this Note or prevent City from exercising any of its other rights or remedies.

13. Prohibited Transfers. Except as otherwise permitted by the terms of this Note or the DDLA, the Borrower is prohibited from transferring by sale, lease, trade, exchange, rental, gift, assignment, conveyance, the Hotel Parcel or Parking Parcel, or any parts thereof, or any trust or power, or any transfer in any other mode or form, of the Hotel Parcel or Parking Parcel, or any parts thereof or any interests therein; provided, however, that the Borrower may transfer any or all of its interest in the Hotel Parcel or Parking Parcel, or both, to a subsidiary or affiliate controlled by Borrower. Notwithstanding anything to the contrary contained herein, this Note shall be assignable and transferable in whole or in part to one or more limited partnerships affiliated with Borrower, so long as any such assignment or other document evidencing such assignment is acceptable to the City.

14. Permitted Transfers. Under the following limited circumstances, the City may give its prior written approval for the transfer of the Hotel Parcel, the Parking Parcel, or both: The Hotel Parcel and Parking Parcel are to be transferred to another qualified developer, as pre-determined by the City, who will assume the Borrower's rights and obligations under the Deed of Trust, this Note, and the DDLA.

15. Prior Written Approval. The City shall not unreasonably withhold its written approval of permitted transfers, encumbrances, and refinancing by the Borrower. However, the City may only give written approval of those transfers, encumbrances, and refinancing authorized by this Note and the DDLA. The Borrower must request the City's written approval prior to pursuing any transfer, encumbrance, or refinancing. If not approved, or in violation of this Note, any unapproved transfer, encumbrance, or refinancing shall be null and void and the

Borrower must deliver to the City any profits or benefit received from the transaction consistent with the requirements of Section 24.

16. Audit and Inspection. To the extent permissible under laws and regulations protecting individual confidentiality, the City shall have access to and is hereby authorized by the Borrower to inspect, make copies or photographs of, the Hotel Parcel, the Parking Parcel, books, utility accounts, and records of the Borrower pertaining to this Note and the Borrower's use of the Hotel Parcel and the Parking Parcel.

17. Notices. Any demand or notice which either party desires to deliver to the other shall be in writing and shall be delivered by hand, sent by a recognized overnight courier, deposited in the United States mail with first-class prepaid postage and a return receipt requested, to ensure timely and complete delivery to the other party at the addresses noted in the DDLA.

18. Attorney Fees and Costs. Borrower agrees that if any amounts due under this Note are not paid when due, to pay all costs and expenses of collection and reasonable attorney fees paid or incurred in connection with the collection or enforcement of this Note, whether or not suit is filed.

19. Severability. Every provision of this Note is intended to be severable. If any provision is held by a court of competent jurisdiction to be invalid, illegal, and unenforceable, the validity, legality, and enforceability, of the remaining provisions shall not in any way be affected or impaired.

20. Interpretation. The provisions of this Note have been arrived at through negotiation and each party had a full and fair opportunity to revise the provisions and have them reviewed by legal counsel. The parties agree that any ambiguities in construing or interpreting this Note shall not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language of this Note and the DDLA, the language of the DDLA shall control.

21. Joint and Several Obligations. This Note is the joint and several obligations of all makers, sureties, guarantors, and endorsers, and shall be binding upon them and their successors and assigns.

22. Negotiability. Except as otherwise provided herein, this Note is non-negotiable and not transferable by the Borrower. The City, in its sole discretion, may, in the event of an Event of Default by the Borrower that is not cured as provided for in the DDLA, negotiate a transfer, assignment, or assumption of this Note to any person and upon a minimum ninety (90) day written notice to the Borrower by the City.

23. Binding Upon Successors. All provisions of this Note shall be binding upon and inure to the benefit of the successors-in-interest, transferees, and assigns of the Borrower and the City, respectively.

24. Nonrecourse. Except as provided in this subsection, neither the Borrower, nor any director or indirect member or interest holder of or in the Borrower, shall have any direct or indirect personal liability for payment of the principal of, and interest on, this Note or the Hotel Parcel Loan. Following recordation of the Deed of Trust, the sole recourse of the City with respect to the principal of, and interest on, this Note and defaults by the Borrower for the use of the Hotel Parcel shall be to the Hotel Parcel; provided, however, that nothing contained in the foregoing limitation of liability shall (i) limit or impair the enforcement against all such security for this Note of all the rights and remedies of the City against Borrower hereunder, or (ii) be deemed in any way to impair the right of the City to assert the unpaid principal amount of this Note as demand for money against Borrower within the meaning and intendment of Section 431.70 of the California Code of Civil Procedure or any successor provision thereto. The foregoing limitation of liability is intended to apply only to the obligation for the repayment of the principal of, and payment of interest on this Note and the performance of the Borrower obligations under the Deed of Trust for the Hotel Parcel, except as hereafter set forth; nothing contained herein is intended to relieve the Borrower of its obligation to indemnify the City under any article or section of the DDLA, or liability for (i) fraud or willful misrepresentation; (ii) the failure to pay taxes, assessments or other charges which may create liens on the Hotel Parcel that are payable or applicable prior to any foreclosure under the Deed of Trust (to the full extent of such taxes, assessments or other charges); (iii) the fair market value of any personal property or fixtures removed or disposed of by the Borrower other than in accordance with the Deed of Trust; and (iv) the misappropriation of any proceeds under any insurance policies or awards resulting from condemnation or the exercise of the power of eminent domain or by reason of damage, loss or destruction to any portion of the Hotel Parcel.

25. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

[Signatures on the Following Page]

DATE:

BORROWER:

2205 RAILROAD AVENUE LLC,
a Delaware limited liability company

By: 2205 Railroad Member LLC, a Delaware limited liability company
Its: Sole Member

By: PresidioCo Bay Area LLC, a Delaware limited liability company
Its: Manager

_____
By: Rikesh Patel
Its: Manager

DATE:

CITY:

CITY OF LIVERMORE,
a municipal corporation

_____
By: Marianna Marysheva
Its: City Manager

APPROVED AS TO FORM

_____
Deputy/Assistant/City Attorney

Exhibit A – Property Description – Hotel Parcel

EXHIBIT A

Legal Description Hotel Parcel

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LIVERMORE, IN THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1, PARCEL MAP 10969, FILED AUGUST 30, 2022, BOOK 356 OF MAPS, PAGE 42, ALAMEDA COUNTY RECORDS.

EXCEPTING THEREFROM:

THAT PORTION THEREOF LYING BELOW A DEPTH OF 500 FEET, MEASURED VERTICALLY, FROM THE CONTOUR OF THE SURFACE OF SAID PROPERTY, HOWEVER, GRANTOR, OR ITS SUCCESSORS AND ASSIGNS, SHALL NOT HAVE THE RIGHT FOR ANY PURPOSE WHATSOEVER TO ENTER UPON, INTO OR THROUGH THE SURFACE OF SAID PROPERTY OR ANY PART THEREOF LYING BETWEEN SAID SURFACE AND 500 FEET BELOW SAID SURFACE", AS RESERVED IN THE DEED FROM SOUTHERN PACIFIC TRANSPORTATION COMPANY, RECORDED DECEMBER 28, 1983, AS INSTRUMENT NO. 83-242907, OF OFFICIAL RECORDS.

RESERVING THEREFROM:

AN EASEMENT FOR PUBLIC ROOFTOP ACCESS AND USE, UNDER, ON AND OVER THAT PORTION OF SAID PARCEL 1 DEPICTED UPON PARCEL MAP 10969 AS "PUBLIC ACCESS & ROOFTOP OPEN SPACE RESERVATION", FOR THE PURPOSES OF PUBLIC ACCESS AND OPEN SPACE USE OF SAID ROOFTOP, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OF THE PUBLIC FOR PEDESTRIAN ACCESS TO AND FROM SAID ROOFTOP AREA, AS FURTHER DESCRIBED AS FOLLOWS:

THE ROOFTOP PUBLIC OPEN SPACE AREA IS TO INCLUDE A MINIMUM OF 3,500 SQUARE FEET OF PUBLICLY ACCESSIBLE ROOFTOP SPACE WITH SEATING FOR AT LEAST 15 PEOPLE. THE ROOFTOP PUBLIC OPEN SPACE AREA IS BE LOCATED ON THE SOUTHERN SIDE OF THE ROOFTOP AREA AND IT WILL BE AVAILABLE FOR PUBLIC USE AT LEAST 6 DAYS EACH WEEK OF THE YEAR FROM 11 A.M. TO 8 P.M. IN ADDITION, PUBLIC USE OF THE ROOFTOP OPEN SPACE WILL BE AVAILABLE EACH YEAR FROM 9:00 A.M. TO 10:00 P.M. ON THE FOURTH OF JULY, FROM 9:00 A.M. TO 9:00 P.M. FOR THE WINTER HOLIDAY PARADE EVENT AND THE RODEO PARADE, AND FROM 11 A.M. TO 8 P.M. ON ALL OTHER HOLIDAYS.

APN: 098-0407-031-00 (AFFECTS A PORTION OF THE ABOVE DESCRIBED LAND)
098-0407-033-00 (AFFECTS THE REMAINDER OF THE ABOVE DESCRIBED LAND)

EXHIBIT N-1

EXHIBIT A

Amended DDLA Schedule of Performance

This is an amended schedule of performance and all items not modified by this amended performance schedule and or completed prior to this amended schedule of performance shall remain in effect.

	Pre-Escrow Requirements	Original Due Date	Amended Due Date
1	Pre-submittal meeting between City and Developer for entitlements	Completed	
2	Developer submittal of entitlement package	Completed	
3	Developer submittal of complete entitlement package in response to City comments	Completed	
4	Developer submittal Phase 1 for Parking Parcel lot prior to close of escrow	Completed	
5	Developer completes purchase of Parking Parcel property	Completed	
6	Preliminary pro-forma submitted by Developer to City	Completed	
7	Developer Submittal of Draft Hotel Standard Proposal	Completed	
8	City Council review of entitlement package (date subject to on-time submittal of complete entitlement package)	Completed	
9	City approval of parcel map waiver (staff level - subject to on-time submittal of complete entitlement package)	Completed	
10	Developer and the City have entered into a Lease and Operating Agreement for the Hotel and Parking Parcels	Completed	
11	City records parcel map for Hotel Parcel	Completed	
12	Close of Escrow and final transfer of property to Developer	Completed	
13	Developer Submittal of Final Hotel Standard Proposal	~~3-Jul-23~~	7/3/2025*
14	Building permit submittal by Developer including Hotel, Parking Parcel, Joint Solid Waste Facility and all public improvements	~~18-Aug-23~~	8/18/2025*
15	City response to final Hotel Standard Proposal (date subject to on-time submittal of Final Hotel Standard Proposal in Item 13 above)	~~30-Nov-23~~	11/30/2025*
16	Final submittal of Final Hotel Standards Proposal in response to City comments	~~12-Jan-24~~	1/12/2026*
17	City approval of Final Hotel Standards Proposal, with conditions as needed (date subject to on-time submittal of Item 17 above)	~~2-Feb-24~~	2/2/2026*
18	Developer submittal of letters of intent from lenders/equity partners demonstrating full financing needed to construct	~~15-Feb-24~~	2/15/2026*
19	Submittal of improvement agreement, bonds, and final off-site improvement plans	~~4-Mar-24~~	3/4/2026*
20	Council approval of improvement agreement and public improvements (subject to on-time submittal of Item 18 above)	~~13-May-24~~	5/13/2026*
21	Developer has obtained Building Permit approval by City for Hotel, Parking Parcel and Joint Solid Waste Facility	~~31-May-24~~	5/31/2026*
22	Start of construction of Joint Solid Waste facility and Hotel (Outside Date)	~~30-Jun-24~~	6/30/2026*
23	Joint Compactor/Solid Waste Facility Agreement signed by all applicable parties	~~30-Jun-23~~	7/31/2026*
24	Start of construction of Parking Parcel improvements	~~30-Jan-25~~	1/30/2027*
25	Construction of Hotel and all public improvements, and Parking Parcel complete	~~15-Nov-25~~	11/15/2027*
26	Hotel opens and lump sum payment due for loan + interest on Parking Parcel and final payment due for the Hotel Property purchase	~~31-Dec-25~~	12/31/2027*

RECORDING REQUESTED BY:
Chicago Title Company
Escrow No 36200749.

WHEN RECORDED MAIL TO:
2205 Railroad Avenue LLC
262 Glorietta Boulevard
Orinda, CA 94563

EXHIBIT A

2022175328 10/21/2022 12:29 PM 5 PGS

OFFICIAL RECORDS OF ALAMEDA COUNTY
MELISSA WILK, CLERK-RECORDER
RECORDING FEES: $36.00
TOTAL TAX: $79.20
COUNTY TAX PORTION: $39.60
CITY TAX PORTION: $39.60

ELECTRONICALLY RECORDED

MAIL TAX STATEMENTS TO:

2205 Railroad Avenue LLC
262 Glorietta Boulevard
Orinda, CA 94563

The Undersigned grantor(s) declare(s): 22-505

DOCUMENTARY TRANSFER TAX $79.20
SURVEY MONUMENT FEE $10.00
Computed on the consideration or value or property conveyed;

APN 098-0407-031-00 & 098-0407-033-00
Property: 2205 Railroad Avenue, Livermore, CA
This document is exempt from the $75 Building Homes and Jobs Act Fee (per Government Code §27388. As it is subject to the imposition of transfer tax.

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

The City of Livermore, a Municipal Corporation ("Grantor")

hereby Grant(s) in fee to

2205 Railroad Avenue LLC, a Delaware limited liability company ("Grantee")

the real property in the City of Livermore
County of Alameda, State of California, as described in Exhibit A with the following restriction:

FOR LEGAL DESCRIPTION
SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

GRANTOR:
City of Livermore, a municipal corporation

By: Marianna Marysheva
Its: City Manager

APPROVED AS TO FORM

Jason Alcala
City Attorney

GRANTEE:

2205 Railroad Avenue LLC, a Delaware limited liability company

By: 2205 Railroad Member LLC, a Delaware limited liability company
Its: Sole Member

By: PresidioCo Bay Area LLC, a Delaware limited liability company
Its: Manager

By: Rikesh Patel Rikesh Patel
Its: Manager

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Alameda)

On 10/14/2022 before me, Susan Mendel, Notary Public
(insert name and title of the officer)

personally appeared Marianna Manyshева,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

SUSAN RACHEL MENDEL
Notary Public - California
Alameda County
Commission # 2368272
My Comm. Expires Jul 28, 2025

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Contra Costa)

On October 19, 2022 before me,
L. Leenhouts, Notary Public (here insert name and title of the officer),
personally appeared Rikesh Patel
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature L. Leenhouts (Seal)

L. LEENHOUTS
Notary Public - California
Alameda County
Commission # 2280571
My Comm. Expires Mar 12, 2023

(notary)(10-03)(Rev. 10-14)

EXHIBIT A
LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LIVERMORE, IN THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1, PARCEL MAP 10969, FILED AUGUST 30, 2022, BOOK 356 OF MAPS, PAGE 42, ALAMEDA COUNTY RECORDS.

EXCEPTING THEREFROM:

THAT PORTION THEREOF LYING BELOW A DEPTH OF 500 FEET, MEASURED VERTICALLY, FROM THE CONTOUR OF THE SURFACE OF SAID PROPERTY, HOWEVER, GRANTOR, OR ITS SUCCESSORS AND ASSIGNS, SHALL NOT HAVE THE RIGHT FOR ANY PURPOSE WHATSOEVER TO ENTER UPON, INTO OR THROUGH THE SURFACE OF SAID PROPERTY OR ANY PART THEREOF LYING BETWEEN SAID SURFACE AND 500 FEET BELOW SAID SURFACE", AS RESERVED IN THE DEED FROM SOUTHERN PACIFIC TRANSPORTATION COMPANY, RECORDED DECEMBER 28, 1983, AS INSTRUMENT NO. 83-242907, OF OFFICIAL RECORDS.

RESERVING THEREFROM:

PUBLIC ACCESS AND USE TO OVER AND ON SAID ROOFTOP PUBLIC OPEN SPACE DESCRIBED IN EXHIBIT A. THE ROOFTOP PUBLIC OPEN SPACE AREA IS TO INCLUDE A MINIMUM OF 3,500 SQUARE FEET OF PUBLICLY ACCESSIBLE ROOFTOP SPACE WITH SEATING FOR AT LEAST 15 PEOPLE. THE ROOFTOP PUBLIC OPEN SPACE AREA IS BE LOCATED ON THE SOUTHERN SIDE OF THE ROOFTOP AREA AND IT WILL BE AVAILABLE FOR PUBLIC USE AT LEAST 6 DAYS EACH WEEK OF THE YEAR FROM 11 A.M. TO 8 P.M. IN ADDITION, PUBLIC USE OF THE ROOFTOP OPEN SPACE WILL BE AVAILABLE EACH YEAR FROM 9:00 A.M. TO 10:00 P.M. ON THE FOURTH OF JULY, FROM 9:00 A.M. TO 9:00 P.M. FOR THE WINTER HOLIDAY PARADE EVENT AND THE RODEO PARADE, AND FROM 11 A.M. TO 8 P.M. ON ALL OTHER HOLIDAYS.

APN: 098-0407-031-00 (AFFECTS A PORTION OF THE ABOVE DESCRIBED LAND)
098-0407-033-00 (AFFECTS THE REMAINDER OF THE ABOVE DESCRIBED LAND)

LEASE AND OPERATING AGREEMENT
2080 RAILROAD AVENUE

(The Parking Parcel)

THIS LEASE AND OPERATING AGREEMENT ("Lease Agreement") dated as of this 3rd day of May, 2022, is made and entered into by and between 2080 Railroad Avenue LLC, a Delaware Limited Liability Company ("Lessor") and the City of Livermore, a municipal corporation ("City" or "Lessee").

RECITALS

A. 2205 Railroad Avenue, LLC ("Developer") desires to construct a four story approximately 65,000-75,000 square foot hotel, containing between 125-135 hotel rooms on City-owned parcels located on the southeast corner of South Livermore Avenue and Railroad Avenue in downtown Livermore (hereinafter "Hotel"). As part of the conditions of approval for the Hotel, Developer is required to comply with the City's parking requirements for the Downtown Specific Plan.

B. Lessor, an affiliate of Developer and Developer's parent company, owns that particular piece of real property located on the northwest corner of Railroad Avenue and North K Street in downtown Livermore commonly known as 2080 Railroad Avenue (APN 098-0282-009-00) as more particularly described in Exhibit A, attached hereto and incorporated herein. At the time construction of the Hotel is complete, Developer, through a use agreement with Lessor, intends to use the property as a valet parking lot to satisfy a portion of the City's parking requirements for the Hotel (hereinafter "Parking Parcel").

C. On January 14, 2022, the City and Developer entered into a Disposition, Development and Loan Agreement (the "DDLA") wherein the City made a Site Acquisition Loan to Developer to fund the acquisition of the Parking Parcel. On February 2, 2022, Developer assigned and conveyed to Lessor all of its rights and obligations under the DDLA related to the Site Acquisition Loan, the acquisition of the Parking Parcel, and the Lease and Operating Agreement for the Parking Parcel, and Lessor accepted and assumed all such rights and obligations.

D. Lessor has agreed to lease the Parking Parcel to City at no cost for use as a temporary surface public parking lot or public valet parking lot for a period of three years from the effective date of this Lease Agreement or the date when construction of the Hotel is at least 40 percent complete, whichever is earlier. However, at a minimum, the City shall be permitted to use the Parking Parcel until September 30, 2024. Upon satisfaction of these requirements, Lessor may terminate this Lease Agreement to allow Lessor to begin the construction of permanent parking improvements on the Parking Parcel.

E. Prior to the construction of permanent parking improvements on the Parking Parcel for the Hotel, City desires to lease from Lessor and Lessor desires to lease to City the Parking Parcel (hereinafter "Parking Parcel" or "Leased Premises") as more particularly described in Exhibit A. The Leased Premises is approximately 33,695 square feet of vacant and undeveloped land.

F. The Lessor desires to lease the Leased Premises to City and City desires to lease the Leased Premises from Lessor on the terms and conditions contained in this Lease Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties hereby agree as follows:

1. **Leased Premises.** Lessor leases to City and City leases from Lessor, the Leased Premises which consists of approximately 33,695 square feet of vacant and undeveloped land, as more particularly described in Exhibit A.

2. **Possession; Delay in Delivery of Possession.**

(a) Except as otherwise provided in this Lease, City agrees to accept possession of the Leased Premises in its existing "as is" condition, including, but not limited to, all patent and latent defects and subject to all applicable laws, ordinances, and regulations governing and regulating the use of the Parking Parcel and/or the Leased Premises and any recorded covenants, conditions, restrictions, easements, licenses, or right of ways.

(b) If Lessor, for any reason whatsoever, cannot deliver possession of the Leased Premises to City on or before the commencement date, this Lease Agreement shall not be void or voidable and no obligation of City shall be affected thereby, and neither Lessor nor Lessor's agents shall be liable to City for any loss or damage resulting therefrom.

3. **Rent.** As a condition of the loan from City to Lessor to purchase the Parking Parcel, Lessor agrees to lease the Leased Premises to the City at no cost for use as a temporary surface public parking lot and/or public valet parking lot. The no cost lease is a condition of the loan the City has provided to Lessor for the purchase of the Parking Parcel through the DDLA. City shall be responsible for all costs associated with the City's use of the Leased Premises.

4. **Term.** This Lease Agreement shall commence on February 14, 2022 ("Commencement Date") and terminate three years from the effective date of this Lease Agreement or the date when construction of the Hotel is at least 40% complete, whichever is earlier ("Term"). However, at a minimum, the City shall be permitted to use the Parking Parcel until September 30, 2024. Upon satisfaction of these requirements, Lessor may terminate this Lease Agreement to allow Lessor to begin construction of permanent parking improvements on the Leased Premises. This Lease Agreement shall supersede and replace any other lease between said parties, or their predecessors in interest, concerning the use of the Leased Premises, or any other space or area of the Leased Premises.

5. **City's Use of Leased Premises.**

(a) **Use of Leased Premises.** City shall only use the Leased Premises for the

purpose of a temporary surface public parking lot, a public valet parking lot, or both.

(b) **Rules Regarding Use**. City shall observe and comply with the rules and regulations annexed to this Lease Agreement and, City's use of the Leased Premises shall be subject to the following rules:

(i) City shall not allow, authorize, or permit the Leased Premises, or any part thereof, to be used for any use or any illegal activity or purpose in violation of federal or state laws and/or ordinances, regulations and requirements of County, City, or any other enforcement authority.

(ii) City shall not commit, allow, or permit to be used for any offensive or improper use or nuisance, the Leased Premises which may unreasonably or unlawfully disturb or damage the Parking Parcel or Leased Premises.

(iii) City shall not leave or store any trash, garbage, or refuse of any kind in, on, or about the Leased Premises and shall cause any refuse, trash, or other waste deposited on the Leased Premises by any of its employees, agents, or representatives to be picked up and disposed of in the appropriate manner so as to keep the Leased Premises in a neat and clean condition.

(iv) City shall not use, commit, allow, or permit to be used or committed, any waste upon the Leased Premises.

(c) **Hazardous Materials**. City shall not cause or permit any Hazardous Materials to be permanently stored, used or disposed of in the Parking Parcel or Leased Premises, by City's agents, employees, contractors or invitees, without having obtained Lessor's prior, written consent. For purposes of this Lease Agreement, the following terms shall have the meanings set forth below:

"Hazardous Materials" shall mean any toxic or hazardous wastes, pollutants, materials or substances, including, without limitation, asbestos, PCB's, petroleum products, radioactive substances or their by-products, other substances defined or listed as "hazardous substances," "hazardous materials," "hazardous wastes" or "toxic substances in or pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §§ 9601 et seq. ("CERCLA"); the Hazardous Materials Transportation Act, 49 U.S.C §§ 5101 et seq.; the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.; the Toxic Substance Control Act of 1976, 15 U.S.C. §§ 2601 et seq.; any "toxic pollutant" under the Clean Water Act, 33 U.S.C. §§ 1251 et seq.; any hazardous air pollutant under the Clean Air Act, 42 U.S.C. §§ 7401 et seq.; the California Hazardous Substance Account Act, California Health & Safety Code ("HSC") §§ 25300 et seq., the Hazardous Waste Disposal Land Use Act, HSC §§ 25100 et seq.; in or pursuant to or identified as causing cancer or reproductive toxicity in the California Safe Drinking Water & Toxic Enforcement Act of 1986, HSC §§ 25249.5 et seq.; and HSC §§ 25117, 25316; all as such laws may be amended; any hazardous or toxic substance, material, chemical, waste, or pollutant now or hereafter

regulated under any other applicable Federal, State, or local environmental laws, without limitation; and any other matter in the nature thereof arising pursuant to the jurisdiction of any public agency.

"Hazardous Discharge" and "Contamination" shall mean the happening of any event involving an emission, spill, release, or discharge ("Release") into or upon (i) the air, (ii) soils or any improvements located thereon, (iii) surface or ground water, (iv) the sewer, septic system, or waste treatment, storage, or disposal system servicing the Premises, of any Hazardous Material, or (v) any other matter in the nature thereof arising pursuant to the jurisdiction of any public agency.

"Environmental Laws" shall mean all applicable Federal, State, and local laws, ordinances, regulations, orders, procedures, policies, and directives of every kind and nature whatsoever pertaining to Hazardous Materials in, at, on, under, or from the Leased Premises or any portion thereof.

6. **Minor Improvements.** Subject to Lessor's approval, City may, construct, install, maintain, repair and replace, if necessary, minor improvements on the Leased Premises which include, but are not limited to, minor grading, installation of gravel or other suitable parking surface, driveway improvements, signage, lighting and other necessary improvements in order to provide a temporary surface public parking lot and/or public valet parking lot ("Minor Improvements"). Lessor shall notify the City within 10 calendar days of any request by the City for minor improvements on the Leased Premises. Failure of Lessor to respond to the City's request within 10 calendars days shall be deemed an approval.

7. **City Obligations.**

(a) Services and Utilities. City shall provide basic electricity and power for the Leased Premises.

(b) Maintenance. Except as otherwise provided herein, City shall at its own cost and expense, maintain the Leased Premises and every part thereof, in good and sanitary order, condition, and repair. City shall be responsible for the cost of any and all repairs or maintenance to the Leased Premises, caused by negligent, careless, or willful acts of City, its employees, agents, equipment, or invitees.

8. **Condition of Leased Premises.** City represents and warrants that it has made a thorough and complete inspection of the Leased Premises using qualified consultants and experts of its own choosing, and the Leased Premises is suitable for a temporary surface public parking lot and/or public valet parking lot and is in good and sanitary order, repair, and condition. City hereby accepts the Leased Premises in its present condition and, except as otherwise may be set forth herein, without representation or warranty by Lessor as to the condition of such Leased Premises or as to the use of the Leased Premises.

9. Construction and Repair.

(a) Mechanic's Lien. City shall pay, or cause to be paid, all costs and expenses for work done by City, or caused to be done by City, on the Leased Premises of a character which could result in any lien on the Parking Parcel, and City will keep the Parking Parcel free and clear of any mechanic's lien and/or other lien on account of work done for City or at its request.

Should any claims of lien be filed and/or recorded against the Parking Parcel, or any action affecting the title thereto commenced, City shall give Lessor written notice thereof as soon as it has knowledge of the action.

(b) Construction. City shall not build or construct any improvement, except for those set forth in Sections 6 and 7 above, or make any structural change, addition, or remodeling to the Leased Premises without the Lessor's prior written consent. In the event that Lessor provides City with written consent, City shall at its own cost comply with any and all Federal, State, or local laws and/or regulations applicable to any such construction, alteration, or remodeling to or within the Leased Premises to upgrade them to satisfy current standards.

10. Destruction. If the Leased Premises is totally destroyed during the term of this Lease Agreement by fire, flood, earthquake, or other casualty, whether or not covered by insurance, this Lease Agreement shall terminate.

11. Condemnation. If all or part of the Leased Premises is taken by condemnation such that the Leased Premises is no longer usable for a temporary, surface public parking lot and/or public valet parking lot, this Lease Agreement shall terminate. City shall be entitled only to that portion of the proceeds of condemnation which is directly attributable to the value of City's interest in this Lease Agreement.

12. Compliance with Laws. City agrees to comply with all applicable zoning, municipal, county and state laws, ordinances and regulations governing the use of the Leased Premises. City agrees to secure and maintain throughout the Term and any Extended Term any federal, state or local licenses or permits required in order to use the Leased Premises for a temporary surface public parking lot and/or public valet parking lot. City's failure to do so shall be considered a material breach of this Lease Agreement.

13. Assignment.

(a) Prohibition Against Assignment and Encumbrance. This Lease Agreement and any rights or obligations of City hereunder shall not be sold, assigned, transferred, leased, assigned, sublet, conveyed, hypothecated either in whole or in part, or in any manner, without Lessor's prior written consent. The City shall not allow any other person or entity to occupy or use all or any part of the Property or Leased Premises without first obtaining Lessor's written consent. Consent to any assignment shall not constitute a further waiver of the provisions of this section.

(b) Involuntary Assignment. No interest of City in this Lease Agreement shall be assignable by operation of law, including, without limitation, the transfer of this Lease Agreement by testacy or intestacy. Each of the following acts shall be considered an involuntary assignment:

(i) If City is or becomes bankrupt or insolvent, makes an assignment for the benefit of creditors, or institutes a proceeding under the Bankruptcy Act in which City is the bankrupt party; or, if the City is a partnership or consists of more than one person or entity, if any partner of the partnership or other person or entity is or becomes bankrupt or insolvent, or makes an assignment for the benefit of creditors;

(ii) If a writ of attachment or execution is levied on this Lease Agreement;

(iii) If, in any proceeding or action to which City is a party, a receiver is appointed with authority to take possession of the Leased Premises.

(iv) An involuntary assignment shall constitute a default by City and Lessor shall have the right to elect to terminate this Lease Agreement, in which case this Lease Agreement shall not be treated as an asset of City.

(v) If a writ of attachment or execution is levied on this Lease Agreement, City shall have ten (10) days in which to cause the attachment or execution to be removed. If any involuntary proceeding in bankruptcy is brought against City, or if a receiver is appointed, City shall have sixty (60) days in which to have the involuntary proceeding dismissed or the receiver removed.

14. Taxes. Lessor shall pay during the term of this Lease Agreement, without abatement, deduction, or offset, any and all real and personal property taxes, general and special assessments, and other charges (including any increase caused by a change in the tax rate or by a change in assessed valuation) of any description levied or assessed during the term of this Lease Agreement by any governmental agency or entity on or against the Parking Parcel, the Minor Improvements located on the Parking Parcel, personal property located on or in the Parking Parcel or Minor Improvements, and the leasehold interest created by this Lease Agreement.

15. Lessor Refinancing. City is aware that Lessor is leasing its interest in the Leased Premises to City and that Lessor's leasehold interest in the Leased Premises is related to an outstanding lease financing. City agrees that it will use best efforts to cooperate with Lessor in connection with a refinancing of the outstanding lease financing, including executing any estoppel, consent, and other similar documents requested by the Lessor.

16. Indemnity. City agrees to and shall defend, indemnify, protect and hold harmless Lessor, its officers, directors, employees and agents harmless from and against any and all loss, damage, injury, accident, casualty, liability, claim, cost or expense (including, but not limited to, reasonable attorneys' fees) of any kind or character to any person or

property arising from or related to any act or omission of City, its employees, agents or contractors, the City's use of the Leased Premises, the City's installation and maintenance of Minor Improvements on the Leased Premises, or as a result of this Lease Agreement. To the greatest extent by law, City waives all claims or demands against Lessor for any loss, damage, or injury to Lessor or Lessor's' property in connection with this Lease Agreement or the operation or use of the Lessors property by City or its agents, servants or contractors or employees and agrees to so indemnify and hold Lessor harmless.

17. Insurance. The City is self-insured and a member of excess pools for General, Auto, and Professional Liability and Workers' Compensation. Specific documentation will be provided upon request from Lessor.

18. Termination.

(a) Termination for Cause. In the event City engages in, or permits any other person to engage in, any illegal activities in, on, or about the Parking Parcel, or the Leased Premises, whether with or without a criminal conviction, Lessor shall have the right to immediately terminate this Lease Agreement and demand City surrender the Leased Premises.

Except for immediate termination as provided for in this Lease Agreement, should City at any time during the term of this Lease Agreement be in default in the performance of any of the terms, conditions, rules, covenants, or requirements herein contained or otherwise agreed to by the parties, including the rules and regulations established by Lessor regarding the use of, or access to, the Parking Parcel and Leased Premises, and should such default continue for thirty (30) days after written notice thereof from Lessor to City specifying the particulars of such default, or should City vacate or abandon the Leased Premises, then in any such event it shall be at the option of the Lessor, the Lessor's right to declare this Lease Agreement terminated and re-enter the Leased Premises and take possession thereof and remove City's fixtures and furnishings, and City shall have no further claim thereon or hereunder.

(b) Lessor's remedies in this section shall be in addition and supplemental to any and all other rights or remedies which Lessor may have pursuant to this Lease Agreement and/or under the law.

19. Default. Any of the following events or occurrences shall constitute a material breach of this Lease Agreement by City and, after the expiration of any applicable grace period, shall constitute an event of default (each an "Event of Default"):

(a) The failure by City to perform any obligation under this Lease Agreement, which by its nature City has no capacity to cure;

(b) The failure by City to perform any other obligation under this Lease Agreement, if the failure has continued for a period of ten (10) days after Lessor demands

in writing that City cure the failure. If, however, by its nature the failure cannot be cured within ten (10) days, City may have a longer period as is necessary to cure the failure, but this is conditioned on City's promptly commencing to cure within the ten (10) day period and thereafter completing the cure within thirty (30) days after Lessor demands in writing that City cure the failure. City shall indemnify and defend Lessor against any liability, claim, damage, loss, or penalty that may be threatened or may in fact arise from that failure during the period the failure is uncured;

(c) Any of the following: a general assignment by City for the benefit of City's creditors; any voluntary filing, petition, or application by City under any law relating to insolvency or bankruptcy, whether for a declaration of bankruptcy, a reorganization, an arrangement, or otherwise; the abandonment, vacation, or surrender of the Leased Premises by City without Lessor's prior written consent; or the dispossession of City from the Leased Premises (other than by Lessor) by process of law or otherwise;

(d) The abandonment of the Leased Premises by City.

20. Remedies. Upon the occurrence of an Event of Default, Lessor may pursue all rights or remedies available to Lessor at law or in equity.

21. Waiver. Any express or implied waiver of a breach of any term of this Lease Agreement shall not constitute a waiver of any further breach of the same or other term of this Lease Agreement; and the acceptance of rent shall not constitute a waiver of any breach of any term of this Lease Agreement, except as to the payment of rent accepted.

22. Surrender of Leased Premises. Upon the expiration of this Lease Agreement, or no later than ten (10) days after its termination, City shall surrender the Leased Premises to Lessor, and all improvements and alterations thereto, in good condition except for ordinary wear and tear occurring after the last necessary maintenance made by City and/or destruction to the Leased Premises covered by Section 10 of this Lease Agreement.

Lessor may elect to retain or dispose of in any manner any alterations, improvements, fixtures, or furnishings that City does not remove from the Leased Premises on expiration or termination of the Lease Agreement by giving at least ten (10) days' notice to City. Title to any such improvements, alterations, fixtures, or furnishings that Lessor elects to retain or dispose of on expiration of the ten (10) day period shall vest in Lessor. City waives all claims against Lessor for any damage to City resulting from Lessor's retention or disposition of any such improvements, alterations, fixtures, or furnishings. City shall be liable to Lessor for Lessor's costs for storing, removing, and disposing of any improvements, alterations, fixtures, or furnishings.

23. Entry by Lessor. City shall permit Lessor, its officers, employees, and agents to enter into and upon the Leased Premises upon reasonable notice for the purpose of inspecting the Leased Premises, enforcing the rules and regulations under this Lease

Agreement, and the posting of such legal notices as Lessor may deem necessary or convenient.

(a) Lessor and its agents may enter the Leased Premises at any reasonable time upon reasonable notice to City, or immediately in the case of an emergency, for the purpose of: (i) inspecting the Leased Premises; (ii) posting notices of nonresponsibility; (iii) supplying any service to be provided by Lessor to City; (iv) showing the Leased Premises to prospective purchasers, mortgagees, or tenants; (v) making necessary alterations, additions, or repairs as required by this Lease Agreement or to otherwise perform Lessor's duties under this Lease Agreement; (vi) determining whether City is complying with the terms of this Lease Agreement; (vii) performing City's obligations when City has failed to do so after written notice from Lessor, if required by the terms of this Lease Agreement; (viii) placing on the Leased Premises ordinary for lease signs or for sale signs; (ix) doing of other lawful acts that may be necessary to protect Lessor's interest in the Leased Premises under this Lease Agreement; and (x) responding to an emergency.

(b) Lessor shall have the right to use any means Lessor deems necessary and proper to enter the Leased Premises in an emergency. Any entry into the Leased Premises obtained by Lessor in accordance with this section shall not be a forcible or unlawful entry into, or a detainer of, the Leased Premises, or an eviction, actual or constructive, of City from the Leased Premises, nor shall such entry give rise to a claim for rent abatement.

24. Notices. Wherever in this Lease Agreement it shall be required or permitted that notice or demand be given or served by either party to this Lease Agreement to or on the other, such notice or demand shall be given or served in writing and forwarded by registered mail, addressed as follows, though any party may change such address or contact person by written notice by registered mail to the other:

City: Community Development Director
City of Livermore
1052 South Livermore Avenue
Livermore, California 94550

Lessor: 2080 Railroad Avenue LLC
A Delaware limited liability company
Attn: Rikesh Patel, Manager
262 Glorietta Boulevard
Orinda, California, 9456

25. Holding Over. Any holding over without the Lessor's prior written consent shall be prohibited.

26. Modification. This Lease Agreement may only be modified or amended by written agreement signed by both parties hereto.

27. **General Provisions**.

(a) Time of Essence. Time is of the essence for each provision of this Lease Agreement.

(b) Relationship of the Parties. Nothing contained in this Lease Agreement shall be deemed or construed by the parties or by a third party to create the relationship of principal and agent, and/or of partnership, and/or of joint venture, and/or of any association between the parties, other than the relationship of Lessor and the City.

(c) Entire Agreement. This instrument, including any attachments hereto, constitutes the entire agreement of the parties relating to the subject matter of this Lease Agreement and correctly sets forth the rights, duties, and obligations of each party to the other, but this Lease Agreement does not supersede any provision in the DDLA.

(d) Partial Invalidity. If any provision or portion of this Lease Agreement shall be deemed invalid, it is agreed that such invalidity shall affect only such provision or portion thereof, and the remainder of this Lease Agreement shall remain in force and effect.

(e) California Law. This Lease Agreement shall be governed by and construed in accordance with the laws of the State of California.

(f) Review of Lease. Each party to this Lease Agreement declares that prior to the execution of this Lease Agreement, each party had the opportunity to seek the independent advice of counsel and that they apprised themselves of sufficient relevant information in order that they might intelligently exercise their own judgment in deciding whether to execute this Lease Agreement. Each party agrees that they have completely read and understood the Lease Agreement, know the contents thereof, and have signed the Lease Agreement of their own free will and free of any duress. No single party has drafted this Lease Agreement and it shall not be interpreted against any party as the drafting party.

(g) Performance Excused. The parties shall be excused from performance, as hereunder agreed to, if such performance is rendered impossible, impractical, or unreasonably difficult by, but not limited to, any strike, lockout, labor disturbance of any kind, civil commotion, war, acts of terrorism, shortage of any supply or labor, shortage of water, weather, act of government authority, enactment or change in laws or regulations, breakdown of facilities or any cause outside of the parties' control.

(h) Mutual Termination. This Lease Agreement may be terminated at any time concerning the rights and responsibilities of the parties who, between them, agree to such a termination.

(i) Headings. The headings used in this Lease Agreement are intended for reference only and do not define or limit the scope or meaning of any provision of this Lease Agreement.

(j) Waiver. A term or condition of this Lease Agreement may be waived at any time by the party entitled to the benefit thereof, but no such waiver shall affect the right of the waiving party to require observance, performance or satisfaction either of that term or condition as it applies on a subsequent occasion or of any other term or condition. City shall not be excused from complying with any of the terms and conditions of this Lease Agreement by any failure of the City upon any one or more occasions to insist upon or to seek compliance with any such terms and conditions.

(k) Attachments. All attachments referred to in and attached to this Lease Agreement are incorporated by reference as though set forth in full.

(l) Attorney's Fees and Costs. If either party commences an action against the other party to enforce this Lease Agreement, the prevailing party is entitled to reasonable attorney's fees, costs of suit, investigation costs and discovery costs, including costs of appeal.

****

Signatures and Attachment List on the Next Page

IN WITNESS WHEREOF, the parties to this Lease Agreement have executed this Lease Agreement as of the dates set forth below.

2080 Railroad Avenue LLC
A Delaware limited liability company

By: PresidioCo Bay Area LLC
A Delaware limited liability company
its manager

Lessor
By: _____ Dated: 4/12/2022
Rikesh Patel
Manager

City or Lessee

City of Livermore
A Municipal Corporation

By: _____ Dated: 5/3/22
Marc Roberts
City Manager

Approved as to Form:

By: _____
Assistant/City Attorney

Attachments:
Exhibit A – Legal Description

Exhibit A – Legal Description

Real property in the City of Livermore, County of Alameda, State of California, described as follows:

PARCEL A, AS SHOWN ON PARCEL MAP 4602 FILED JULY 29, 1985, IN BOOK 155 OF MAPS, PAGE 39, ALAMEDA COUNTY RECORDS.

APN: 098-0282-009

PLEASE PLACE RECORDER LABEL BELOW THIS LINE

Recording Requested By &
Return to:

City of Livermore
City Clerk's Office
1052 So. Livermore Ave.
Livermore, CA 94550

No fee for recording
pursuant to Government
Code section 27383

2022059386 03/22/2022 01:57 PM 8 PGS
OFFICIAL RECORDS OF ALAMEDA COUNTY
MELISSA WILK, CLERK-RECORDER
RECORDING FEES: $0.00

A.P.N.: 098-0407-031-00, 098-0407-033-00, and 098-0282-009-00 22-116

MEMORANDUM OF DISPOSITION, DEVELOPMENT AND LOAN AGREEMENT

THIS MEMORANDUM OF DISPOSITION, DEVELOPMENT AND LOAN AGREEMENT ("Memorandum") is made as of February 2, 2022, by and between the 2205 Railroad Avenue LLC, a Delaware limited liability company (the "Developer"), and the City of Livermore (the "City"), to confirm that the City and Developer are parties to that certain Amended and Restated Disposition, Development and Loan Agreement between the City and the Developer dated as of January 14, 2022, as may be amended from time-to-time (the "DDLA"). The DDLA concerns the sale of real property in Livermore, California, and a site acquisition loan for the purchase of property in Livermore, California, which properties are described in the attached Exhibits A and J and the development of a four-story approximately 65,000-75,000 square foot hotel containing between 125-135 rooms, approximately 1,400-2,000 square feet of economically viable meeting space, a roof-top public open space and related hotel amenities and improvements (the "Project") on the Property identified in Exhibit A and the use of the Parking Parcel identified in Exhibit J to satisfy a portion of the parking requirements identified in the conditions for approval for the Project. (The Exhibits to this Memorandum have been marked to be consistent with the Exhibits to the DDLA.)

The DDLA is a public document and may be reviewed at and in the office of the City Clerk for the City of Livermore.

This Memorandum is solely for recording purposes and shall not be construed to alter, modify, amend, or supplement the DDLA, of which this is a memorandum. In the event, and to the extent that, that any of the terms or provisions of this Memorandum are inconsistent with the terms or provisions of the DDLA, the provisions of the DDLA shall govern and prevail.

IN WITNESS WHEREOF, the City and Developer have executed this Memorandum and the DDLA by duly authorized representatives, all on the date first written above.

DATE: 2/2/2022

BORROWER:

2205 RAILROAD AVENUE LLC,
a Delaware limited liability company

By: PresidioCo Bay Area LLC,
a Delaware limited liability company,
Its: Manager

By: _____

Name: Richard Pahl

Title: Manager

DATE: 2/3/2022

CITY:

CITY OF LIVERMORE,
a municipal corporation

By: _____

Name: Marc Roberts

Title: City Manager

APPROVED AS TO FORM:

By: _____
Assistant/City Attorney

CALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Alameda }

On 2/2/2022 (Date) before me, Deborah Davis, Notary Public (Here Insert Name and Title of the Officer)

personally appeared Ritesh Patel (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DEBORAH S. DAVIS
Notary Public - California
Alameda County
Commission # 2357707
My Comm. Expires May 15, 2025

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Deborah S. Davis
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

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CALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Alameda }

On 2-3-2022 (Date) before me, Deborah Davis, Notary Public (Here Insert Name and Title of the Officer)

personally appeared Marc Roberto (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DEBORAH S. DAVIS
Notary Public - California
Alameda County
Commission # 2357707
My Comm. Expires May 15, 2025

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Deborah S. Davis
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

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EXHIBIT A

LEGAL DESCRIPTION HOTEL PARCEL

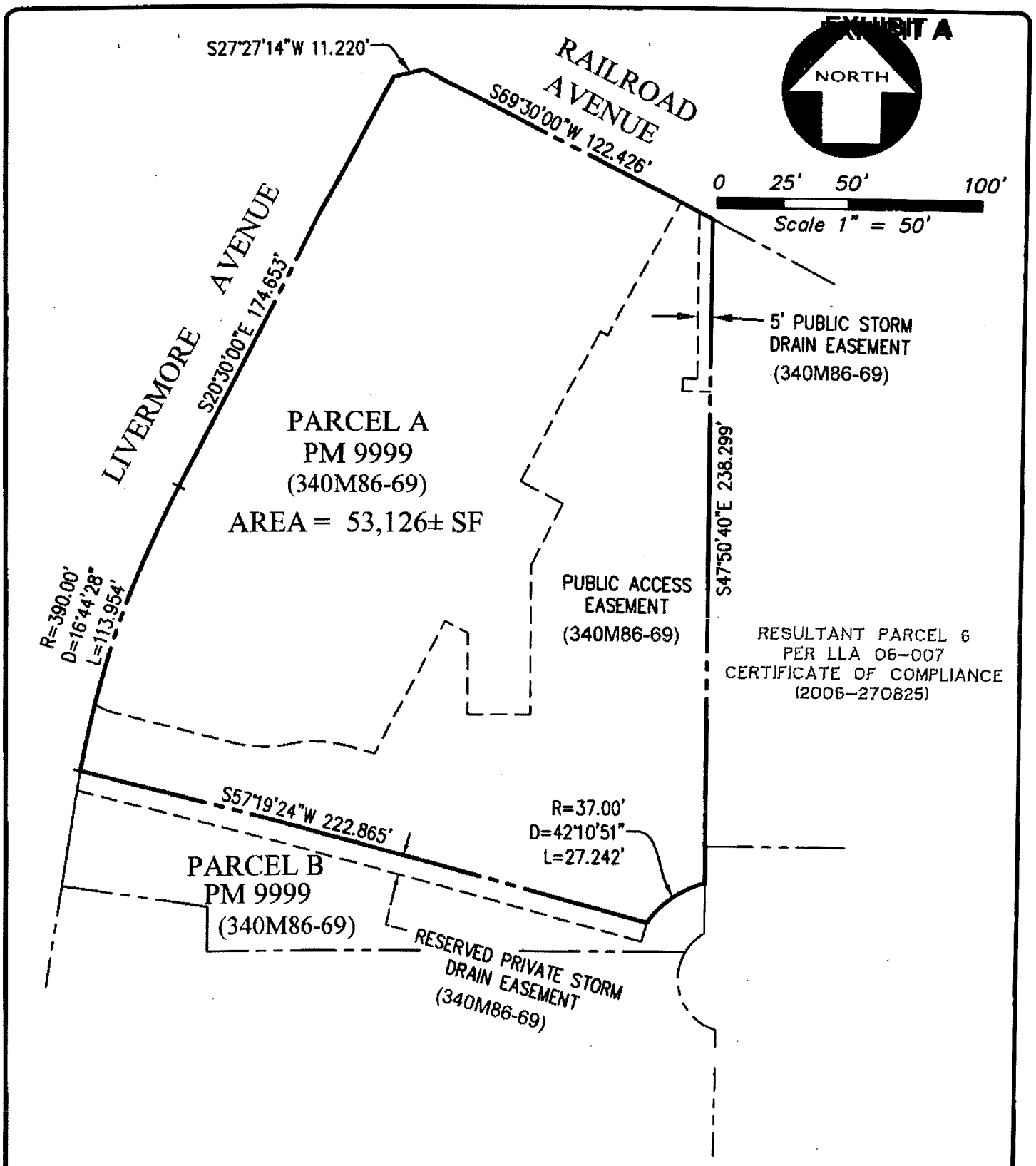
PARCEL A & SUBSURFACE PARCEL C – PARCEL MAP 9999

REAL PROPERTY SITUATED IN THE CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEING ALL OF PARCEL A AND SUBSURFACE PARCEL C, OF PARCEL MAP NO. 9999, RECORDED
October 3, 2018, IN BOOK 340 OF MAPS AT PAGES 86-89, ALAMEDA COUNTY RECORDS.

PARCEL A CONTAINING 53,126 SQUARE FEET OF LAND MORE OR LESS

SUBSURFACE PARCEL C CONTAINING 50,963 SQUARE FEET OF LAND MORE OR LESS



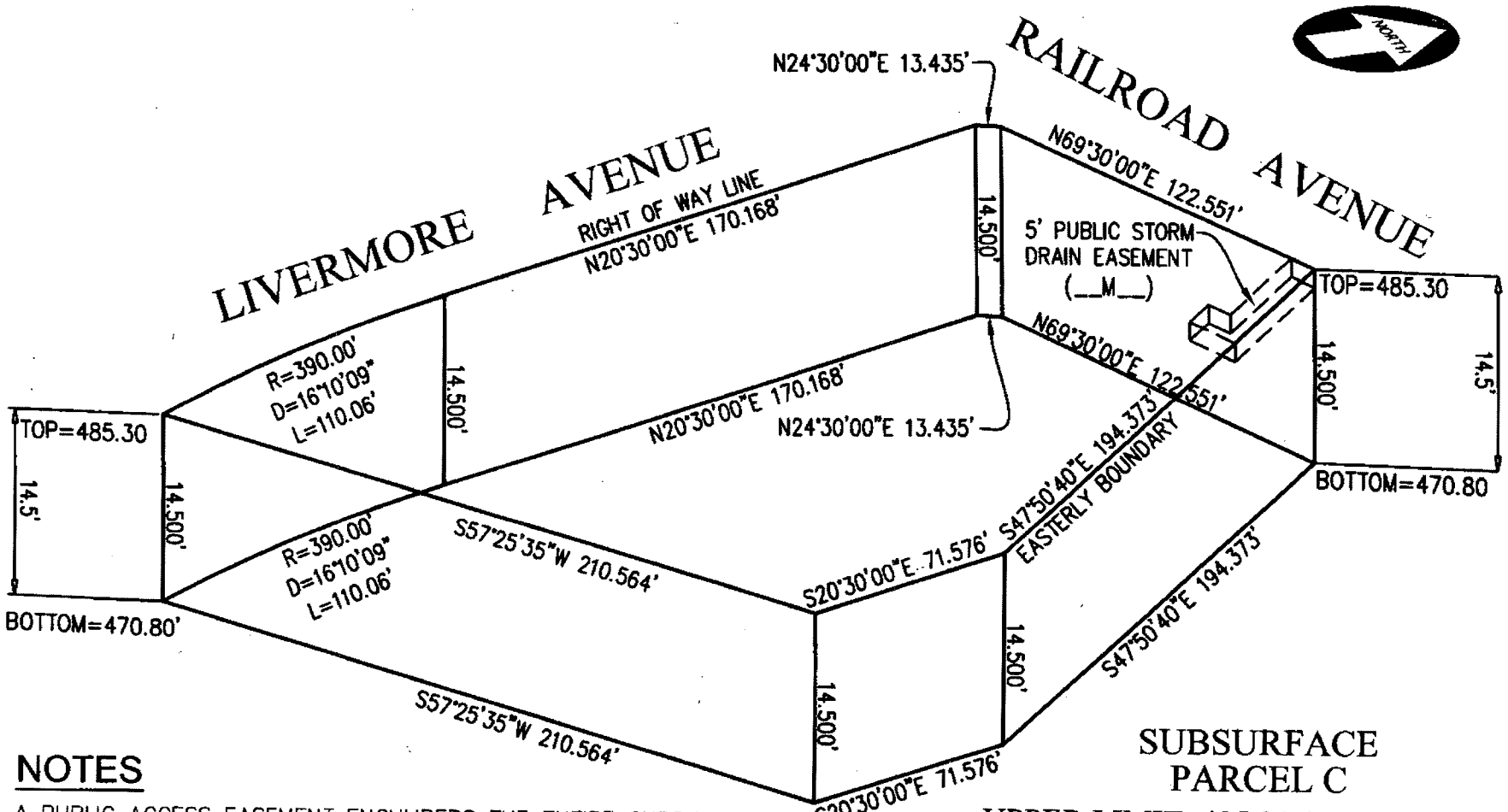
SHEET 6 OF 8

KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC.
2850 Collier Canyon Road Phone (925) 245-8788
Livermore, California 94551 Fax (925) 245-8796
www.kierwright.com

PLAT - PARCEL A
PARCEL MAP 9999
LIVERMORE, CALIFORNIA

DATE	AUG 2018
SCALE	1" = 50'
BY	RJH
JOB NO.	A18527
SHEET	1 OF 1

EXHIBIT A-1
SHEET 2 OF 3



NOTES

A PUBLIC ACCESS EASEMENT ENCUMBERS THE ENTIRE SUBSURFACE PARCEL C.

PARCEL A ENCOMPASSES ALL SIDES OF SUBSURFACE PARCEL C AND ABUTS PARCEL B, LIVERMORE AVENUE, RAILROAD AVENUE AND RESULTANT PARCEL 6. SEE SHEET 2 OF PARCEL MAP 9999.

SUBSURFACE PARCEL C

UPPER LIMIT=485.30 (0.5' BELOW FF)
LOWER LIMIT=470.80 (16.5' BELOW FF)
50,963± SF.
(1.1700± AC.)

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Livermore, California 94551
www.kierwright.com
Phone (925) 245-8788
Fax (925) 245-8796

PLAT - SUBSURFACE PARCEL C
PARCEL MAP 9999
LIVERMORE, CALIFORNIA

DATE	AUG 2018
SCALE	NOT TO SCALE
BY	RJH
JOB NO.	A18527
SHEET	1 OF 1

EXHIBIT J

Parking Parcel Description

Real property in the City of Livermore, County of Alameda, State of California, described as follows:

PARCEL A, AS SHOWN ON PARCEL MAP 4602 FILED JULY 29, 1985, IN BOOK 155 OF MAPS, PAGE 39, ALAMEDA COUNTY RECORDS.

APN: 098-0282-009

PARCEL MAP 10969

CITY OF LIVERMORE

ALAMEDA COUNTY–CALIFORNIA APRIL, 2022

A RESUBDIVISION OF PARCEL A AND PARCEL C, PER PARCEL MAP NO. 9999, FILED FOR RECORD ON OCTOBER 3, 2018, AS INSTRUMENT NO. 2018-192226, IN BOOK 340 OF MAPS, AT PAGES 86-87, OFFICIAL RECORDS OF ALAMEDA COUNTY, BY THE CITY OF LIVERMORE

COMMUNITY DEVELOPMENT DEPARTMENT

JUNE, 2022

KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC.
2850 Collier Canyon Road Phone (925) 245-8788
Livermore, California 94551 Fax (925) 245-8796

OWNER'S STATEMENT

THE UNDERSIGNED, HEREBY STATE THAT THEY ARE THE OWNERS OF ALL THE LANDS DELINEATED WITHIN THE BOUNDARY LINES UPON THE HEREIN EMBRACED MAP ENTITLED "PARCEL MAP 10969, CITY OF LIVERMORE, ALAMEDA COUNTY, CALIFORNIA" CONSISTING OF TWO (2) SHEETS, THIS STATEMENT BEING ON SHEET ONE (1) THEREOF; THAT THEY HAVE CAUSED SAID MAP TO BE PREPARED FOR RECORD AND DO CONSENT TO THE MAKING AND FILING OF SAID MAP; THAT SAID MAP DOES PARTICULARLY SET FORTH AND DESCRIBE ALL PARCELS OF LAND SO RESERVED FOR PUBLIC PURPOSES BY THEIR BOUNDARY COURSES AND EXTENT.

AND THE UNDERSIGNED HEREBY RESERVES AN EASEMENT FOR PUBLIC RIGHT OF WAY, ACCESS AND PARKING, UNDER, ON AND OVER THAT PORTION OF PARCEL 1 SHOWN UPON SAID MAP AS "ROW RESERVATION", ALL AS EMBRACED WITHIN THE BOUNDARIES OF SAID MAP.

AND THE UNDERSIGNED HEREBY RESERVES AN EASEMENT FOR PUBLIC ROOFTOP ACCESS AND USE, UNDER, ON AND OVER THAT PORTION OF PARCEL 1 SHOWN UPON SAID MAP AS "PUBLIC ACCESS & ROOFTOP OPEN SPACE RESERVATION", ALL AS EMBRACED WITHIN THE BOUNDARIES OF SAID MAP, FOR THE PURPOSES OF PUBLIC ACCESS AND OPEN SPACE USE OF SAID ROOFTOP, TOGETHER WITH RIGHT OF INGRESS AND EGRESS OF THE PUBLIC FOR PEDESTRIAN ACCESS TO AND FROM SAID ROOFTOP AREA.

THIS MAP SHOWS OR NOTES ALL EASEMENTS, EXISTING OR OF RECORD WITHIN THE BOUNDARY LINES OF THE HEREIN EMBODIED MAP.

OWNERS: CITY OF LIVERMORE, A MUNICIPAL CORPORATION

BY: Marianna Marysheva
MARIANNA MARYSHEVA, CITY MANAGER OF THE CITY OF LIVERMORE

CITY ENGINEER'S STATEMENT

I, ROBERT G. VINN, CITY ENGINEER OF THE CITY OF LIVERMORE, ALAMEDA COUNTY, STATE OF CALIFORNIA, HEREBY STATE THAT I HAVE EXAMINED THIS MAP ENTITLED "PARCEL MAP 10969, CITY OF LIVERMORE, ALAMEDA COUNTY, STATE OF CALIFORNIA", AND THAT THE SUBDIVISION SHOWN HEREON IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE APPROVED TENTATIVE MAP (IF ANY) AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE STATE LAWS AND LOCAL ORDINANCES APPLICABLE AT THE TIME OF APPROVAL OF THE TENTATIVE MAP HAVE BEEN COMPLIED WITH; THIS MAP WAS PROCESSED UNDER THE PARCEL MAP PROCEDURE.

ROBERT G. VINN, R.C.E. 51222
CITY ENGINEER, CITY OF LIVERMORE
ALAMEDA COUNTY, CALIFORNIA

7/7/22
DATE

REGISTERED PROFESSIONAL ENGINEER ROBERT G. VINN NO. 51222 CIVIL STATE OF CALIFORNIA

I, DAVID W. ENKE, A LICENSED SURVEYOR FOR THE CITY OF LIVERMORE, ALAMEDA COUNTY, STATE OF CALIFORNIA, DO HEREBY STATE THAT I HAVE EXAMINED THIS MAP ENTITLED "PARCEL MAP 10969, CITY OF LIVERMORE, ALAMEDA COUNTY, STATE OF CALIFORNIA", AND I AM SATISFIED THAT SAID MAP IS TECHNICALLY CORRECT.

DAVID W. ENKE, L.S. 4071
LAND SURVEYOR, FOR THE CITY OF LIVERMORE
ALAMEDA COUNTY, CALIFORNIA

7/7/22
DATE

LICENSED LAND SURVEYOR DAVID W. ENKE NO. 4071 STATE OF CALIFORNIA

CITY CLERK'S STATEMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA) S.S.

ON THIS 14th DAY July 2022 BEFORE ME, MARIE WEBER, CITY CLERK, CITY OF LIVERMORE, ALAMEDA COUNTY, CALIFORNIA, PERSONALLY APPEARED PAUL SPENCE PERSONALLY KNOWN TO ME TO BE THE DIRECTOR OF COMMUNITY DEVELOPMENT OF THE CITY OF LIVERMORE, AND IS THE PERSON AUTHORIZED BY THE CITY OF LIVERMORE MUNICIPAL CODE TO APPROVE THIS PARCEL MAP.

I FURTHER CERTIFY THAT THE INTEREST IN ALL THOSE PARCELS OF LANDS, EASEMENTS AND OTHER LEGAL INTERESTS IN LAND OFFERED FOR PUBLIC USE IN CONFORMANCE WITH THE TERMS OF THE HEREIN OFFERS, IS HEREBY ACCEPTED BY THE UNDERSIGNED CITY CLERK ON BEHALF OF THE CITY COUNCIL PURSUANT TO AUTHORITY CONFERRED BY RESOLUTION NO. 1-65 OF THE CITY COUNCIL ADOPTED ON JANUARY 4, 1965.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND THIS 14th DAY OF July 2022

MARIE WEBER
CITY CLERK AND CLERK OF THE CITY COUNCIL
CITY OF LIVERMORE, ALAMEDA COUNTY, STATE OF CALIFORNIA

CLERK OF THE BOARD OF SUPERVISOR'S STATEMENT

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA) S.S.

I, ANIKA CAMBELL-BELTON, CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA, HEREBY STATE, AS CHECKED BELOW THAT:

[ ] AN APPROVED BOND HAS BEEN FILED WITH THE SUPERVISORS OF THE SAID COUNTY AND STATE IN THE AMOUNT OF $_____ CONDITIONED FOR THE PAYMENT OF ALL THE TAXES AND SPECIAL ASSESSMENTS COLLECTED AS TAXES WHICH ARE NOW A LIEN AGAINST SAID LAND OR ANY PART THEREOF BUT NOT SET PAYABLE, AND WAS DULY APPROVED BY SAID BOARD IN SAID AMOUNT.

[ ] ALL TAXES AND SPECIAL ASSESSMENTS COLLECTED AS TAXES HAVE BEEN PAID, AS CERTIFIED BY THE TREASURER TAX COLLECTOR OF THE COUNTY OF ALAMEDA.

[X] EXEMPT

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND THIS 22 DAY OF AUGUST A.D. 2022.

ANIKA CAMBELL-BELTON
CLERK OF THE BOARD OF SUPERVISORS OF THE
COUNTY OF ALAMEDA, STATE OF CALIFORNIA

BY: _____
DEPUTY COUNTY CLERK

OWNER'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA) S.S.

ON JULY 18 2022 BEFORE ME, CLAY L. JAMES, NOTARY PUBLIC
PERSONALLY APPEARED MARIANNA MARYSHEVA, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER /THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S) OR ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND

SIGNATURE: _____

PRINT NAME: CLAY L. JAMES

MY COMMISSION NUMBER: 2313146

MY COMMISSION EXPIRES: 11/21/2023

PRINCIPAL COUNTY OF BUSINESS: RIVERSIDE

Dwg\Survey\Mapping\A18527-23 PM 10969 7-7-22 9:13:38 am plavs

SURVEYOR'S STATEMENT

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE DIRECTION OF THE CITY OF LIVERMORE IN FEBRUARY 2020. I HEREBY STATE THAT THIS MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY.

I FURTHER STATE THAT "PARCEL MAP 10969, CITY OF LIVERMORE, COUNTY OF ALAMEDA, STATE OF CALIFORNIA" IS A SUBDIVISION INTO PARCELS OF LAND CONTAINING 1.2198 ACRES, MORE OR LESS.

GARY K. LAMB P.L.S. 6627

07-07-22
DATE

LICENSED LAND SURVEYOR GARY K. LAMB No. 6627 STATE OF CALIFORNIA

COMMUNITY DEVELOPMENT DIRECTOR'S STATEMENT

PARCEL MAP 10969 CONFORMS WITH THE CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY, AND WAS PROCESSED IN ACCORDANCE WITH THE SUBDIVISION MAP ACT SECTION 66428(b), AND LOCAL ORDINANCES.

PAUL SPENCE
DIRECTOR OF COMMUNITY DEVELOPMENT
CITY OF LIVERMORE
ALAMEDA COUNTY, CALIFORNIA

7/13/22
DATE

COUNTY RECORDER'S STATEMENT

FILED THIS 30TH DAY OF AUGUST 2022, AT 11:14 A M. IN BOOK 356 OF MAPS AT PAGES 42-43 INCLUSIVE, RECORDERS SERIES NO. 2022150511 AT THE REQUEST OF OLD REPUBLIC TITLE COMPANY.

FEE $ 85.00 PAID

MELISSA WILK
COUNTY RECORDER IN AND FOR THE
COUNTY OF ALAMEDA, STATE OF CALIFORNIA

BY: _____
DEPUTY COUNTY RECORDER

JOB NO. A18527-23

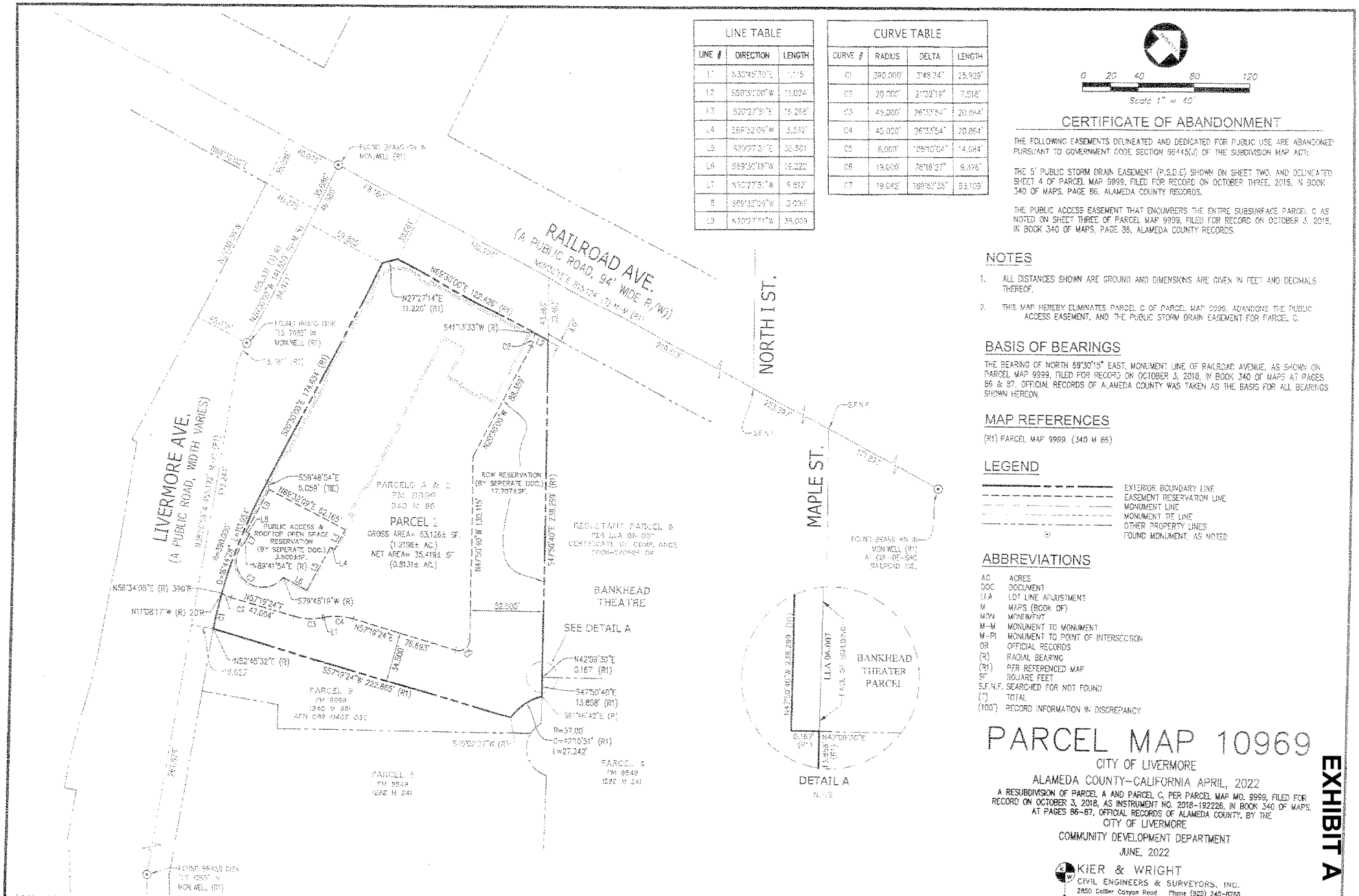
SHEET 1 OF 2 SHEETS

EXHIBIT A

EXHIBIT U

SHEET 1 OF 2

115



LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	N38°48'54"E	1.15'
L2	S89°31'09"W	11.024'
L3	S20°27'51"E	16.369'
L4	S89°32'09"W	3.332'
L5	S20°27'51"E	35.501'
L6	S69°30'18"W	18.220'
L7	N20°27'51"W	6.812'
L8	S89°32'09"W	3.038'
L9	N20°27'51"W	35.009'

CURVE TABLE			
CURVE #	RADIUS	DELTA	LENGTH
C1	350.000'	3°48'34"	25.029'
C2	20.000'	21°32'19"	7.518'
C3	45.000'	26°33'54"	20.864'
C4	45.000'	26°33'54"	20.864'
C5	6.000'	135°10'04"	14.684'
C6	19.000'	26°16'27"	8.376'
C7	19.042'	169°56'35"	83.103'

CERTIFICATE OF ABANDONMENT

THE FOLLOWING EASEMENTS DELINEATED AND DEDICATED FOR PUBLIC USE ARE ABANDONED PURSUANT TO GOVERNMENT CODE SECTION 66445(J) OF THE SUBDIVISION MAP ACT:

THE 5' PUBLIC STORM DRAIN EASEMENT (P.S.D.E) SHOWN ON SHEET TWO, AND DELINEATED SHEET 4 OF PARCEL MAP 9999, FILED FOR RECORD ON OCTOBER THREE, 2018, IN BOOK 340 OF MAPS, PAGE 86, ALAMEDA COUNTY RECORDS.

THE PUBLIC ACCESS EASEMENT THAT ENCUMBERS THE ENTIRE SUBSURFACE PARCEL C AS NOTED ON SHEET THREE OF PARCEL MAP 9999, FILED FOR RECORD ON OCTOBER 3, 2018, IN BOOK 340 OF MAPS, PAGE 86, ALAMEDA COUNTY RECORDS.

NOTES

1. ALL DISTANCES SHOWN ARE GROUND AND DIMENSIONS ARE GIVEN IN FEET AND DECIMALS THEREOF.
2. THIS MAP HEREBY ELIMINATES PARCEL C OF PARCEL MAP 9999, ABANDONS THE PUBLIC ACCESS EASEMENT, AND THE PUBLIC STORM DRAIN EASEMENT FOR PARCEL C.

BASIS OF BEARINGS

THE BEARING OF NORTH 69°30'15" EAST, MONUMENT LINE OF RAILROAD AVENUE, AS SHOWN ON PARCEL MAP 9999, FILED FOR RECORD ON OCTOBER 3, 2018, IN BOOK 340 OF MAPS AT PAGES 86 & 87, OFFICIAL RECORDS OF ALAMEDA COUNTY WAS TAKEN AS THE BASIS FOR ALL BEARINGS SHOWN HEREON.

MAP REFERENCES

(R1) PARCEL MAP 9999, (340 M 86)

LEGEND

- EXTERIOR BOUNDARY LINE
- EASEMENT RESERVATION LINE
- MONUMENT LINE
- MONUMENT TIE LINE
- OTHER PROPERTY LINES
- FOUND MONUMENT, AS NOTED

ABBREVIATIONS

AC	ACRES
DOC	DOCUMENT
LLA	LOT LINE ADJUSTMENT
M	MAPS (BOOK OF)
MON	MONUMENT
M-M	MONUMENT TO MONUMENT
M-PI	MONUMENT TO POINT OF INTERSECTION
OR	OFFICIAL RECORDS
(R)	RADIAL BEARING
(R1)	PER REFERENCED MAP
SF	SQUARE FEET
S.F.N.F.	SEARCHED FOR NOT FOUND
(T)	TOTAL
(100')	RECORD INFORMATION IN DISCREPANCY

PARCEL MAP 10969

CITY OF LIVERMORE

ALAMEDA COUNTY–CALIFORNIA APRIL, 2022

A RESUBDIVISION OF PARCEL A AND PARCEL C, PER PARCEL MAP NO. 9999, FILED FOR RECORD ON OCTOBER 3, 2018, AS INSTRUMENT NO. 2018-182226, IN BOOK 340 OF MAPS, AT PAGES 86–87, OFFICIAL RECORDS OF ALAMEDA COUNTY, BY THE CITY OF LIVERMORE

COMMUNITY DEVELOPMENT DEPARTMENT

JUNE, 2022

KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC.
2850 Collier Canyon Road
Livermore, California 94551
Phone (925) 245-8788
Fax (925) 245-8796

JOB NO. A18527-23

SHEET 2 OF 2 SHEETS

EXHIBIT A

EXHIBIT U

TEMPORARY PARKING LEASE AGREEMENT
(Hotel Parcel)

THIS LEASE AGREEMENT ("Lease") dated as of this 27th day of April, 2023, is made and entered into by and between 2205 Railroad Avenue LLC, a Delaware Limited Liability Company ("Lessor") and the City of Livermore, a municipal corporation ("City" or "Lessee").

RECITALS

A. Lessor desires to construct a four story approximately 65,000-75,000 square foot hotel, containing between 125-135 hotel rooms on two City-owned parcels (APNs: 098-0407-031-00 and 098-0407-033-00) located on the southeast corner of South Livermore Avenue and Railroad Avenue in downtown Livermore (hereinafter "Hotel Parcel").

B. On January 14, 2022, the City and Lessor entered into a Disposition, Development and Loan Agreement (the "DDLA") wherein the City agreed to sell the Hotel Parcel to Lessor for $71,521. Prior to the close of escrow, the City was using a portion of the Hotel Parcel as a temporary paved surface public parking lot. Upon sale of the Hotel Parcel to Lessor, Lessor has agreed to lease a portion of the Hotel Parcel to City at no cost for use as a temporary paved surface public parking lot until the commencement of construction on the Hotel Parcel.

C. As part of the Disposition, Development and Loan Agreement, the City made a loan to Developer to fund the acquisition of a piece of real property located at 2080 Railroad Avenue in Livermore in order to use the property as a valet parking lot to satisfy a portion of the City's parking requirements for the Hotel ("Parking Parcel").

D. Prior to commencement of construction of the Hotel, City desires to lease from Lessor and Lessor desires to lease the Hotel Parcel (hereinafter "Hotel Parcel" or "Leased Premises") as more particularly shown on Exhibit A, attached hereto and incorporated herein. The Leased Premises is approximately 41,500 square feet of a paved surface public parking lot.

E. The Lessor desires to lease the Leased Premises to City and City desires to lease from Lessor the Leased Premises on the terms and conditions contained in this Lease Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties hereby agree as follows:

1. **Leased Premises.** Lessor leases to City and City leases from Lessor, the Leased Premises which consists of approximately 41,500 square feet of a paved surface public parking lot, as indicated on Exhibit A, attached hereto.

2. **Possession; Delay in Delivery of Possession.**

(a) Except as otherwise provided in this Lease Agreement, City agrees to accept possession of the Leased Premises in its existing "as is" condition, including, but not limited to, all patent and latent defects and subject to all applicable laws, ordinances, and regulations governing and regulating the use of the Hotel Parcel and/or the Leased Premises and any recorded covenants, conditions, restrictions, easements, licenses, or right of ways.

(b) If Lessor, for any reason whatsoever, cannot deliver possession of the Leased Premises to City on or before the commencement date, this Lease Agreement shall not be void or voidable and no obligation of City shall be affected thereby, and neither Lessor nor Lessor's agents shall be liable to City for any loss or damage resulting therefrom.

3. **Rent.** As a condition of the sale of the Hotel Parcel from City to Lessor, Lessor agrees to lease the Leased Premises to the City at no cost for use as a temporary paved surface public parking lot. This no cost lease was incorporated into the sale price for the Hotel Parcel through the DDLA. City shall be responsible for all costs associated with the maintenance of the Leased Premises as set forth in Section 7 of this Lease Agreement.

4. **Term.** This Lease Agreement shall commence on April 27, 2023 ("Commencement Date"), and terminate on the date when Lessor commences construction of the Hotel. Lessor shall provide City with 30 days written notice prior to the date that construction of the Hotel will commence. This Lease Agreement shall supersede and replace any other lease agreement between said parties, or their predecessors in interest, concerning the use of the Leased Premises, or any other space or area of the Hotel Parcel.

5. **Solid Waste Disposal and Collection.** In accordance with the DDLA, Lessor is required to design, construct, and own a Joint Solid Waste Facility that will provide garbage, organics, and recyclable services for the Hotel, Bankhead Theater, First Street Mixed Use Commercial Projects (East and West), Livermore Valley Center Plaza, and the Livermore Cinema. The Joint Solid Waste Facility shall replace the temporary solid waste facility located south of the Hotel Parcel and north of the First Street Mixed-Use Commercial Project (West). Pursuant to the terms of the DDLA, Lessor is required to maintain sufficient truck access on the Leased Premises to allow solid waste collection at the existing temporary solid waste facility until such time when the Joint Solid Waste Facility is constructed and operational. For the duration of this Lease, Lessee shall maintain sufficient truck access on the Leased Premises to allow solid waste collection at the existing temporary solid waste facility until such time when the Joint Solid Waste Facility is constructed and operational. At the time Lessor provides City written notice of the date construction of the Hotel will commence, Lessor shall identify how solid waste collection access will be maintained if the Joint Solid Waste Facility is not yet operational.

6. **City's Use of Leased Premises.**

(a) Use of Leased Premises. City shall use the Leased Premises for the purpose of a temporary paved surface public parking lot and for trash collection at the temporary solid waste facility located south of the Hotel Parcel.

(b) Rules Regarding Use. City's use of the Leased Premises shall be subject to the following rules:

(i) City shall not allow, authorize, or permit the Leased Premises, or any part thereof, to be used for any use or any illegal activity or purpose in violation of federal or state laws and/or ordinances, regulations and requirements of County, City, or any other enforcement authority.

(ii) City shall not commit, allow, or permit to be used for any offensive or improper use or nuisance, the Leased Premises, which may unreasonably or unlawfully disturb or damage the Hotel Parcel or Leased Premises.

(iii) City shall not leave or store any trash, garbage, or refuse of any kind in, on, or about the Leased Premises and shall cause any refuse, trash, or other waste deposited on the Leased Premises by any of its employees, agents, or representatives to be picked up and disposed of in the appropriate manner so as to keep the Leased Premises in a neat and clean condition.

(iv) City shall not use, commit, allow, or permit to be used or committed, any waste upon the Leased Premises.

(c) Hazardous Materials. City shall not cause or permit any Hazardous Materials to be permanently stored, used or disposed of in the Hotel Parcel or Leased Premises, by City's agents, employees, contractors or invitees, without having obtained Lessor's prior, written consent. For purposes of this Lease Agreement, the following terms shall have the meanings set forth below:

"Hazardous Materials" shall mean any toxic or hazardous wastes, pollutants, materials or substances, including, without limitation, asbestos, PCB's, petroleum products, radioactive substances or their by-products, other substances defined or listed as "hazardous substances," "hazardous materials," "hazardous wastes" or "toxic substances in or pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §§ 9601 et seq. ("CERCLA"); the Hazardous Materials Transportation Act, 49 U.S.C §§ 5101 et seq.; the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.; the Toxic Substance Control Act of 1976, 15 U.S.C. §§ 2601 et seq.; any "toxic pollutant" under the Clean Water Act, 33 U.S.C. §§ 1251 et seq.; any hazardous air pollutant under the Clean Air Act, 42 U.S.C. §§ 7401 et seq.; the California Hazardous Substance Account Act, California Health & Safety Code ("HSC") §§ 25300 et seq., the Hazardous Waste Disposal Land Use Act, HSC §§ 25100 et seq.; in or pursuant to or identified as causing cancer or reproductive toxicity in the California Safe Drinking Water & Toxic Enforcement Act of 1986, HSC §§ 25249.5 et seq.; and HSC §§ 25117, 25316; all as such laws may be amended; any hazardous or toxic substance,

material, chemical, waste, or pollutant now or hereafter regulated under any other applicable Federal, State, or local environmental laws, without limitation; and any other matter in the nature thereof arising pursuant to the jurisdiction of any public agency.

"Hazardous Discharge" and "Contamination" shall mean the happening of any event involving an emission, spill, release, or discharge ("Release") into or upon (i) the air, (ii) soils or any improvements located thereon, (iii) surface or ground water, (iv) the sewer, septic system, or waste treatment, storage, or disposal system servicing the Leased Premises, of any Hazardous Material, or (v) any other matter in the nature thereof arising pursuant to the jurisdiction of any public agency.

"Environmental Laws" shall mean all applicable Federal, State, and local laws, ordinances, regulations, orders, procedures, policies, and directives of every kind and nature whatsoever pertaining to Hazardous Materials in, at, on, under, or from the Leased Premises or any portion thereof.

7. City Obligations.

(a) Services and Utilities. City shall provide basic electricity and power for the Leased Premises.

(b) Maintenance. Except as otherwise provided herein, City shall at its own cost and expense, maintain the Leased Premises, and every part thereof, in good and sanitary order, condition, and repair. City shall be responsible for the cost of any and all repairs or maintenance to the Leased Premises, caused by negligent, careless, or willful acts of City, its employees, agents, equipment, or invitees.

8. Condition of Leased Premises. City represents and warrants that it has made a thorough and complete inspection of the Leased Premises using qualified consultants and experts of its own choosing, and the Leased Premises is suitable for a temporary, surface public parking lot and in good and sanitary order, repair, and condition. City hereby accepts the Leased Premises in its present condition and, except as otherwise may be set forth herein, without representation or warranty by Lessor as to the condition of such Leased Premises or as to the use of the Leased Premises.

9. Construction and Repair.

(a) Mechanic's Lien. City shall pay, or cause to be paid, all costs and expenses for work done by City, or caused to be done by City, on the Leased Premises of a character which could result in any lien on the Hotel Parcel, and City will keep the Leased Premises free and clear of any mechanic's lien and/or other lien on account of work done for City or at its request.

Should any claims of lien be filed and/or recorded against the Leased Premises, or any action affecting the title thereto commenced, City shall give Lessor written notice thereof as soon as it has knowledge of the action.

(b) Construction. City shall not build or construct any improvement, or make any structural change, addition, or remodeling to the Leased Premises without the Lessor's prior written consent. In the event that Lessor provides City with the required written consent, City shall at its own cost comply with any and all Federal, State, or local laws and/or regulations applicable to any such construction, alteration, or remodeling to or within the Leased Premises to upgrade them to satisfy current standards.

10. Destruction. If the Leased Premises is totally destroyed during the term of this Lease Agreement by fire, flood, earthquake, or other casualty, whether or not covered by insurance, this Lease Agreement shall terminate.

11. Condemnation. If all or part of the Leased Premises is taken by condemnation such that the Leased Premises is no longer usable for a temporary, paved surface public parking lot, this Lease Agreement shall terminate. City shall be entitled only to that portion of the proceeds of condemnation which is directly attributable to the value of City's interest in this Lease Agreement.

12. Compliance with Laws. City agrees to comply with all applicable zoning, municipal, county and state laws, ordinances and regulations governing the use of the Leased Premises. City agrees to secure and maintain throughout the Term and any Extended Term any federal, state or local licenses or permits required in order to use the Leased Premises for a temporary surface public parking lot . City's failure to do so shall be considered a material breach of this Lease Agreement. City is responsible for compliance with all Federal requirements for improvements, construction and/or repair work outside of the Lessor's obligations.

13. Assignment.

(a) Prohibition Against Assignment and Encumbrance. This Lease Agreement and any rights or obligations of City hereunder shall not be sold, assigned, transferred, leased, assigned, sublet, conveyed, hypothecated either in whole or in part, or in any manner, without Lessor's prior written consent. The City shall not allow any other person or entity to occupy or use all or any part of the Hotel Parcel or Leased Premises without first obtaining Lessor's written consent. Consent to any assignment shall not constitute a further waiver of the provisions of this section.

(b) Involuntary Assignment. No interest of Lessee in this Lease Agreement shall be assignable by operation of law, including, without limitation, the transfer of this Lease Agreement by testacy or intestacy. Each of the following acts shall be considered an involuntary assignment:

(i) If City is or becomes bankrupt or insolvent, makes an assignment for the benefit of creditors, or institutes a proceeding under the Bankruptcy Act in which City is the bankrupt party; or, if the City is a partnership or consists of more than one person or entity, if any partner of the partnership or other person or entity is or becomes bankrupt or insolvent, or makes an assignment for the benefit of creditors;

(ii) If a writ of attachment or execution is levied on this Lease Agreement;

(iii) If, in any proceeding or action to which Lessee is a party, a receiver is appointed with authority to take possession of the Leased Premises.

(iv) An involuntary assignment shall constitute a default by City and Lessor shall have the right to elect to terminate this Lease Agreement, in which case this Lease Agreement shall not be treated as an asset of City.

(v) If a writ of attachment or execution is levied on this Lease Agreement, City shall have ten (10) days in which to cause the attachment or execution to be removed. If any involuntary proceeding in bankruptcy is brought against Lessee, or if a receiver is appointed, Lessee shall have sixty (60) days in which to have the involuntary proceeding dismissed or the receiver removed.

14. Taxes. Lessor shall pay during the term of this Lease Agreement, without abatement, deduction, or offset, any and all real and personal property taxes, general and special assessments, and other charges (including any increase caused by a change in the tax rate or by a change in assessed valuation) of any description levied or assessed during the term of this Lease Agreement by any governmental agency or entity on or against the Hotel Parcel, improvements located on the Hotel Parcel, personal property located on or in the Hotel Parcel or improvements, and the leasehold interest created by this Lease Agreement.

15. Lessor Refinancing. City is aware that Lessor is leasing its interest in the Leased Premises to City and that Lessor's leasehold interest in the Leased Premises is related to an outstanding lease financing. City agrees that it will use best efforts to cooperate with Lessor in connection with a refinancing of the outstanding lease financing, including executing any estoppel, consent, and other similar documents requested by the Lessor.

16. Indemnity. City agrees to and shall defend, indemnify, protect and hold harmless Lessor, its officers, directors, employees and agents harmless from and against any and all loss, damage, injury, accident, casualty, liability, claim, cost or expense (including, but not limited to, reasonable attorneys' fees) of any kind or character to any person or property arising from or related to any act or omission of City, its employees, agents or contractors, the City's use of the Leased Premises, or as a result of this Lease Agreement. To the greatest extent by law, City waives all claims or demands against Lessor for any loss, damage, or injury to City or City's property in connection with this Lease Agreement or the operation or use of the City's property by City or its agents, servants or contractors or employees and agrees to so indemnify and hold Lessor harmless.

17. Insurance. For the duration of this Lease Agreement, City shall procure and maintain, at its own cost, insurance in the amounts and under the terms set forth in Exhibit B, attached hereto, against claims for injuries to persons or damages to property which may arise from or in connection with this Lease Agreement.

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18. Termination.

(a) Termination for Cause. In the event City engages in, or permits any other person to engage in, any illegal activities in, on, or about the Hotel Parcel or the Leased Premises, whether with or without a criminal conviction, Lessor shall have the right to immediately terminate this Lease Agreement and demand City surrender the Leased Premises.

Except for immediate termination as provided for in this Lease Agreement, should City at any time during the term of this Lease Agreement be in default in the performance of any of the terms, conditions, rules, covenants, or requirements herein contained or otherwise agreed to by the parties, including the rules and regulations established by Lessor regarding the use of, or access to, the Hotel Parcel and Leased Premises, and should such default continue for thirty (30) days after written notice thereof from Lessor to City specifying the particulars of such default, or should City vacate or abandon the Leased Premises, then in any such event it shall be at the option of the Lessor, the Lessor's right to declare this Lease Agreement terminated and re-enter the Leased Premises and take possession thereof and remove City's fixtures and furnishings, and City shall have no further claim thereon or hereunder.

(b) Lessor's remedies in this section shall be in addition and supplemental to any and all other rights or remedies which Lessor may have pursuant to this Lease Agreement and/or under the law.

19. Default. Any of the following events or occurrences shall constitute a material breach of this Lease Agreement by City and, after the expiration of any applicable grace period, shall constitute an event of default (each an "Event of Default"):

(a) The failure by City to perform any obligation under this Lease Agreement, which by its nature City has no capacity to cure;

(b) The failure by City to perform any other obligation under this Lease Agreement, if the failure has continued for a period of ten (10) days after Lessor demands in writing that City cure the failure. If, however, by its nature the failure cannot be cured within ten (10) days, City may have a longer period as is necessary to cure the failure, but this is conditioned on City's promptly commencing to cure within the ten (10) day period and thereafter completing the cure within thirty (30) days after Lessor demands in writing that City cure the failure. City shall indemnify and defend Lessor against any liability, claim, damage, loss, or penalty that may be threatened or may in fact arise from that failure during the period the failure is uncured;

(c) Any of the following: a general assignment by City for the benefit of City's creditors; any voluntary filing, petition, or application by City under any law relating to insolvency or bankruptcy, whether for a declaration of bankruptcy, a reorganization, an arrangement, or otherwise; the abandonment, vacation, or surrender of the Leased Premises by Lessee without Lessor's prior written consent; or the dispossession of City from the Leased Premises (other than by Lessor) by process of law or otherwise;

(d) The abandonment of the Leased Premises by City.

20. Remedies. Upon the occurrence of an Event of Default, Lessor may pursue all rights or remedies available to Lessor at law or in equity.

21. Waiver. Any express or implied waiver of a breach of any term of this Lease Agreement shall not constitute a waiver of any further breach of the same or other term of this Lease Agreement.

22. Surrender of Leased Premises. Upon the expiration of this Lease Agreement, or no later than ten (10) days after its termination, City shall surrender the Leased Premises to Lessor, and all improvements and alterations thereto, in good condition except for ordinary wear and tear occurring after the last necessary maintenance made by City and/or destruction to the Leased Premises covered by Section 10 of this Lease Agreement.

Lessor may elect to retain or dispose of in any manner any alterations, improvements, fixtures, or furnishings that City does not remove from the Leased Premises on expiration or termination of the Lease Agreement by giving at least ten (10) days' notice to City. Title to any such improvements, alterations, fixtures, or furnishings that Lessor elects to retain or dispose of on expiration of the ten (10) day period shall vest in Lessor. City waives all claims against Lessor for any damage to City resulting from Lessor's retention or disposition of any such improvements, alterations, fixtures, or furnishings. City shall be liable to Lessor for Lessor's costs for storing, removing, and disposing of any improvements, alterations, fixtures, or furnishings.

23. Entry by Lessor. City shall permit Lessor, its officers, employees, and agents to enter into and upon the Leased Premises upon reasonable notice for the purpose of inspecting the Leased Premises, enforcing the rules and regulations under this Lease Agreement, and the posting of such legal notices as Lessor may deem necessary or convenient.

(a) Lessor and its agents may enter the Leased Premises at any reasonable time upon reasonable notice to City, or immediately in the case of an emergency, for the purpose of: (i) inspecting the Leased Premises; (ii) posting notices of nonresponsibility; (iii) supplying any service to be provided by Lessor to City; (iv) showing the Leased Premises to prospective purchasers, mortgagees, or tenants (v) making necessary alterations, additions, or repairs as required by this Lease Agreement or to otherwise perform Lessor's duties under this Lease Agreement; (vi) determining whether City is complying with the terms of this Lease Agreement; (vii) performing City's obligations when City has failed to do so after written notice from Lessor, if required by the terms of this Lease Agreement; (viii) placing on the Leased Premises ordinary for lease signs or for sale signs; (ix) doing of other lawful acts that may be necessary to protect Lessor's interest in the Leased Premises under this Lease Agreement; and (x) responding to an emergency.

(b) Lessor shall have the right to use any means Lessor deems necessary and proper to enter the Leased Premises in an emergency. Any entry into the Leased Premises obtained by Lessor in accordance with this section shall not be a forcible or unlawful entry

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into, or a detainer of, the Leased Premises, or an eviction, actual or constructive, of City from the Leased Premises, nor shall such entry give rise to a claim for rent abatement.

24. Notices. Wherever in this Lease Agreement it shall be required or permitted that notice or demand be given or served by either party to this Lease Agreement to or on the other, such notice or demand shall be given or served in writing and forwarded by registered mail, addressed as follows, though any party may change such address or contact person by written notice by registered mail to the other:

City: Community Development Director
City of Livermore
1052 South Livermore Avenue
Livermore, California 94550

Lessor: 2205 Railroad Avenue LLC, a Delaware limited liability company
Attn: Rikesh Patel
262 Glorietta Blvd.
Orinda, CA 94563

25. Holding Over. Any holding over without the Lessor's prior written consent shall be prohibited.

26. Modification. This Lease Agreement may only be modified or amended by written agreement signed by both parties hereto.

27. General Provisions.

(a) Time of Essence. Time is of the essence for each provision of this Lease Agreement.

(b) Relationship of the Parties. Nothing contained in this Lease Agreement shall be deemed or construed by the parties or by a third party to create the relationship of principal and agent, and/or of partnership, and/or of joint venture, and/or of any association between the parties, other than the relationship of Lessor and Lessee.

(c) Entire Agreement. This instrument, including any attachments hereto, constitutes the entire agreement of the parties relating to the subject matter of this Lease Agreement and correctly sets forth the rights, duties, and obligations of each party to the other, but this Lease Agreement does not supersede any provision in the DDLA.

(d) Partial Invalidity. If any provision or portion of this Lease Agreement shall be deemed invalid, it is agreed that such invalidity shall affect only such provision or portion thereof, and the remainder of this Lease Agreement shall remain in force and effect.

(e) California Law. This Lease Agreement shall be governed by and construed in accordance with the laws of the State of California.

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(f) Review of Lease. Each party to this Lease Agreement declares that prior to the execution of this Lease Agreement, each party had the opportunity to seek the independent advice of counsel and that they apprised themselves of sufficient relevant information in order that they might intelligently exercise their own judgment in deciding whether to execute this Lease Agreement. Each party agrees that they have completely read and understood the Lease Agreement, know the contents thereof, and have signed the Lease Agreement of their own free will and free of any duress. No single party has drafted this Lease Agreement and it shall not be interpreted against any party as the drafting party.

(g) Performance Excused. The parties shall be excused from performance, as hereunder agreed to, if such performance is rendered impossible, impractical, or unreasonably difficult by, but not limited to, any strike, lockout, labor disturbance of any kind, civil commotion, war, acts of terrorism, shortage of any supply or labor, shortage of water, weather, act of government authority, enactment or change in laws or regulations, breakdown of facilities or any cause outside of the parties' control.

(h) Mutual Termination. This Lease Agreement may be terminated at any time concerning the rights and responsibilities of the parties who, between them, agree to such a termination.

(i) Headings. The headings used in this Lease Agreement are intended for reference only and do not define or limit the scope or meaning of any provision of this Lease Agreement.

(j) Waiver. A term or condition of this Lease Agreement may be waived at any time by the party entitled to the benefit thereof, but no such waiver shall affect the right of the waiving party to require observance, performance or satisfaction either of that term or condition as it applies on a subsequent occasion or of any other term or condition. City shall not be excused from complying with any of the terms and conditions of this Lease Agreement by any failure of the City upon any one or more occasions to insist upon or to seek compliance with any such terms and conditions.

(k) Attachments. All attachments referred to in and attached to this Lease Agreement are incorporated by reference as though set forth in full.

(l) Attorney's Fees and Costs. If either party commences an action against the other party to enforce this Lease Agreement, the prevailing party is entitled to reasonable attorney's fees, costs of suit, investigation costs and discovery costs, including costs of appeal.

************Signatures and Attachment List On Next Page************

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IN WITNESS WHEREOF, the parties to this Lease Agreement have executed this Lease Agreement as of the dates set forth below.

LESSOR:

2205 RAILROAD AVENUE LLC,
a Delaware limited liability company

By: 2205 Railroad Member LLC, a Delaware limited liability company
Its: Sole Member

By: PresidioCo Bay Area LLC, a Delaware limited liability company
Its: Manager

Dated: 4/25/2023 | 8:55 AM PDT

DocuSigned by:
Rikesh Patel
E479C8A4B1514B4...
By: Rikesh Patel
Its: Manager

City or Lessee:

City of Livermore
A Municipal Corporation

DocuSigned by:
Marianna Marysheva
67FF83A39740458...
By: Marianna Marysheva
Its: City Manager

Dated: 4/27/2023 | 9:15 AM PDT

Approved as to Form:

DocuSigned by:
Kimberly Cilley
70AABF2D2EAC450...
By: Assistant/City Attorney

DS
JH

Attachments:
Exhibit A – Real Property Site Plan – Hotel Parcel
Exhibit B – Insurance Requirements

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EXHIBIT A

REAL PROPERTY SITE PLAN - HOTEL PARCEL

AREA SUMMARY

LEVEL	PROGRAM	AREA (APPROX.)	AREA (APPROX.)	ROOM COUNT	STALL COUNT	NOTES
LEVEL 1	GUEST AMENITIES/SERVICES					
	PUBLIC CIRCULATION					
	GUEST ROOMS					
	GUEST ROOMS					
LEVEL 2	GUEST ROOMS					
	GUEST ROOMS					
LEVEL 3	GUEST ROOMS					
	GUEST ROOMS					
TOTAL						

presidio companies

HRGA

LIVERMORE HOTEL

12/16/2021

4

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EXHIBIT B

INSURANCE STATEMENT

The City of Livermore is self-insured for General and Auto Liability up to a self-insured retention (SIR) of $750,000 and for Workers' Compensation up to a SIR of $500,000. The City is a member of California Joint Powers Risk Management Authority (CJPRMA), an excess insurance pool for General and Auto Liability, and of Local Agency Workers' Compensation Excess (LAWCX), an excess insurance pool for Workers' Compensation for claims that exceed the SIR.

Copies of Memoranda of Coverage with the insurance pools or certificates of insurance are available upon request.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.6**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: Resolution authorizing the execution of an agreement with Michael Baker International, Inc. for services to support the administration of the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program in a not-to-exceed amount of $400,000, a term ending June 30, 2029, and appropriating $400,000 over five years from the Housing Trust Fund.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the execution of an agreement with Michael Baker International, Inc. for services to support the administration of the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program in a not-to-exceed amount of $400,000, a term ending June 30, 2029, and appropriate $400,000 over five years from the Housing Trust Fund.

SUMMARY

In March 2024, the City issued a Request for Qualifications to identify agencies that could support the administration of the City's Affordable First-Time Homebuyer Programs (Below Market Rate ["BMR"] Homebuyer Program) and Mortgage Assistance Program ["MAP"]). Michael Baker International, Inc. was selected as the agency most qualified to provide the range of services the City needs. The proposed five-year Professional Services Agreement includes services to be the primary contact for all inquiries and correspondence on the Program, assist with developing program market information, establish and maintain a waitlist, conduct workshops and selection process, and manage the transaction through closing, and manage refinances and resales of existing BMRs. Staff recommends approval of the Agreement with Michael Baker International, Inc. and an appropriation of $400,000 over five (5) years from the City's Housing Trust Fund for the services. The City is able to recover and defray the cost of these services through fees paid by developers selling BMR inclusionary units and other transaction fees.

DISCUSSION

The City of Livermore generates affordable homeownership opportunities (BMR for-sale units) through its Inclusionary Housing Ordinance. Additionally, the City provides a Mortgage Assistance Program,

which provides down payment and closing cost assistance loans, using local and State CalHome funding, for first-time homebuyers who have incomes between 80% and 120% of Area Median Income (AMI).

The City's Inclusionary Housing Ordinance was first adopted in 2000. The ordinance requires developers of new for-sale residential projects to provide between 10% and 20% of units (depending on location within the City) to be made available for purchase to low-, median-, and moderate-income households, at or below 80%, 100%, and 120% of Area Median Income, respectively. The BMR units are subject to silent mortgages, second mortgages, and resale restrictions with the purchasers to secure the City's affordable housing interest in the units.

The pipeline of ownership BMR units is secured through City Council-approved affordable housing agreements with developers. The City currently has 155 BMR ownership units and mortgage assistance loans in its portfolio which require annual monitoring and coordination with homeowners. Currently, the City also has five affordable housing agreements with developers of projects that are expected to start construction within the next five years and will generate an additional 140 affordable, for-sale units. To prepare for the high volume of units, in March 2024, the City issued a Request for Qualifications (RFQ) to identify agencies that could provide administration support and homebuyer counseling services for the City's BMR Homebuyer Program and Mortgage Assistance Program which were previously provided by ZASM Consulting, LLC. These services include acting as the primary contact for all inquiries and correspondence on the Program, assisting with developing program market information, establishing and maintaining a waitlist, conducting workshops and selection process, managing the transaction through closing, and managing refinances and resales of existing BMRs. Two firms submitted proposals: Michael Baker International, Inc. and Rise Housing.

During the selection process, staff considered each firm's pricing, ability to scale operations, experience, and marketing capabilities in reaching low-, median-, and moderate-income households. Based on the above criteria, Michael Baker International, Inc. was selected as the firm most qualified to provide the BMR administration services requested in the RFQ. The key enhancements in contracting for Michael Baker International, Inc.'s services include their service cost efficiency, capacity to expand staffing during increased influxes of available BMRs, and ability to translate and create brochures to reach Spanish-speaking residents. Additionally, the City of Livermore currently contracts with Michael Baker International, Inc. to monitor annual BMR compliance.

The proposed FY 2025-29 Professional Services Agreement includes fees for services to be provided as needed for the sale of BMR units and other mortgage assistant services. The estimated budget for new Below Market Unit sales, including administration of the City's Applicant Selection Process ("Lottery") is based on the number of units anticipated to be sold through existing Low Income Housing Agreements each fiscal year. BMR administration services include screening and qualifying prospective applicants according to the City's criteria and interfacing with the City's buyers and mortgage lenders through the close of escrow. Other first-time homebuyer services, including mortgage assistance program administration, have been included in the agreement on a variable, as-needed basis.

Professional Services Scope/Cost Summary:

Services	Description	Year 1
General Administration Services	Payoffs, four (4) workshops & general services items	$12,500

BMR Program Services	New sales, resales & refinances	19,500
Mortgage Assistance Program (MAP) Services	New MAP loans and other MAP services	17,500
	Subtotal	49,500
	Additional Services Contingency*	25,500
	Total for Year 1	**$75,000**

Average Annual +/- 3% Cost Escalator Summary for Five (5) Years:

Annual Escalator	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total
3%	$75,000	$78,000	$80,000	$82,000	$85,000

Approx. 5 Years Subtotal & Not to Exceed Total	**$400,000**

*The “Additional Services Contingency” cost of $25,500 each year covers periods when a higher number of BMRs become available due to the completion of new construction.

Staff recommends City Council approve a five-year contract with the consultant so that the City secures consistent services for new development projects expected to deliver affordable units during that period. As indicated in the contract, the City may terminate any portion or all of the services by giving Consultant at least 30 calendar days written notice.

FISCAL AND ADMINISTRATIVE IMPACTS

Funds to support the administration of the City’s Affordable First-Time Homebuyer Program and Mortgage Assistance Program are appropriated from the City's Housing Trust Fund (F611). The City collects an administrative fee equal to 1.5 percent of the affordable sales price from developers upon close of escrow and sale to the eligible buyers to pay for marketing costs, BMR applicant selection, and to defray ongoing monitoring costs. The administrative fee for resale BMR units would be collected from the seller by the City upon close of escrow to a new eligible purchaser. The fees are updated annually in the City's master fee schedule. The estimated administrative cost recovery per unit for the FY 2025-29 contract period averages $6,400 per affordable unit and would be deposited into Fund 611.

COMMUNITY PILLAR

1: A Safe Community that Thrives

GOAL

7: Expand and preserve the supply of affordable housing opportunities.

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement

Prepared by: Trisha Howard
Management Analyst II

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT WITH MICHAEL BAKER INTERNATIONAL, INC. FOR ADMINISTRATION OF THE AFFORDABLE FIRST-TIME HOMEBUYER AND MORTGAGE ASSISTANCE PROGRAMS IN A NOT-TO-EXCEED AMOUNT OF $400,000 FOR A FIVE-YEAR TERM, AND APPROPRIATION OF $400,000 IN HOUSING TRUST FUNDS (F611)

In March 2024, the City of Livermore ("City") issued a Request for Qualifications (RFQ) to identify agencies that could provide administration support and homebuyer counseling services for the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program. Michael Baker International, Inc. was selected as the agency most qualified to provide the administration services requested in the RFQ. The proposed five-year Professional Services Agreement includes services to assist with qualifying applicants for new units sold through the Inclusionary Housing Program and other first-time homebuyer programs.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager, or her designee, to sign a Professional Services Agreement, attached hereto as Exhibit A, with Michael Baker International, Inc., in an amount not-to-exceed $400,000, for the administration of the City's Affordable First-Time Homebuyer Program and Mortgage Assistance Program.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby authorizes the appropriation of $400,000 in Housing Trust Funds (Fund 611) for five (5) years.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Michael Baker International, Inc. Agreement

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PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this ___ day of _____, 2024, by and between the City of Livermore ("City"), a municipal corporation, and Michael Baker International, Inc. ("Consultant"), a Pennsylvania Corporation.

RECITALS

City requires professional services to administer the City's Affordable First-Time Homebuyer Program (Below Market Rate) and the Mortgage Assistance Program.

Consultant warrants it possesses the distinct professional skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Consultant acknowledges City has relied upon these warranties to retain Consultant.

AGREEMENT

NOW, THEREFORE, City and Consultant hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Consultant. City hereby retains Consultant, and Consultant hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Consultant and its employees are not City officers or employees. Consultant is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Consultant shall provide the following professional services as more particularly set forth in Exhibit "A" (collectively "the Services"):

Administer the City's Affordable First-Time Homebuyer Program (Below Market Rate) and the Mortgage Assistance Program as submitted in the Consultant's proposal dated April 19, 2024.

4. Consultant's Responsibilities. Consultant shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

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(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Consultant to practice its profession and to provide the Services;

(e) Comply with all laws in effect that are related to Consultant and the Services;

(f) Coordinate the Services with Frances Reisner ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Consultant by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Consultant's invoice shall be in writing and describe the Services performed for the payment requested. Consultant shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Consultant and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Consultant shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Consultant shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Consultant and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Consultant shall correct, at its own expense, all errors in the Services. Should Consultant fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Consultant;

(l) If applicable, Consultant shall ensure that all work for compensation is provided in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Consultant shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Consultant shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each

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laborer, worker, or mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Consultant's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as all applicable regulations and guidelines issued pursuant to the ADA.

5. Compensation and Payment.

(a) The total compensation payable by City to Consultant for the Services **SHALL NOT EXCEED** the sum of $400,000 ("not-to-exceed amount"). City shall compensate Consultant for the Services rendered at the hourly rates, task amounts or travel expenses set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates, task amounts or travel expenses are intended to be Consultant's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Consultant, its agents, and employees to provide the Services.

(b) City shall pay Consultant no later than 30 days after City receives a written invoice from Consultant and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 1, 2024, and terminates upon the completion of the Services or June 30, 2029, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Consultant at least 30 calendar-days written notice. Upon receipt of a termination notice, Consultant shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and then assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Consultant in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Consultant in the performance of the Services are City's property and Consultant shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Consultant for City under this Agreement are works made for hire, and Consultant shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Consultant agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Consultant to City and Consultant obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

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10. Confidentiality. Consultant shall not disclose any confidential or proprietary information received from City to anyone except Consultant's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Consultant shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Consultant's performance of the services contemplated by this Agreement, or in connection with Consultant's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Consultant's obligations to hold harmless, indemnify, and defend shall not be excused because of Consultant's inability to evaluate Liability or because Consultant evaluates Liability and determines that Consultant is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Consultant must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Consultant's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Consultant's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Consultant shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Consultant shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Consultant's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Consultant for, the Services does not release Consultant from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an

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assumption of Consultant's responsibility or liability by City for any defect or error in the Services.

15. Conflict of Interest. Consultant represents that no City employee or official has a financial interest in Consultant. Consultant shall not offer, encourage, or accept any financial interest in any part of Consultant's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private party, Consultant represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Consultant shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Consultants' financial interest. While it is Consultant's sole responsibility to evaluate its conflicts of interest, the Consultant nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other consultants to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Consultant shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty-percent or more in the ownership or control of Consultant constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Consultant must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

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22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Frances Reisner,
Housing and Human Services Manager
City of Livermore
1052 S Livermore Avenue
Livermore, California 94550

TO CONSULTANT: Attention: William Hoose, Vice President
Michael Baker International, Inc.
3760 Kilroy Airport Way, Suite 270
Long Beach, CA 90806

23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

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In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONSULTANT: **Dated:**

DocuSigned by:
William Hoose
83BF7E9037E449E...

5/27/2024 | 8:34 AM PDT

William Hoose
Vice President

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Katherine Mirassou
D48B6A0C4F27411...

Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

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Michael Baker
INTERNATIONAL

EXHIBIT A

Michael Baker International, Inc. will perform the following tasks in addition to providing example documents:

A. GENERAL ADMINISTRATION SERVICES:

- Be the primary contact for questions from the public about the BMR and MAP programs, and will handle inquiries and correspondence from applicants, real estate agents, lenders, escrow and loan servicing agents, and current BMR homeowners and/or MAP borrowers.
- Utilize the City's procedures, ordinance(s), resolution(s), and guidelines in the implementation of the BMR and MAP Programs.
- Develop a report form in conjunction with the City representative and submit quarterly activity reports.
- Provide suggestions to the City for potential modifications to the City's application process, procedures, and/or guidelines to ensure effective operation of the Program.
- (If applicable) Maintain marketing content for the Program, including information on Consultant's website, and other material as needed.
- Maintain a list of local lenders interested in providing loans to qualified Program applicants.
- When requested by the City, advise and assist City staff on matters related to the Program.
- As necessary, and/or requested by the City, provide access to translation in other languages.
- Conduct quarterly in-person workshops to educate the public on the City's affordable homeownership programs.
- Utilize the City's HomeKeeper database to manage the BMR and DPA portfolios, and will keep all data in HomeKeeper accurate and current.

B. BMR PROGRAM SERVICES:

- **New BMR Units**
  - **Advertising:** Assist with the development of program marketing information and project-specific collaterals for prospective BMR buyers on the new developments where the new BMR units will be located. Consultant will assist City with marketing new BMR opportunities via website, flyer or posters, e-blasts, social media, etc. using imagery, language and design consistent with City standards.
  - **Waitlist Creation and Management:** Use the City's Homekeeper software and associated forms and applications to prepare an online pre-application to conduct an annual solicitation for applications to the Program to solicit buyers for available units and to establish and maintain a waiting list in accordance with the City's Program guidelines. Establishing a waitlist

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Michael Baker INTERNATIONAL

includes, but is not limited to, distributing and receiving applications through electronic methods, sorting all applicants into the appropriate City priority point system, conducting an annual "lottery-style" selection process for new applicants, and communicating results with the applicants.

- Develop a report form in conjunction with the City representative and submit quarterly activity reports.
- Provide suggestions to the City for potential modifications to the City's application process, procedures, and/or guidelines to ensure effective operation of the Program.
- (If applicable) Maintain marketing content for the Program, including information on Consultant's website, and other material as needed.
- Maintain a list of local lenders interested in providing loans to qualified Program applicants.
- When requested by the City, advise and assist City staff on matters related to the Program.
- As necessary, and/or requested by the City, provide access to translation in other languages.
- Conduct quarterly in-person workshops to educate the public on the City's affordable homeownership programs.
- Utilize the City's HomeKeeper database to manage the BMR and DPA portfolios, and will keep all data in HomeKeeper accurate and current.

C. BMR PROGRAM SERVICES:

- **New BMR Units**
  - **Advertising:** Assist with the development of program marketing information and project-specific collaterals for prospective BMR buyers on the new developments where the new BMR units will be located. Consultant will assist City with marketing new BMR opportunities via website, flyer or posters, e-blasts, social media, etc. using imagery, language and design consistent with City standards.
  - **Waitlist Creation and Management:** Use the City's Homekeeper software and associated forms and applications to prepare an online pre-application to conduct an annual solicitation for applications to the Program to solicit buyers for available units and to establish and maintain a waiting list in accordance with the City's Program guidelines. Establishing a waitlist includes, but is not limited to, distributing and receiving applications through electronic methods, sorting all applicants into the appropriate City priority point system, conducting an annual "lottery-style" selection process for new applicants, and communicating results with the applicants. Maintenance of the waiting list includes reviewing required annual applications for eligibility to remain on the waiting list.

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Michael Baker
INTERNATIONAL

- **Selection Process Administration**: Conduct workshop detailing instructions on the application process; use the City's Homekeeper system to collect full applications and required documents to determine eligibility based on unit availability, sales prices, and unit size; and obtain conditional approval or disqualification letter from the City as applicable.
- **Manage Transaction Through Closing**: Manage the entire sale process through close of escrow, including but not limited to the following tasks:
  - Prepare the sales schedule in coordination with the projects' developers for City approval.
  - Adhere to appropriate deadlines to ensure the timely delivery of qualified applicants to the developer.
  - Coordinate with or arrange for homebuyer education consistent with U.S. Department of Housing and Urban Development (HUD) standards.
  - Be available to answer any questions regarding the BMR Program and facilitate escrow closing.
  - Create the "City Loan Documents" (Deed of Trust, Promissory Note, Resale Restriction Agreement, Requests for Notice of Default and any other applicable documents). Review documents with the buyers and coordinate signing of documents.
  - Provide Escrow Instructions and facilitate recordation of the City's documents with the title company prior to close of escrow. Once complete, ensure City receives copies of all closing documents.

- **Existing BMR Units**
  - **Refinances:** Provide information on City subordination requirements for lenders and owners and answer phone and email inquiries. Consultant will review and process requests for refinancing in accordance with Program guidelines.
  - **Resale of Existing BMR Homes:** Administer the resale process for units sold back through the Program and will follow the City's established "Steps to Reselling your BMR Home" procedures including: marketing the unit through the City's program waitlist (as applicable); coordinating with the seller and listing agent to ensure necessary inspections are completed; holding at least one "open house" for prospective buyers; screening and identifying eligible buyers; acting as City's liaison on buyers eligibility and loan approval through close of escrow; and processing City Loan Documents to ensure close of escrow meets program deadlines (90 days in most cases).

D. MORTGAGE ASSISTANCE PROGRAM SERVICES

Administer, process, and screen applications for the City's Mortgage Assistance Program ("MAP"). Similar to the aforementioned BMR Program Services, Consultant will market the program, collect and screen applications and process the transaction through the close of escrow.

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Michael Baker
INTERNATIONAL

Michael Baker International, Inc. will provide all necessary services for the successful administration of the City's BMR Program as outlined in the Implementation Plan section at a not-to-exceed amount of $49,500 per year.

Here is the cost estimate for each task:

Task Description	Project Director $185	Project Manager $150	Housing & Grants Specialist $135	Technical Specialist $125	Totals
Task A – General Administration Services: Estimated number of payoffs – 2: $1,500 ($750 each) Estimated number of workshops – 4: $4,000 ($1,000 each) Other General Administration Services: $7,000					
					Subtotal: $12,500
Task B - BMR Program Services: Estimated number of resales – 2: $6,000 ($3,000 each) Estimated number of new sales – 6: $12,000 ($2,000 each) Estimated number of refinances – 1: $1,500 each					
					Subtotal: $19,500
Task C – Mortgage Assistance Program Services: Estimated number of new MAP loans – 2: $8,000 ($4,000 each) Other Mortgage Assistance Program Services - $9,500					
					Subtotal: $17,500

Additional tasks performed under the contract shall be billed at the rate noted above. An additional contingency of $25,500 each year shall be allocated for additional BMRs or other services requested by the City.

An annual escalator of no more than 3% shall be applied annually.

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $1,000,000 per occurrence/**$2,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $1,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability".
4. Professional Liability/Errors and Omissions:
   $1,000,000 per claim. Consultant/Contractor warrants that any retroactive date under this policy shall precede the effective date of this contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two years beginning at the time work under this contract is completed.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated

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volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.7**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: Resolution authorizing the change of the General Partner for 2891 Carmen, L.P., owner of the Carmen Avenue Apartments from Satellite AHA Development, Inc. to ABODEHD 2891 CARMEN LLC, to streamline property management and service delivery.

RECOMMENDED ACTION

Staff recommends that the City Council adopt a resolution authorizing the City Manager to approve ABODEHD 2891 CARMEN LLC as the new General Partner in the 2891 Carmen, L.P., California limited partnership for the Carmen Avenue Apartments to streamline property management and service delivery once Abode oversees all aspects of the partnership.

SUMMARY

Carmen Avenue Apartments is owned by the 2891 Carmen, L.P., a limited partnership between Satellite AHA Development, Inc. (SAHA) as the Managing General Partner, and Abode Housing Development (AHD) as the Co-General Partner. SAHA has agreed to transfer the full role of Managing General Partner to Abode Housing under a new affiliate, ABODEHD 2891 CARMEN LLC and transition the property management responsibilities to Abode Property Management (APM). APM works in alliance with Abode Housing Development and partners with Abode Services to support the needs of the residents. The changes are intended to streamline property management and service delivery under one provider for the residents and provide consistency. In accordance with the City's loan and regulatory agreements with the 2891 Carmen L.P., any changes to the general partnership must be approved by the City.

DISCUSSION

In October 2006, the City executed loan and regulatory agreements for the Carmen Avenue Apartments project with 2891 Carmen L.P., for $2,665,000 In-Lieu and Housing Trust Funds. At that time, the Carmen limited partnership included Affordable Housing Associates as the General Partner, and Allied Housing as the Co-General Partner. The City's loan agreement reserved the right to approve any changes to the General Partner within the 2891 Carmen limited partnership.

In January 2013, the City approved a Change of Name Amendment reflecting the merger of Affordable Housing Associates and Satellite Housing, Inc., with the corporate name changed to Satellite AHA Development, Inc. (SAHA). SAHA is the current Managing General Partner of 2891 Carmen, L.P. On July 7, 2023, the Co-General Partner, Allied Housing, changed to Abode Housing Development (AHD).

Now, SAHA has agreed to transfer the Managing General Partner role to Abode Services under a new affiliate, ABODEHD 2891 CARMEN LLC. Additionally, they have agreed to transition the property management responsibilities from SAHA to Abode Property Management (APM).

APM has provided property management services for affordable housing, serving low-income, homeless disabled, and other special needs households for over 42 years. APM is a $39 million organization that currently provides property and asset management to more than 52 affordable/supportive housing properties with over 900 units serving seniors, families, veterans, special needs, vulnerable populations, or low-income individuals financed with Federal, State, tax credit, and local funding across Alameda, San Francisco, Santa Clara, and Santa Cruz counties.

APM's leadership team has experience managing a wide array of affordable housing properties and funding types, including permanent supportive housing, low-income housing tax credits (LIHTC), HOME funded units, properties with project-based Section 8 vouchers, and the State's Multi-Family Housing Program (MHP), all of which are applicable to Carmen Avenue.

This change in Managing General Partner will allow AHD to assume 100% interest in the partnership and provide direct oversight. AHD is a member of the Abode strategic alliance which includes Abode Housing Development (AHD), Abode Services (AS), and Abode Property Management (APM). Abode Services has been the resident services provider since the project first opened and intends to continue to deliver services with more efficiency and effectiveness once Abode oversees all aspects of the partnership. This change in Managing General Partner will allow AHD to work closer with AS, as well as APM as the property management agent for service delivery at Carmen. APM specializes in working with permanent supportive housing households.

FISCAL AND ADMINISTRATIVE IMPACTS

Changes to the agreement do not increase the City's financial commitment to the project and will have no impact on the City's General Fund.

COMMUNITY PILLAR

1: A Safe Community that Thrives

GOAL

7: Expand and preserve the supply of affordable housing opportunities.

ATTACHMENTS

1. Resolution
2. Exhibit A - Approval for General Partner Change
3. Exhibit B - Agreement to Withdraw and Transfer Partnership Interest

Prepared by: Trisha Howard
Management Analyst II

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE APPROVAL OF ABODEHD 2891 CARMEN LLC AS THE NEW GENERAL PARTNER IN THE 2891 CARMEN, L.P. FOR THE CARMEN AVENUE APARTMENTS TO STREAMLINE PROPERTY MANAGEMENT AND SERVICE DELIVERY FOR THE RESIDENTS OF THE PROJECT

On October 23, 2006, the City of Livermore ("City") and 2891 Carmen, L.P., a California Limited Partnership ("Partnership") entered into a First Amended and Restated Loan Agreement for the Use of In-Lieu and Housing Trust Funds in the principal amount of $2,665,000 (Instrument No. 2006405749) ("Loan Agreement") for the Carmen Avenue Apartments project.

The Loan Agreement requires the City's approval before the Partnership may replace its General Partner.

The Partnership desires to replace its current managing General Partner, Satellite AHA Development, Inc., a California nonprofit public benefit corporation, and its Co-General Partner, Abode Housing Development, a California nonprofit public benefit corporation, with a new General Partner, ABODEHD 2891 CARMEN LLC, a California limited liability company. Satellite AHA Development Inc., Abode Housing Development, and ABODEHD 2891 CARMEN LLC have entered into an agreement documenting this change, attached hereto as Exhibit B.

This change in partnership interest will allow for streamlined property management and service delivery for the residents of the project once Abode oversees all aspects of the partnership.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby approves the change in 2891 Carmen L.P.'s managing General Partner from Satellite AHA Development, Inc. to ABODEHD 2891 CARMEN LLC., and authorizes the City Manager to sign on behalf of the City of Livermore the approval of the General Partner change, attached hereto as Exhibit A, and any other documents that may be necessary to document the approval.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – City of Livermore Approval for General Partner Change
Exhibit B – Agreement to Withdrawal and Transfer Partnership Interest

Docusign Envelope ID: 4DA75EF9-D581-40F3-BF0E-ABF8C2BB6BB7

EXHIBIT A

CITY OF LIVERMORE APPROVAL

FOR GENERAL PARTNER CHANGE

First Amended and Restated Loan Agreement for the Use of In-Lieu and Housing Trust Funds ($2,665,000)

RECITALS

On October 23, 2006, the City of Livermore ("City") and 2891 Carmen L.P., a California Limited Partnership ("'Partnership"), entered into a First Amended and Restated Loan Agreement for the Use of In-Lieu and Housing Trust Funds in the principal amount of $2,665,000 (Instrument No. 2006405749) ("Loan Agreement").

The Loan Agreement requires the City's approval before the Partnership may replace its General Partner.

The Partnership's General Partner is Satellite AHA Development, Inc., a California nonprofit public benefit corporation, and its Co-General Partner is Abode Housing Development, also a California nonprofit public benefit corporation. The Partnership wants to replace its current General Partner and Co-General Partner with a new General Partner, an affiliate of Abode Housing, ABODEHD 2891 CARMEN LLC, a California limited liability company.

APPROVAL

The City of Livermore hereby approves 2891 Carmen LP.'s replacement of its General Partner with ABODEHD 2891 CARMEN LLC pursuant to the Managing General Partnership and Co-General Partner Agreement to Withdraw and to Transfer Partnership Interest dated June 30, 2024.

Dated:

CITY OF LIVERMORE:

By: _____
Marianna Marysheva
City Manager

APPROVED AS TO FORM

DocuSigned by:
Katherine Mirassou
D48B6A0C4F27411...

APPROVED AS TO INSURANCE

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

MANAGING GENERAL PARTNER AND CO-GENERAL PARTNER AGREEMENT TO WITHDRAW AND TO TRANSFER PARTNERSHIP INTEREST

This Managing General Partner and Co-General Partner Agreement to Withdraw and to Transfer Partnership Interest (this "**Agreement**") is made as of June 30, 2024, by and among Satellite AHA Development, Inc., a California nonprofit public benefit corporation ("**SAHA**"), Abode Housing Development (f/k/a Allied Housing, Inc.), a California nonprofit public benefit corporation ("**AHD**"), Allied 2095 Evans LLC, a California limited liability company ("**2095 LLC**"), AbodeHD 2891 Carmen LLC, a California limited liability company ("**Carmen LLC**"), and 2891 Carmen, L.P., a California limited partnership (the "**Partnership**"). SAHA, AHD, 2095 LLC, Carmen LLC and the Partnership shall collectively be referred to as the "**Parties**" and each individually as a "**Party**" in this Agreement.

RECITALS

A. The Partnership was formed as a limited partnership under the Revised Limited Partnership Act of California pursuant to a Certificate of Limited Partnership dated June 23, 2006.

B. The Partnership is currently operating pursuant to the First Amended and Restated Agreement of Limited Partnership dated March 28, 2007, as heretofore amended by a Transfer Agreement dated March 28, 2007, a First Amendment dated September 30, 2010; a Second Amendment dated September 20, 2010; a Third Amendment dated May 29, 2012; the IRS Amendment dated August 28, 2018; and a Fifth Amendment dated December 31, 2023 (collectively, the "**Partnership Agreement**"). All capitalized terms not defined in this Agreement shall have the meanings ascribed to them in the Partnership Agreement.

C. SAHA is the managing general partner of the Partnership, AHD is the co-general partner of the Partnership, and 2095 LLC is the sole limited partner of the Partnership.

D. The Parties intend that (i) Carmen LLC will purchase the managing general partner interest of SAHA in the Partnership (the "**MGP Interest**") and that SAHA will withdraw as a partner in the Partnership, and (i) Carmen LLC will purchase the co-general partner interest of AHD in the Partnership (the "**CGP Interest**") and AHD will withdraw as a partner in the Partnership.

E. The Parties desire to enter into this Agreement to set forth the terms of (i) SAHA's withdrawal from the Partnership and assignment of the MGP Interest to Carmen LLC, and (ii) AHD's withdrawal from the Partnership and assignment of the CGP Interest to Carmen LLC.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Withdrawal. The Parties will cause the following (the "**Closing**") to occur by

June 30, 2024, which date may be extended as mutually agreed by the Parties (the "**Closing Date**"):

(a) AHD will request and use due diligence to obtain the California Tax Credit Allocation Committee approval and any necessary lender(s)' consents to the transfer of the MGP Interest and the CGP Interest and the withdrawal of SAHA and AHD from the Partnership as soon as practicable following the execution of this Agreement.

(b) SAHA will assign its MGP Interest and Carmen LLC will assume that MGP Interest pursuant to the Assignment, Assumption, Withdrawal and Amendment of Agreement of Limited Partnership in substantially the form attached as Exhibit A to this Agreement (the "**Assignment and Amendment**").

(c) AHD will assign its CGP Interest and Carmen LLC will assume that CGP Interest pursuant to the Assignment and Amendment.

(d) Any unpaid Partnership Administration Fee, Incentive Management Fee and Property Management Fee payable by the Partnership to SAHA pursuant to the Partnership Agreement or the Fee Agreements that has accrued as of the Closing Date shall be paid in full.

2. Purchase Price. The purchase price for the MGP Interest shall be $1.00 and the purchase price for the CGP Interest shall be $1.00.

3. Property Management. The Property Management Agreement between the Partnership and SAHA will be terminated effective as of the Closing Date.

4. Taxes and Legal Fees. All transfer taxes imposed and legal fees incurred in connection with the transfer of the MGP Interest and the CGP Interest to Carmen LLC and the withdrawal of SAHA and AHD from the Partnership shall be paid by the Partnership.

5. Indemnity. From and after the Closing Date, AHD, 2095 LLC, Carmen LLC, and the Partnership (collectively, the "**Indemnifying Parties**") shall, jointly and severally, indemnify and hold SAHA and its respective officers, agents and employees harmless against from any and all claims, suits, liabilities, actions, proceedings, obligations, debts, damages, losses, expenses, fines, penalties, charges, fees, judgments, awards, and amounts paid in settlement (including reasonable attorney fees but excluding consequential, special or punitive damages) (the "**Claims**"), imposed on, incurred by, or asserted against SAHA, directly or indirectly, related to the Partnership or the Project, including all claims related to SAHA's guaranty to the limited partners of the Partnership that arise after the Closing Date.

6. Release. As of the Closing Date, the Indemnifying Parties shall remise, release and discharge SAHA from any claims of any kind whatsoever which have been or could have been asserted in connection with the Partnership or the Project, whether known or unknown, asserted or unasserted, accrued or unaccrued; provided, however, that nothing in this Section 6 shall in any way amend, modify, alter, reduce or compromise the obligations and liabilities of SAHA under this Agreement, or affect any other rights of the Indemnifying Parties herein. Each

of the Indemnifying Parties knowingly waives California Civil Code Section 1542, which provides that a general release does not extend to claims which the creditor does not know or suspect to exist in its favor at the time of executing the release, which if known to it must have materially affected its settlement with the debtor.

7. Survival. The provisions of this Agreement shall survive the Closing.

8. Representations and Warranties.

(a) SAHA represents and warrants that it has not previously assigned any portion of its MGP Interest to any other Person.

(b) AHD represents and warrants that it has not previously assigned any portion of its CGP Interest to any other Person.

9. Counterparts. This Assignment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which, when taken together, shall constitute one and the same instrument. The facsimile signature or signature sent electronically by pdf or otherwise of any Party to any counterpart shall constitute the signature of such Party for all purposes.

10. Notices, Demands, Communications. All notices, demands, requests or other communications to be sent by one party to another hereunder or required by law shall be in writing and shall be deemed to have been validly given or served by delivery of the same in person to the intended addressee, or by depositing the same with Federal Express or another reputable private courier service for next business day delivery, or by depositing the same in the United States mail, postage prepaid, registered or certified mail, return receipt requested, in any event addressed to the intended addressee and by electronic mail to the intended addressee at the e-mail address set forth below, as follows:

SAHA: Satellite AHA Development, Inc.
1835 Alcatraz Avenue
Berkeley, CA 94703
Email: assetmanagement@sahahomes.org
Attn: Susan Friedland

AHD: Abode Housing Development
40849 Fremont Boulevard
Fremont, CA 94538
Email: jwhite@abode.org
Attn: Director of Real Estate Development

2095 LLC: Allied 2095 Evans LLC
40849 Fremont Boulevard
Fremont, CA 94538
Email: jwhite@abode.org
Attn: Director of Real Estate Development

Carmen LLC: AbodeHD 2891 Carmen LLC
40849 Fremont Boulevard
Fremont, CA 94538
Email: jwhite@abode.org
Attn: Director of Real Estate Development

Such written notices, demands, and communications may be sent in the same manner to such other addresses as the affected Party may from time to time designate as provided in this Section. All notices, demands and requests shall be effective upon such personal delivery, or one (1) business day after being deposited with the private courier or three (3) business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, demand or request sent.

11. Section Titles. Any titles of the sections or subsections of this Agreement are inserted for convenience of reference only and shall be disregarded in interpreting any part of the Agreement's provisions.

12. Governing Law. This Agreement shall be interpreted under and pursuant to the laws of the State of California.

13. Severability. If any term of this Agreement is held in a final disposition by a court of competent jurisdiction to be invalid, then the remaining terms shall continue in full force unless the rights and obligations of the Parties have been materially altered by such holding of invalidity.

14. Attorneys' Fees. If any legal action is commenced to interpret or to enforce the terms of this Agreement or to collect damages as a result of any breach of this Agreement, then the Party or Parties prevailing in any such action shall be entitled to recover against the non-prevailing Party or Parties all reasonable attorneys' fees and costs incurred in such action.

15. Amendment; Modification. This Agreement shall not be modified or amended except by written instrument executed by and among the Parties.

[SIGNATURE PAGES FOLLOW]

SAHA:

SATELLITE AHA DEVELOPMENT INC.,
a California nonprofit public benefit corporation

By: _____
Name: Susan Friedland
Title: Chief Executive Officer

AHD:

ABODE HOUSING DEVELOPMENT,
a California nonprofit public benefit corporation

By: _____
Jonathan White,
Chief Real Estate Officer

2095 LLC:

ALLIED 2065 EVANS LLC,
a California limited liability company

By: Abode Housing Development,
a California nonprofit public benefit corporation,
its sole member/manager

By: _____
Jonathan White,
Chief Real Estate Officer

[Signature Page 1 of 2]

CARMEN LLC:

ABODEHD 2891 CARMEN LLC,
a California limited liability company

By: Abode Housing Development,
a California nonprofit public benefit corporation,
its sole member/manager

By: _____
Jonathan White,
Chief Real Estate Officer

PARTNERSHIP:

2891 CARMEN, L.P.,
a California limited partnership

By: Satellite AHA Development, Inc., a California nonprofit public benefit corporation, its managing general partner

By: _____
Name: Susan Friedland
Title: Chief Executive Officer

[Signature Page 2 of 2]

EXHIBIT A

FORM OF ASSIGNMENT AGREEMENT

ASSIGNMENT, ASSUMPTION, WITHDRAWAL AND AMENDMENT OF AGREEMENT OF LIMITED PARTNERSHIP (2891 CARMEN, L.P.)

This ASSIGNMENT, ASSUMPTION, WITHDRAWAL AND AMENDMENT OF AGREEMENT OF LIMITED PARTNERSHIP (the "**Agreement**") is made as of June 30, 2024 (the "**Effective Date**") by and between Satellite AHA Development Inc., a California nonprofit public benefit corporation (the "**MGP Assignor**"), Abode Housing Development (f/k/a Allied Housing, Inc.), a California nonprofit public benefit corporation (the "**CGP Assignor**"), AbodeHD 2891 Carmen, LLC, a California limited liability company (the "**Assignee**"), and Allied 2095 Evans LLC, a California limited liability company (the "**Limited Partner**"). Assignor and Assignee may be referred to collectively as the "**Parties**" and individually each as a "**Party.**"

RECITALS

A. 2891 Carmen, L.P. (the "**Partnership**") is governed by that certain First Amended and Restated Agreement of Limited Partnership dated March 28, 2007, as heretofore amended by a Transfer Agreement dated March 28, 2007, a First Amendment dated September 30, 2010; a Second Amendment dated September 20, 2010; a Third Amendment dated May 29, 2012; the IRS Amendment dated August 28, 2018; and a Fifth Amendment dated December 31, 2023 (the "**Partnership Agreement**").

B. The MGP Assignor is the managing general partner of the Partnership, the CGP Assignor is the co-general partner of the Partnership, and the Limited Partner is the sole limited partner of the Partnership.

C. MGP Assignor desires to assign all of MGP Assignor's rights, title and interest, together with all duties, obligations and responsibilities, as the managing general partner of the Partnership (the "**MGP Interest**") to Assignee, and to withdraw fully as a partner of the Partnership.

D. CGP Assignor desires to assign all of CGP Assignor's rights, title and interest, together with all duties, obligations and responsibilities, as the co-general partner of the Partnership (the "**CGP Interest**") to Assignee, and to withdraw fully as a partner of the Partnership.

E. Assignee desires to accept the assignment of the rights, title and interest and assume the duties, obligations and responsibilities of the MGP Interest and the CGP Interest and to continue as the sole general partner of the Partnership.

F. Upon the Effective Date, this Agreement constitutes an amendment to the Partnership Agreement to provide that the Assignee has been admitted as a Partner to the Partnership is the sole general partner of the Partnership.

G. Capitalized terms not defined herein shall have the meanings set forth in the Partnership Agreement, unless stated otherwise.

NOW, THEREFORE, in consideration of mutual covenants contained herein and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties hereby agree as follows:

AGREEMENT

1. Assignment. MGP Assignor hereby conveys, transfers, assigns and delivers to Assignee, AS-IS, all of its right, title and interest in and to the MGP Interest, and any other interest in the Partnership (if any) to Assignee. CGP Assignor hereby coveys, transfers, assigns and delivers to Assignee, AS-IS, all of its right, title and interest in and to the CGP Interest, and any other interest in the Partnership (if any) to the Assignee.

2. Assumption. Assignee hereby assumes, AS IS, (i) all of MGP Assignor's right, title and interest in and to the MGP Interest, and any other interest MGP Assignor may have in the Partnership, and (ii) all of CGP Assignor's right, title and interest in and to the CGP Interest, and any other interest CGP Assignor may have in the Partnership.

3. Withdrawal. MGP Assignor and CGP Assignor hereby fully withdraw from the Partnership.

4. Amendment of Partnership Agreement. This Agreement constitutes an amendment to the Partnership Agreement such that, as of the Effective Date, Assignee has been admitted as a Partner to the Partnership and is the sole general partner of the Partnership.

5. [Assignee] Representation. [Assignee] hereby represents that it has obtained the California Tax Credit Allocation Committee approval and any and all necessary lender(s)' consents to the transfers of the MGP Interest and the CGP Interest and to each of MGP Assignor's and CGP Assignor's withdrawal from the Partnership.

6. Successors and Assigns. This Assignment shall be binding upon MGP Assignor and CGP Assignor and each of their respective successors and assigns, and shall be binding upon and inure to the benefit of Assignee and its successors and assigns.

7. Governing Law. This Agreement shall be governed by the laws of the State of California.

8. Counterparts. This Assignment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which, when taken together, shall constitute one and the same instrument. The facsimile signature or signature sent electronically by pdf or otherwise of any Party to any counterpart shall constitute the signature of such Party for all purposes.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of the Effective Date.

MGP ASSIGNOR:

SATELLITE AHA DEVELOPMENT, INC.,
a California nonprofit public benefit corporation

By: _____
Name: Susan Friedland
Title: Chief Executive Officer

CGP ASSIGNOR:

ALLIED 2095 EVANS LLC,
a California limited liability company

By: Abode Housing Development, a California nonprofit public benefit corporation, its sole member and manager

By: _____
Jonathan White,
Chief Real Estate Officer

ASSIGNEE:

ABODEHD 2891 CARMEN LLC,
a California limited liability company

By: Abode Housing Development, a California nonprofit public benefit corporation, its sole member/manager

By: _____
Jonathan White,
Chief Real Estate Officer

LIMITED PARTNER:

ABODE HOUSING DEVELOPMENT,
a California nonprofit public benefit corporation

By: _____
Jonathan White,
Chief Real Estate Officer

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.8**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution authorizing the execution of a second amendment to the Memorandum of Understanding between the City of Livermore, Alameda County, and Livermore Sanitation, Inc. to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1 and to determine no further action under CEQA is required.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute a second amendment to the Memorandum of Understanding between the City of Livermore, Alameda County, and Livermore Sanitation, Inc. to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1 and to determine that no further action under CEQA is required.

SUMMARY

The Memorandum of Understanding (MOU) between the City of Livermore, Alameda County and Livermore Sanitation, Inc. (LSI) defines responsibilities related to the provision of solid waste, recycling, and organics services in areas of Alameda County, and allows LSI to use City of Livermore rate payer-funded assets in exchange for an annual credit to the rates charged by LSI.

In September of 2023, after the assignment of LSI to Waste Connections was approved by Alameda County, the City Council adopted a resolution authorizing the City Manager to execute the first amendment to the Memorandum of Understanding (MOU) between the City of Livermore, Alameda County and Livermore Sanitation, Inc. to recognize the assignment and redefine some County services to comply with Senate Bill (SB) 1383.

The City of Livermore has made the determination that the Second Amendment to the Memorandum of Understanding with Alameda County and Livermore Sanitation, Inc. does not constitute a project under CEQA pursuant to Section 15378(b)(5) of the State CEQA Guidelines which provides that organizational and administrative activities of governments that will not result in physical changes in the environment are not considered projects for CEQA purposes. With this determination, no further action under CEQA

is required.

The City of Livermore, Alameda County, and LSI now desire to identify the collection services more specifically within the County Collection Zone No. 1 to meet compliance with SB 1383 and modify the MOU to clarify the provision of such services. Therefore, Staff is recommending that the City Council adopt a resolution authorizing the City Manager to execute the second amendment to the MOU.

DISCUSSION

On July 1, 2010, Livermore Sanitation, Inc. (LSI) began services in the City of Livermore and shortly thereafter began services in nearby unincorporated areas of Alameda County. On November 26, 2012, the City Council approved a Memorandum of Understanding (MOU) between the City of Livermore, Alameda County and LSI to define responsibilities related to the provision of solid waste, recycling, and organics services in areas of Alameda County, and allow LSI to use City of Livermore rate payer-funded assets in exchange for an annual credit to the rates charged by LSI. This MOU is included as Exhibit P in the Third Amended and Restated Agreement (Franchise Agreement) approved by the City Council in April 2020.

In September 2016, Governor Brown signed into law the Short-lived Climate Pollutants Organic Waste Reductions law, known as Senate Bill (SB) 1383, which established aggressive targets to achieve a 50 percent reduction in the statewide disposal of organic waste. In November 2020, CalRecycle finalized the SB 1383 Regulations which established the regulatory requirements for jurisdictions and are contained in Title 14 of the California Code of Regulations. The Franchise Agreement includes programs to comply with SB 1383 regulatory changes and outlines LSI staff responsibilities and funding for required organics monitoring, reporting, and contamination reduction to demonstrate compliance.

In the fall of 2021, Livermore Sanitation, Inc. (LSI) staff notified the City that they planned to sell LSI to another company, Waste Connections, along with their holdings in San Jose and Milpitas, and parts of eastern Alameda County served by LSI. On November 28, 2022, the Livermore City Council approved the assignment of Livermore Sanitation, Inc. to Waste Connections.

On November 22, 2022, the Alameda County Board of Supervisors authorized the Interim Director of the Community Development Agency to negotiate and execute an agreement to assign the obligations of the MOU to Waste Connections.

In September of 2023, the City Council adopted a resolution authorizing the City Manager to execute the First Amendment to the Memorandum of Understanding (MOU) between the City of Livermore, Alameda County and Livermore Sanitation, Inc. to include services to eastern Alameda County to ensure County compliance with SB 1383, adding programs similar to those provided to the Livermore community as stated in Exhibit D1 of the Franchise Agreement.

City of Livermore, Alameda County, and Livermore Sanitation, Inc. now desire to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1. The proposed Second Amendment updates the MOU to include additional definitions to clarify terms related to SB 1383 compliance, specifies the implementation plan for SB 1383 compliant services, and detailing the collection services and rates for Mandatory and Optional Service Areas in the County.

The City of Livermore has made the determination that the second amendment to the Memorandum of

Understanding with Alameda County and Livermore Sanitation, Inc. does not constitute a project under CEQA pursuant to Section 15378(b)(5) of the State CEQA Guidelines, which provides that organizational and administrative activities of governments that will not result in physical changes in the environment are not considered projects for CEQA purposes. With this determination, no further action under CEQA is required.

Staff recommends that the City Council adopt a resolution authorizing the City Manager to execute the attached amendment to the MOU.

FISCAL AND ADMINISTRATIVE IMPACTS

LSI secured City approval to use assets (e.g., trucks) paid for by the ratepayers of Livermore to provide the County collection service in exchange for a credit for the use of assets. The scheduled reimbursement for Rate Year 15 (FY 2024-25) is $85,444. The credit calculation is based on the number of container "lifts" in the commercial sector and the number of accounts in the residential sector in the County area, as it relates to the number of lifts and accounts in the total service area between the City and the County. This calculation is further described by Section 6.4 of Exhibit P to the City's Franchise Agreement.

COMMUNITY PILLAR

3: Environmental Stewardship

GOAL

2: Solid Waste/Recycling

ATTACHMENTS

1. Resolution
2. Exhibit A - Second Amendment

Prepared by: Anna Zamboanga
Recycling Specialist

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF A SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, ALAMEDA COUNTY, AND LIVERMORE SANITATION, INC. TO MODIFY PROVISIONS OF COLLECTION SERVICES FOR SOLID WASTE AND RECYCLING SERVICES

The City of Livermore ("City") and Livermore Sanitation, Inc. ("LSI") are parties to the Amended and Restated Agreement for Solid Waste, Recyclable Materials, and Compostable Materials Services dated May 9, 2011 (the "LSI Agreement") that provided services within the corporate limits of the City.

The LSI Agreement was then amended by the Third Amended and Restated Agreement for Solid Waste, Recyclable Materials, and Compostable Materials Services dated April 27, 2020, and which was further amended by a First Amendment and then on November 28, 2022, by a Second Amendment to Third Amended and Restated Franchise Agreement (collectively the "Amended LSI Agreement").

On November 26, 2012, the City Council approved a Memorandum of Understanding (MOU) to define responsibilities related to the provision of solid waste, recycling, and organics services in areas of Alameda County, and allow LSI to use City of Livermore rate payer-funded assets in exchange for an annual credit to the rates charged by LSI. This MOU is included as Exhibit P in the Amended LSI Agreement approved by the City Council in April 2020.

In the fall of 2021, LSI staff notified the City that they planned to sell LSI to another company, Waste Connections, along with their holdings in San Jose and Milpitas, and parts of eastern Alameda County served by LSI

On Nov 22, 2022, the Alameda County Board of Supervisors authorized the Interim Director of the Community Development Agency to negotiate and execute an agreement to assign the obligations of the MOU to Waste Connections.

On November 28, 2022, the Livermore City Council approved the Assignment of Livermore Sanitation, Inc. to Waste Connections.

On September 11, 2023, the Livermore City Council adopted a resolution authorizing the City Manager to execute the First Amendment to the MOU to include services to eastern Alameda County to ensure County compliance with SB 1383, adding programs similar to those provided to the Livermore community as stated in Exhibit D1 of the Franchise Agreement.

City of Livermore, Alameda County, and Livermore Sanitation, Inc. now desire to modify provisions of collection services to meet compliance with Senate Bill 1383 in the County Collection Zone 1. The proposed Second Amendment updates the MOU to include additional definitions to clarify terms related to SB 1383 compliance, specifies the implementation plan for SB 1383 compliant services, and detailing the collection services and rates for Mandatory and Optional Service Areas in the County.

The County has filed a Notice of Determination/Notice of Exemption in compliance with Section 21108 or 21152 of the Public Resources Code so that the County will prepare findings pertaining to that agency that the MOU is exempt from the California Environmental Quality Act

(CEQA) and on a separate and independent basis, the County determined this project is exempt from CEQA pursuant to Section 15308, Class 8 of the CEQA Guidelines, as it is an action that involves procedures for protecting the environment; therefore, it will not have a significant impact on the environment.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Authorizes the City Manager to execute the Second Amendment to the Memorandum of Understanding with Alameda County and Livermore Sanitation, Inc., a copy of which is attached as Exhibit A and incorporated by this reference.

   The Second Amendment to the Memorandum of Understanding with Alameda County and Livermore Sanitation, Inc. is not subject to the requirements of CEQA as it is not a "project" within the meaning of Section 15378(b)(5) of Title 14 of the California Code of Regulations ("State CEQA Guidelines") because it has no potential for resulting in direct or indirect physical change in the environment. With this determination, no further action pursuant to CEQA is required. The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City Clerk's Office. The custodian for these records is the City Clerk.

2. Authorizes the City Manager to take whatever actions are necessary and appropriate to carry out the purpose and intent of this resolution, including approving minor changes to the proposed Memorandum of Understanding.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

Exhibit A – Second Amendment to the Memorandum of Understanding with Alameda County and Livermore Sanitation, Inc.

SECOND AMENDMENT TO MEMORANDUM OF UNDERSTANDING BETWEEN ALAMEDA COUNTY, LIVERMORE SANITATION, INC. AND CITY OF LIVERMORE REGARDING SOLID WASTE AND RECYCLING SERVICES

THIS SECOND AMENDMENT ("**2nd Amendment**"), is entered into by and between COUNTY OF ALAMEDA, a political subdivision of the State of California ("**County**"), LIVERMORE SANITATION, INC., a California corporation ("**LSI**"), and the CITY OF LIVERMORE, a municipal corporation (the "**City**"), (each from time to time hereafter referred to individually as a "**Party**" and collectively as the "**Parties**"), with respect to that *Memorandum Of Understanding Between The City Of Livermore, Alameda County And Livermore Sanitation, Inc. Regarding Solid Waste And Recycling Service*s dated for reference purposes as of November 6, 2012 ("**2012 MOU**"), the *1st Amendment,* dated for refence purposes September 27, 2023*,* and collectively with this 2nd Amendment ("the **MOU**").

RECITALS

This Amendment is entered into by the Parties based on the following facts, findings, and determinations:

A. Whereas, the City and LSI are parties to the *Amended and Restated Agreement for Solid Waste, Recyclable Materials, and Compostable Materials Services* dated May 9, 2011 (the "**LSI Agreement"**) that provided services within the corporate limits of the City, which was then amended by the *Third Amended and Restated Agreement For Solid Waste, Recyclable Materials, and Compostable Materials Services* (Exhibit C) dated April 27, 2020, and which was further amended by a *First Amendment* and then on November 28, 2022 by a *Second Amendment To Third Amended And Restated Franchise Agreement* (collectively the "**Amended LSI Agreement**"); and

B. Whereas, on November 6, 2012, the County granted authority to LSI to provide services for the collection of solid waste, recyclable materials, and compostable materials in County Collection Zone No. 1 and thereafter the City, LSI and the County entered into the 2012 MOU (Exhibit A) in which LSI provides services in the County Collection Zone 1 as set forth in the LSI Agreement as modified by the 2012 MOU and 2023 1st Amendment (Exhibit B); and

C. Whereas, the County Collection Zone 1 is being revised; and

D. Whereas, the County, LSI and the City desires to more specifically identify the collection services within the County Collection Zone No. 1 to meet compliance with SB 1383 and modify the MOU to clarify the provision of such services.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and obligations set forth in this Amendment, the Parties hereby agree as follows:

1. Additional Definitions.

The following additional definitions shall apply to this MOU. For purposes of this Agreement, unless a different meaning is clearly required, the following terms shall have the following meanings and be capitalized throughout this Agreement:

1.1 **Alternative Diversion Method** - means an approved Organic Material diversion activity other than weekly Curbside Collection. It can include self-haul or on-site management.

1.2 **Automatic Roll-out Period** - means the delivery of a 3-container collection system to all subscribed CCZ1 accounts in the Mandatory Service Area that lack any of the services required under SB 1383. The Automatic Roll-out period commences September 1, 2024.

1.3 **Collection Service** - means waste collection service provided by Contractor using from 1 to 3 containers and may include Trash, Recycling and Organics.

1.4 **CCZ1 Customers** - means those Customers located within County Collection Zone 1, previously referred to as County Customers (Exhibit D).

1.5 **County Fee** - means the fee paid by Contractor to County for the privilege to hold the exclusive rights granted by this Agreement.

1.6 **De Minimis Waiver** - is a Jurisdiction granted waiver for a Generator that can demonstrate that they dispose of less than the maximum weekly Organics as defined in the SLCP Regulations.

1.7 **Mandatory Service Area** - means an area where Three Container Service is required unless the generator is approved for a De Minimis Waiver or Alternate Diversion Method.

1.8 **Optional Service Area** - means an area in which Service is not mandated, however the Approved Hauler may provide service if requested by a Generator.

1.9 **Outreach** – means printed and electronic public education.

1.10 **Roll-Off Container** - means a large, metal container that is delivered and serviced with a special vehicle.

1.11 **Solid Waste Collection and Organics Waste Reduction Ordinance** - means the County SB 1383 Enforcement Ordinance 2021-48 approved by the County Board of Supervisors.

1.12 **Specialty Services –** refers to services outside of normal trash, recycling and organics services provided at the curbside, including E-Waste/U-Waste collection, Holiday Tree collection, On-Call Clean-Up Services, Bulky Item collection, and Handy Hauler Service.

1.13 **Subscribed Generator** - is any resident or business entity in County Collection Zone 1, who has subscribed for collection services from Contractor and has an active waste collection account.

1.14 **Three-Container Collection System or Service** - means SB 1383 compliant service that includes Trash, Recycling and Organics.

1.15 **Trash** - means the same as "Garbage" and is the portion of discarded Solid Waste that does not require diversion under SB 1383.

2. Scope of Services

2.1 Amendments to 2012 County/LSI/City MOU

The Memorandum of Understanding Between The City Of Livermore, Alameda County And Livermore Sanitation, Inc. Regarding Solid Waste And Recycling Services dated November 6, 2012 ("**2012 MOU**") is amended as follows:

Section 4.2 Collection Services

a) Required Services and Standards

This section is amended to clarify that only CNG vehicles will be used for County Collection.

b) Single Family Collection Services

Replace *i) Densely Populated Area* with:

Mandatory Service Area - Contractor shall provide a Three-Container Collection System (Trash, Recycling and Organics) during the Automatic Rollout Period to all Subscribed Generators within the Mandatory Service Area. In situations where the generator is approved for a De Minimis Waiver or Alternate Diversion Method, Organics service will not be required. Contractor agrees to provide weekly Collection Service to generators in the Mandatory Service Area, which is identified on the attached County Service Area Map – 2024 (Exhibit E).

Replace *ii) Rural Area* with:

Optional Service Area - Contractor may, at their option, provide Trash, Recycling, or Organics Collection Services to generators within the Optional Service Area identified on the attached County Service Area Map – 2024 (Exhibit E), if requested by a generator. Although not required, Contractor shall use reasonable efforts to provide all Specialty Services in the Optional Service Area. If Contractor declines to provide requested Collection Services to an Optional Service Area generator, then the generator may arrange or contract with another collector/hauler to provide such services and the Exclusive Rights of Contractor shall not apply.

Insert iii) Service Area Changes:

The County, in consultation with LSI, may change the designation of a parcel or parcels within CCZ1 without additional approval by the Board of Supervisors.

Section 5 Other Services

Replace *5.2 Public Education* with:

a) General

The County agrees to utilize the outreach and education materials Contractor has prepared for the City, with any modifications necessary to make them specific to the County service area(s). Most commonly, these are bill inserts and information on the Contractor's website. Residential and Commercial outreach shall include the following topics at least once annually: Organics and Recyclable material separation requirements; organic waste diversion options; impacts of organics disposal; methane reduction benefits of organics diversion; the benefit of source reduction; Recycling, and Composting; proper handling of E-Waste, U-Waste, and Hazardous Waste; Specialty Services offered by the Contractor; compliance with the County Solid Waste Collection and Organics Reduction Ordinance and SB 1383, as applicable.

b) Public Education Plan

In advance of each Rate Period, Contractor shall submit an annual Public Education Plan to the County Waste Program Manager outlining its planned public education efforts for CCZ1. The plan shall list each type of public education piece to be prepared, the purpose of the piece, the key

subject(s) to be covered, and the anticipated date of issuance. The County Contract Manager shall review and approve the plan within 2 weeks of submission.

c) County Outreach Review

LSI shall allow the County a reasonable opportunity to review, comment, request modification to, and approve all public education materials prior to printing and distribution within County Collection Service Zone No. 1, such as, but not be limited to, newsletters, flyers, door hangers, notification tags.

Section 7 Records and Reports

Replace section *7.1* with:

a) Contractor shall maintain all service records required for monitoring generator compliance in CCZ1. These service records include Service address, customer name, account type and service level data for all materials, including regularly serviced debris boxes, for each generator in CCZ1. Contractor agrees to add Parcel Numbers (APNs) to CCZ1 account data so that APNs will be included in all service record submissions.

b) Contractor shall submit service record and Route Review reports to the County Waste Program bi-annually by email, or by mail, at the following address:

By email: Waste.Program@acgov.org

By mail:

Alameda County
224 West Winton Ave, Room 111
Hayward, CA 94544
Attn: Waste Program Manager

2.3 Summary of Services to Alameda County

Contractor shall continue to provide all Collection Services, Outreach, Processing and Route Reviews to County customers as set forth in the Third Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. For Solid Waste, Recyclable Materials and Compostable Materials Services, dated April 27, 2020, except as follows:

a) Delete Section *5.5 City Facilities and Events Collection* – Not applicable to County Collection Zone 1.

b) Delete Section *5.6 Provision of Service to Schools* – Replace with:

If a public or private school in CCZ1 requests Trash, Recycling, or Organics Collection services, Contractor shall provide such services in accordance with the Collection requirements of the Mandatory Service Area. Contractor shall charge the school at Rates that do not exceed the County Customer Rates for Commercial Customers. (Exhibit F).

c) Delete Section *5.8 Abandoned Solid Waste Collection* – Not applicable to County Collection Zone 1.

d) Delete Section *5.9 Community Garage Sale Event* - Not applicable to County Collection Zone 1.

3. Contractor Compensation

3.1 General

As established in the original 2012 MOU, the Contractor's compensation for performance of all its obligations under this agreement shall be Gross Revenue. Contractor's compensation provided for in this Article shall be the full, entire and complete compensation due to Contractor pursuant to this agreement for all labor, equipment, materials and supplies, processing and disposal fees, fees due to County, Reimbursement due to the City, taxes, insurance, bonds, overhead, operations, profit and all other things necessary to perform all the services required by this agreement in the manner and at the times prescribed. If Contractor's actual costs, including fees due to County, are more than Gross Revenue, Contractor shall not be compensated for the difference in actual costs and actual Gross Revenue. If Contractor's actual costs are less than the actual Gross Revenue, Contractor shall retain the difference provided that Contractor has paid County fees pursuant to Section 8 of the 2012 MOU. Under this agreement, Contractor shall have the right and obligation to charge and collect from Customers, rates in Exhibit F for provision of services to Customers.

3.2 County Customer Rates

The initial rates charged by Contractor to County Customers in CCZ1 shall be the same rates as Contractor currently charges its customers in the City for all Collection and Specialty Services, with the exception of County Roll-off service rates, which are calculated independently. (Exhibit F). Such rates charged to County Customers shall be adjusted at the same times and in the same amounts as any adjustments in rates are approved by the City in accordance with Article 8 of the LSI Agreement so that the County rates continue to be the same as the City rates despite the differences in County service levels under this MOU.

3.4 Rate Adjustments

Upon written notice to Contractor and the City that the County wishes to adjust the rates charged to County Customers, Contractor and the County agree to meet and confer to discuss amendments to this MOU setting forth the process for the County's adjusting rates for County Customers.

4. Billing

4.1 General

Contractor shall bill County Customers in accordance with the procedures specified in the LSI Agreement with the exception that the bad debt procedures do not apply to County Customers.

4.2 Bad Debt Collection

Contractor shall be responsible for collection of payment from County Customers. When attempting to collect past-due amounts, Contractor may charge Customers with past-due amounts a late payment assessment equal to ten percent (10%) of the amount of the past due statement as part of the next billing cycle. The amount of the late payment assessment may accumulate with completion of each payment cycle if the amount is still past due. For example, after the completion of the second payment cycle for a delinquent account, the late payment amount shall equal the sum of: (1) amount of the first bill past due multiplied by ten percent (10%), (2) the product of that calculated in item 1 multiplied by ten percent (10%), and (3) the amount of the then-current bill. If payment is not received within 120 days of the billing date, Contractor will report delinquent account information to the County via email so that the County can pursue a property lien process.

4.3 Billing Inserts

Contractor shall include public education billing inserts, specific to County programs and accounts, as part of their quarterly Billing process. The billing inserts should match the content and schedule of the inserts used for City accounts.

5. County Fee and Other Fees

5.1 General

In consideration for the exclusive rights provided to Contractor by the County, and in lieu of the fees payable to the City in accordance with Article 7 of the LSI Agreement, Contractor shall pay to the County ten (10%) of the County Gross Rate Revenues collected by Contractor for services provided in CCZ1 pursuant to this MOU. The County shall use the County Fee to offset expenses including staffing costs related to County waste programs, pilot studies, education and outreach campaigns, technical assistance to Customers, reporting, compliance, enforcement, or other activities involved in compliance with SB 1383.

5.2 County Fee Remittance Dates

On or before the twentieth (20^{th}) day of each month during the term of this MOU, Contractor shall remit to the County the fees due pursuant to Section 8 of the 2012 MOU. If the fees are not paid before the twentieth (20^{th}) day any month, Contractor shall pay in addition to the amount owed to County a late payment penalty in an amount equal to two percent (2%) of the amount owing for that month. Contractor shall pay an additional two percent (2%) penalty owing on any unpaid balance for each following thirty (30) calendar days period the fees remain unpaid. Late payment penalty amounts shall not be reimbursed to Contractor. The late payment penalty amounts are not intended as interest on debt, but rather are intended as a predetermined penalty for failure to meet an obligation under this MOU.

5.3 County Fee Statements

Each monthly remittance to the County shall be accompanied by a statement detailing County Gross Rate Revenues for the period covered from all operations conducted or permitted pursuant to this MOU. This monthly statement shall identify billed revenues and actual County Gross Rate Revenues received listed separately for Single-Family, Multi-Family, Commercial, and Drop Box/Compactor County Customers. In addition, Contractor shall maintain copies of all Billing

and collection records for five (5) years, following the expiration or earlier termination of this MOU, for inspection and verification by County at any reasonable time upon request.

5.4 County Fee Increases

Any increase in this County fee shall be reflected on a dollar-for-dollar basis through an increase in Contractor rates hereunder effective as of the date of such increase.

5.5 Reimbursement Due to City

In exchange for the right to use assets financed by City ratepayers and necessary for the implementation of this MOU, including, without limitation, vehicles, Containers, personnel and administrative support, Contractor shall pay the City an annual Reimbursement for each Rate Period that Contractor provides services in County Collection Zone 1 under this MOU, pro-rated for any partial Rate Period of such service; provided, however, that the Reimbursement will be adjusted annually, by mutual agreement of the City and Contractor based upon then current County Customer data. The projected Reimbursement for Rate Year 15 (FY 2025) is $85,443.98. The Reimbursement will be paid by means of a credit against the rates charged by Contractor in the City under the LSI Agreement for such Rate Period.

6. Miscellaneous

6.1 Consistent Services. Except as expressly modified by this 2nd Amendment, all of the terms and conditions of the 2012 MOU and 1st Amendment are and remain in full force and effect. It is the intent of this 2024 Amendment that LSI provide services to County in accordance and consistent with the Amended LSI Agreement.

6.2 Authority. The City and the County agree that each has taken the appropriate steps necessary to authorize and approve this Amendment. LSI agrees that it has the authority to enter into and perform its obligations under this collective MOU.

6.3 Entire Agreement. This 2nd Amendment, the 2023 First Amendment, and the 2012 MOU, incorporating the **Amended LSI Agreement** and collectively the MOU, including all recitals, exhibits and schedules hereto, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior or contemporaneous understandings, negotiations, representations, promises, memoranda and agreements, oral or written, by or between the Parties. No representations, inducements, promises, or agreements have been made in connection with this MOU by any Party, or anyone acting on behalf of any Party, other than those expressly set forth in this MOU.

6.4 Severability. If any term or provision of this MOU is ever determined to be invalid or unenforceable for any reason, such term or provision shall be severed from this MOU without affecting the validity or enforceability of the remainder of this MOU.

IN WITNESS WHEREOF, this SECOND AMENDMENT TO MOU has been approved by the Parties and is effective upon Execution of all Parties.

CITY OF LIVERMORE

By: _____

Name: Marianna Marysheva

Its: City Manager

Date: _____

APPROVED AS TO FORM:

_____
Livermore Assistant/City Attorney

APPROVED AS TO INSURANCE:

_____
Livermore Risk Manager/Analyst

COUNTY OF ALAMEDA

By: _____

Name: Sandra Rivera

Its: CDA Director

Date: _____

WASTE CONNECTIONS US, INC.,
LIVERMORE SANITATION, INC.
A California Corporation

By: _____

Name: Ron J. Mittelstaedt

Its: President and Chief Executive Officer

Date: _____

Approved as to form by:
Donna R. Ziegler, County Counsel

By: _____
Caitlyn M. Gulyas
Deputy County Counsel

EXHIBITS

Exhibit A – 2012 County-LSI-City MOU
Exhibit B – 2023 County-LSI-City MOU 1st Amendment
Exhibit C - Third Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. For Solid Waste, Recyclable Materials and Compostable Materials Services, dated April 27, 2020
Exhibit D – County Collection Zone 1 Map 2024
Exhibit E – County Service Area Map 2024
Exhibit F - County Customer Rates 2024

12-336
EXHIBIT A

MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, ALAMEDA COUNTY AND LIVERMORE SANITATION, INC. REGARDING SOLID WASTE AND RECYCLING SERVICES

THIS MEMORANDUM OF UNDERSTANDING ("MOU"), dated for reference purposes as of November 6, 2012, is entered into by and between the CITY OF LIVERMORE, a municipal corporation (the "City"), the COUNTY OF ALAMEDA, a political subdivision of the State of California ("County"), and LIVERMORE SANITATION, INC., a California corporation ("LSI") (each from time to time hereafter referred to individually as a "Party" and collectively as the "Parties").

RECITALS

This MOU is entered into by the Parties based on the following facts, findings and determinations:

A. The City and LSI are parties to that certain Amended and Restated Agreement For Solid Waste, Recyclable Materials, and Compostable Materials Services within the corporate limits of the City dated May 9, 2011 (the "LSI Agreement").

B. County desires to have similar collection services provided within the unincorporated areas surrounding the City, and the City desires to assist the County by modifying the LSI Agreement in accordance with the terms of this MOU to allow LSI to provide such services within certain designated portions of the unincorporated area of the County.

C. Pursuant to Section 6.40.280 of the County General Ordinance Code, the County Board of Supervisors may establish County Collection Service Zones for the Collection of Solid Waste, Compostable Materials, and Recyclable Materials. On November 6, 2012, the County Board of Supervisors established County Collection Service Zone 1, which is shown on the map attached as Exhibit A.

D. Section 6.40.290 of the County General Ordinance Code authorizes the Board of Supervisors to enter into franchise agreements, grant permits, or otherwise give authorization for the Collection of Solid Waste, Compostable Materials, and Recyclable Materials within a County Collection Service Zone. On November 6, 2012, the County Board of Supervisors granted authority to LSI to provide services for the Collection of Solid Waste, Compostable Materials, and Recyclable Materials within County Collection Service Zone No. 1, and provided that the specific scope, nature, and requirements of such services to be provided by LSI shall be as set forth in the LSI Agreement, as modified by this MOU.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and obligations set forth in this MOU, the Parties hereby agree as follows:

1. Definitions. For purposes of this MOU, unless a different meaning is clearly required, the following terms have the following meanings and shall be capitalized throughout this MOU. Capitalized terms not defined in this section shall the meanings set forth in the LSI Agreement.

1.1 "County Collection Zone No. 1" means that certain area within the unincorporated area of the County, shown on the map attached as Exhibit A, established by the County Board of Supervisors pursuant to Section 6.40.290 of the County General Ordinance Code, which requires authorization from the County for the Collection of Solid Waste, Compostable Materials, and Recyclable Materials.

1.2 "County Customers" means those Customers located within County Collection Zone No. 1.

1.3 "County Gross Rate Revenues" means actual monies remitted to LSI by County Customers, which shall be determined in accordance with Generally Accepted Accounting Principles.

1.4 "Densely Populated Area" means that certain area within County Collection Zone No. 1 that is located close to the City's incorporated area, as shown and set forth in Exhibit A.

1.5 "Rural Area" means that certain area within County Collection Zone No. 1 that is located farther from the City limits, as set shown and set forth in Exhibit A.

2. Term.

2.1 Effective Date. The Effective Date of this MOU shall be the date that the City, the County and LSI sign this MOU, following approval of the City Council and the Board of Supervisors.

2.2 Term. The term of this MOU shall be the from the Effective Date until the date that is the earlier of (a) the end of the Term of the LSI Agreement; (b) the date that the LSI Agreement is terminated in accordance with Section 11.3 of the LSI Agreement; (c) the date this MOU is terminated pursuant to Section 2.3 below; or (d) the date that this MOU is terminated pursuant to Section 10 below.

2.3 Termination by Livermore. City may terminate this MOU in the event the City determines, in its sole discretion, that it cannot continue to authorize LSI to utilize assets financed by City ratepayers and necessary for the implementation of this MOU in accordance with Section 6.4(b) below. City agrees to provide a minimum of 90 days' notice of such termination to the County and LSI.

3. Amendment of LSI Agreement. Concurrently with the execution of this MOU, and in accordance with Section 6.18 of the LSI Agreement, the City hereby consents to LSI's providing services to County Customers in County Collection Service Zone 1, on the terms and conditions as set forth in this MOU irrespective of the terms of service in such Section 6.18, and waives any time periods set forth in such Section 6.18. The City further agrees to formally incorporate the provisions of this MOU in the LSI Agreement when the LSI Agreement is next amended or restated.

4. Scope of Services.

4.1 Exclusive Rights. Pursuant to County General Ordinance Code Section 6.40.290, and County Board of Supervisors Resolution No. _____, the County Board of Supervisors has granted to LSI the exclusive right to provide Solid Waste, Recyclable Materials, and Compostable Materials Collection services to Single-Family, Multi-Family, and Commercial Customers that voluntarily subscribe to Collection service in the County Collection Service Zone No. 1 commencing on January 8, 2013 (the "Commencement Date"). LSI's scope of services shall include the Collection, transfer, Transportation, Processing, Recycling, Composting, and/or Disposal of Solid Waste, Recyclable Materials, and Compostable Materials, as described in Section 4.2. The rights granted by the County extend only to provision of service in the County Service Area No. 1, described in Exhibit A, as its boundaries are now constituted or as may hereafter be amended by the Board of Supervisors and Section 11.1 of this MOU. LSI's exclusive rights shall extend to Solid Waste, Recyclable Materials, and Compostable Materials that have been placed in Containers provided by LSI. LSI's rights are exclusive as set forth above, except as to the following persons, who are not required to obtain authorization from the County for collection of Solid Waste or Recyclable Materials within a County Collection Service Zone pursuant to Article IV of Chapter 6.40 of Title 6 of the County Ordinance Code:

(a) The County;

(b) A commercial business owner or resident removing solid waste, recyclable materials, or compostable materials generated from his or her premises and transported personally by the owner or occupant of such premises, or by his or her employees or contractor whose removal of the solid waste, recyclable materials or compostable materials is incidental to the service being performed and provided such materials are processed, or disposed of at a facility permitted to accept such materials;

(c) Youth, civic, or charitable organizations which collect or accept donated recyclable materials and compostable materials;

(d) Persons that collect or accept donated Recyclable Materials, or pay the generator for the collection of Recyclable Materials and Compostable Materials;

(e) Persons delivering Recyclable Materials for recycling under the California Beverage Containers Recycling Litter Reduction Act (California Public Resources Code Section 14500 et seq.);

(f) A gardening, landscaping or tree-trimming contractor removing Compostable Materials from a premises as an incidental part of total service offered by that contractor for no additional or separate fee;

(g) Persons that have contracted for the collection of Solid Waste, Compostable Materials, or Recyclable Materials generated by a public school or County facilities;

(h) Persons collecting Solid Waste, Recyclable Materials, or Compostable Materials where such materials are removed as part of the abatement of a public nuisance or dangerous condition at the direction of the County;

(i) Persons collecting Construction and Demolition Debris resulting from a construction or demolition project; provided, however, that, subject to the County's amendment of its relevant Ordinance, which the County undertakes to use its best efforts to accomplish prior to the Commencement Date, this exception to LSI's exclusive rights shall be limited as of the Commencement Date to licensed construction or demolition contractors removing Construction and Demolition Debris from any Premises using their own employees and equipment as an incidental part of a comprehensive service offered by such contractors, rather than as a hauling service, and provided that such Debris is processed, or disposed of, at a facility permitted to accept such Debris;

(j) Persons collecting, removing or disposing the following:

(i) Animal waste and remains from slaughterhouse or butcher shops, grease, or used cooking oil;

(ii) By-products of sewage treatment, including , sludge ash, grit and screenings;

(iii) Hazardous or dangerous materials; liquid and dry caustics; acids; bio-hazardous, flammable and explosive materials; insecticides; and similar substances;

(iv) Infectious medical waste (as defined in California Health and Safety Code Section 25117.5).

4.2 Collection Services.

(a) Required Services and Standards. Starting on the Commencement Date, LSI shall offer Solid Waste, Compostable Materials and Single-Stream Recyclable Materials Collection services to County Customers in County Collection Service Zone No. 1 in accordance with the LSI Agreement as modified by this MOU and as more specifically set forth below in this Section 4.2, and shall provide service to those County Customers that voluntarily subscribe to and pay for LSI's Collection services. In providing such services, LSI shall comply with the provisions stated in the LSI Agreement for the following:

(i) Collection standards,

(ii) Vehicles,

(iii) Containers,

(iv) Personnel, and

(v) Corporation yard, transfer operations, and compressed natural gas station.

(b) Single Family Collection Services. LSI shall have different obligations for Single Family Collection Services in the Densely Populated Area and in the Rural Area, as set forth below.

(i) Densely Populated Area. For Single-Family Customers located in the Densely-Populated Area that subscribe to LSI's Collection service, LSI shall provide each Customer weekly Solid Waste, Single-Stream Recyclables Materials, and Compostable Materials Cart Collection services. LSI's services shall also include: on-call Curbside clean-up services, on-call Bulky Item collection, weekly motor oil and filter Collection, quarterly textile Collection, provision of kitchen pails, Compostable Materials overages program, Curbside Christmas tree Collection, on-call E-Waste Collection, and weekly cell phone and household battery Collection. LSI may, but is not obligated to offer, the community re-use network and other services specified in the LSI Agreement that are not listed here as requirements for the Customers in the Densely-Populated Area. All of these services shall be provided by the LSI in accordance with the provisions specified for the Single-Family Customers in the LSI Agreement. These Single-Family Customers need not subscribe to all of these Collection services, but all are included in their rates.

(ii) Rural Area.

(A) Solid Waste Collection Services. For Single-Family Customers located in the Rural Area that subscribe to LSI's Collection service, LSI shall provide each Customer weekly Solid Waste Cart Collection services.

(B) Single-Stream Recyclables Collection Services. LSI shall also Collect Single-Stream Recyclable Materials on a weekly basis from Single-Family Customers located in the Rural Area that subscribe to Solid Waste Cart Collection service. The Single-Stream Recyclable Materials Collection service may be performed in a manner different than that used to service Customers in the Densely-Populated Area. LSI shall instruct Customers to place Single-Stream Recyclable Materials in a bag and to place the bag to the side of the Solid Waste cart for collection. LSI shall ensure that the Solid Waste and bagged Recyclable Materials are kept separate and shall ensure that the Solid Waste is disposed of at a designated landfill. Pursuant to the terms of Site Plan Approval

Amendment (SPAA) 09-006, LSI shall first dispose of any Solid Waste collected in County Service Area No. 1 at the Disposal Site and shall then transport the Recyclable Materials to LSI's facility for further handling and transfer.

(C) Other Services Not Required. For the Rural Area Single-Family Customers, LSI is not obligated to provide the following services: on-call Curbside clean-up services, on-call Bulky Item collection, motor oil and filter Collection, quarterly textile Collection, provision of kitchen pails, Collection of Compostable Materials, and Curbside Christmas tree Collection, e-waste collection, weekly cell phone and battery collection.

(iii) Single-Family Bin Service. LSI shall offer Single-Family Customers Bin Collection service for Solid Waste at Customer's option. In such case, the Customer shall be treated as a Commercial Customer in accordance with Section 4.2(c) below.

(c) Multi Family and Commercial Collection Services. LSI shall offer Solid Waste and Single-Stream Recyclables Collection services to all Multi-Family and Commercial Premises in the County Collection Service Zone No. 1, and Compostable Materials Collection services to Commercial Customers. LSI shall offer Multi-Family and Commercial Premises a variety of service options including the use of Carts, Bins, Drop Boxes, or Compactors for Solid Waste and Single-Stream Recyclable Materials Collection. LSI shall provide these Collection services in accordance with the provisions specified for the Multi-Family and Commercial Customers in the LSI Agreement with the exception that LSI may, but is not obligated to, provide the following services: "Universal Recycling," internal recycling bins for Commercial Customers, Compostable Materials Collection service to Multi-Family Customers, and/or technical assistance.

4.3 Transportation of Collected Materials. LSI shall Transport all Solid Waste, Recyclable Materials, and Compostable Materials Collected under this MOU to the Disposal, Processing, or Composting Sites approved by the City pursuant to the LSI Agreement.

4.4 Disposal and Processing of Collected Materials.

(a) Processing. LSI shall provide Recyclable Materials and Compostable Materials Processing Services and Solid Waste Disposal Services in accordance with the provisions specified for the City in the LSI Agreement. LSI shall guarantee Processing and Disposal capacity over the Term of the MOU for all Recyclable Materials, Compostable Materials, and Solid Waste Collected in County Collection Service Zone No. 1. The capacity guarantee shall be made by LSI and/or by its affiliates or its Subcontractors if LSI does not own and operate the Processing and Disposal Sites.

(b) Disposal. With regard to Disposal Services, either LSI shall enter into an agreement, or the City shall amend its existing disposal agreement, with Republic Services Vasco Road, LLC, a wholly-owned subsidiary of Republic Services, Inc., to arrange for Disposal of the Solid Waste Collected in County Collection Service Zone No. 1 at the Vasco Road Sanitary Landfill, located at 4001 North Vasco Road in unincorporated Alameda County, California. The terms of the new LSI Disposal agreement or of the amended City Disposal agreement shall be similar in nature to the City's current Disposal Agreement with Republic Services Vasco Road, LLC, and shall specify that the Disposal cost for Solid Waste from County Collection Service Zone No. 1 will be the same Disposal cost as that for Solid Waste from the City. In addition, the new or amended Disposal agreement between LSI or the City and Republic Services Vasco Road, LLC shall specify that the County is indemnified in the same manner as the City. Upon request, LSI or the City shall provide the County with a copy of the new or amended Disposal agreement for review.

5. Other Services

5.1 Customer Service and Complaints. LSI shall provide customer service to County Customers and respond to service complaints in accordance with the procedures specified in the LSI Agreement. To the extent that LSI is unable to resolve a complaint from a County Customer, such complaints shall be elevated to staff within the County's Community Development Agency, and the City shall have no responsibility or obligation to provide customer service or resolve complaints of County Customers.

5.2 Public Education

(a) At a minimum, LSI shall prepare and distribute a service information brochure to new Customers describing how to prepare Solid Waste, Recyclable Materials, and Compostable Materials for Collection. The brochure shall inform Customers as to the acceptable materials that can be included for Collection and any unacceptable materials to be excluded from Collection.

(b) On an annual basis on or before July 1 of each year, LSI shall notify Multi-Family and Commercial County Customers that are not in compliance with State or local recycling requirements including the State's mandatory commercial recycling requirements (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) and the Alameda County Waste Management Authority Ordinance 2012-1, "An Ordinance requiring actions to Reduce Landfilling of Recyclable and Organic Solid Wastes from Businesses, Multi-Family Residences, and Self Haulers." Such notification shall describe the recycling requirements and how the Customer can comply with such requirements.

(c) LSI shall allow the County a reasonable opportunity to review, comment, request modification to, and approve public education materials before printing, publication, distribution, and/or release, including public education materials required by Sections 5.2(a) and (b), and any other materials LSI chooses to prepare and distribute within County Collection Service Zone No. 1, such as, but not be limited to, newsletters, flyers, door hangers, notification tags, and direct contact.

6. Billing and Rates.

6.1 General. Contractor shall bill County Customers in accordance with the procedures specified in the LSI Agreement with the exception that the bad debt procedures do not apply to County Customers.

6.2 Bad Debt Collection. LSI shall be responsible for collection of payment from County Customers with past due accounts ("bad debt"). If payment is not received within 30 days of the billing date, LSI may discontinue service. When LSI is attempting to collect past-due amounts, LSI may charge Customers with past-due amounts a late payment assessment equal to ten percent (10%) of the amount of the past due statement as part of the next billing cycle. The amount of the late payment assessment may accumulate with completion of each payment cycle if the amount is still past due. For example, after the completion of the second payment cycle for a delinquent account, the late payment amount shall equal the sum of: (1) amount of the first bill past due multiplied by ten percent (10%), (2) the product of that calculated in item 1 multiplied by ten percent (10%), and (3) the amount of the then-current bill.

6.3 Billing Inserts. LSI shall include County-prepared public education materials as inserts in LSI's quarterly Billings, which LSI mails to Customers provided County pays for and delivers to LSI copies of all printed materials to be inserted into the bills. County shall allow LSI a reasonable opportunity to review public education materials and request modifications to materials to clarify

operational practices before printing, publication, and distribution in LSI's billing statements. County's inserts shall state that the information contained therein is the position of County and not necessarily that of LSI.

6.4 Rates; City Credit.

(a) The initial rates charged by LSI to County Customers shall be as set forth in the attached Exhibit B, which, except as to Single-Family Customers located in the Rural Area, contains the same rates as LSI currently charges its customers in the City for the Collection of Solid Waste despite the differences in County service levels set forth in this MOU. Such rates charged to County Customers shall be adjusted at the same times and in the same amounts as any adjustments in rates are approved by the City in accordance with Article 8 of the LSI Agreement so that the County rates continue to be the same as the City rates despite the differences in County service levels under this MOU; provided, however, that each of such rates charged to Single-Family Customers located in the Rural Area shall be adjusted at the same times and by the same percentage amounts as the most comparable corresponding rate by service level approved by the City in accordance with Article 8 of the LSI Agreement.

(b) In exchange for the right to use assets financed by City ratepayers and necessary for the implementation of this MOU, including, without limitation, vehicles, Containers, personnel and administrative support, LSI shall pay the City an annual amount of $46,191.67 for each Rate Period that LSI provides services in County Collection Service Zone No. 1 under this MOU, pro rated for any partial Rate Period of such service (the "Reimbursement"); provided, however, that the Reimbursement will be adjusted annually, commencing July 1, 2013, by mutual agreement of the City and LSI based upon then current County Customer data and Exhibit D attached hereto. The Reimbursement will be paid by means of a credit against the rates charged by LSI in the City under the LSI Agreement for such Rate Period

(c) Upon written notice to LSI and the City that the County wishes to adjust the rates charged to County Customers, LSI and the County agree to meet and confer to discuss amendments to this MOU setting forth the process for the County's adjusting rates for County Customers. Unless and until this MOU is amended to provide for such separate rate setting for County Customers, LSI shall continue to charge rates as set forth in Section 6.4(a).

7. Records and Reports.

7.1 LSI shall maintain all records and prepare all reports as required pursuant to the LSI Agreement. All such records and reports shall separately track information related to County Collection Service Zone No. 1. All reports LSI is required to submit to the City pursuant to the LSI Agreement shall also be submitted to the County at the following address:

Alameda County Community Development Agency
224 West Winton Ave, Room 110
Hayward, CA 94544
Attn: Community Development Director

7.2 To the same extent that the City may inspect the records of LSI pursuant to the LSI Agreement, the County may inspect LSI's records that relate to the services provided by LSI for County Collection Service Zone No. 1.

8. County Fees.

8.1 In consideration for the exclusive rights provided to LSI by the County, and in lieu of the fees payable to the City in accordance with Article 7 of the LSI Agreement, LSI shall pay to the County ten percent (10%) of the County Gross Rate Revenues collected by LSI for services provided pursuant to this MOU. Any increase in this County fee shall be reflected on a dollar-for-dollar basis through an increase in LSI's rates hereunder effective as of the date of such increase.

8.2 On or before the twentieth (20^{th}) day of the each month during the term of this MOU, LSI shall remit to the County the fees due pursuant to Section 8.1. If the fees are not paid before the twentieth (20^{th}) day any month, LSI shall pay in addition to the amount owed to County a late payment penalty in an amount equal to two percent (2%) of the amount owing for that month. LSI shall pay an additional two percent (2%) penalty owing on any unpaid balance for each following thirty (30) calendar days period the fees remain unpaid. Late payment penalty amounts shall not be reimbursed to LSI. The late payment penalty amounts are not intended as interest on debt, but rather are intended as a predetermined penalty for failure to meet an obligation under this MOU.

Each monthly remittance to the County shall be accompanied by a statement detailing County Gross Rate Revenues for the period covered from all operations conducted or permitted pursuant to this MOU. This monthly statement shall identify billed revenues and actual County Gross Rate Revenues received listed separately for Single-Family, Multi-Family, Commercial, and Drop Box/Compactor County Customers. In addition, LSI shall maintain copies of all Billing and collection records for five (5) years, following the expiration or earlier termination of this MOU, for inspection and verification by County at any reasonable time upon request.

9. Indemnity and Insurance.

9.1 LSI shall indemnify, defend, protect and hold harmless the County, its officers, employees, volunteers, and agents with respect to LSI's services under this MOU to the same extent that LSI indemnifies the City, its officers, employees, volunteers and agents pursuant to Article 9 of the LSI Agreement.

9.2 The County, its officials, employees and volunteers are to be covered as additional insureds with respect to LSI's services under this MOU to the same extent as the City, its officers, employees, volunteers and agents pursuant to Article 9 of the LSI Agreement.

10. Default and Remedies. The provisions in this Section 10 shall apply to LSI's services under this MOU in lieu of the provisions in Article 11 of the LSI Agreement.

10.1 LSI Events of Default. Each of the following shall constitute an event of default by LSI under this MOU:

(a) Any representation, warranty, or disclosure made to County by LSI in connection with or as an inducement to entering into this MOU or any future amendment to this MOU, which proves to be false or misleading in any material respect as of the time such representation or disclosure is made, whether or not any such representation, warranty, or disclosure appears as part of this MOU;

(b) There is a seizure or attachment (other than a pre-judgment attachment) of, or levy affecting possession on, the operating equipment of LSI, including without limit its vehicles, maintenance or office facilities, or any part thereof of such proportion as to substantially impair LSI

ability to perform under this MOU and which cannot be released, bonded, or otherwise lifted within forty-eight (48) hours excluding weekends and Holidays;

(c) LSI files a voluntary petition for debt relief under any applicable bankruptcy, insolvency or other similar law;

(d) An involuntary petition is brought against LSI under any bankruptcy, insolvency, or similar law, which remains undismissed or unstayed for ninety (90) days;

(e) LSI fails to provide reasonable assurances of performance as required under Section 10.8 below;

(f) LSI fails to perform any other obligation established under this MOU;

(g) LSI fails to perform any obligation established under the LSI Agreement which impacts the services or relates to the services LSI is providing to County Customers.

10.2 LSI's Rights to Remedy Default.

LSI shall be given ten (10) calendar days from written notification by County to cure any event of default which, in the County's sole opinion, creates a potential public health and safety threat.

LSI shall be given ten (10) calendar days from written notification by County to cure any event of default arising under section 10.2(c)(d) or (e); provided, however, that the County shall not be obligated to provide LSI with a notice and cure opportunity if LSI has committed the same or similar default within a twenty-four (24) month period

LSI shall be given thirty (30) calendar days from written notification by County to cure any other event of default (which is not required to be cured within tem (10) calendar days); provided, however, that the County shall not be obligated to provide LSI with a notice and cure opportunity if LSI has committed the same or similar default within a twenty-four (24) month period.

10.3 County's Remedies in the Event of Default. The County has the following remedies in the event of LSI's default:

(a) Waiver of Default. The County may waive any event of default or may waive LSI's requirement to cure a default event if the County determines that such waiver would be in the best interest of the County. The County's waiver of an event of default is not a waiver of future events of default that may have the same or similar conditions.

(b) Suspension of LSI's Obligation. The County may suspend LSI's performance of its obligations if LSI fails to cure default in the time frame specified in Sections 10.2 and 10.3(d) until such time the LSI can provide assurance of performance in accordance with Section 10.8.

(c) Liquidated Damages. The County may assess Liquidated Damages for LSI's failure to meet specific performance standards pursuant to Section 10.6 and Exhibit C. Each of the County and the City will promptly notify the other of any Liquidated Damages assessed by that Party under this MOU or the LSI Agreement, as the case may be.

(d) Termination. In the event that LSI should default and subject to the right of LSI to cure, in the performance of any provisions of this MOU, and the default is not cured within ten (10) calendar days if the default creates a potential public health and safety threat or arises under Section

10.1(c)(d) or (e), or otherwise thirty (30) calendar days after receipt of written notice of default from the County, then the County may, at its option, terminate this MOU and/or hold a hearing at its Board of Supervisors meeting to determine whether this MOU should be terminated. In the event the County decides to terminate this MOU, the County shall serve twenty (20) calendar days' written notice of its intention to terminate upon LSI. In the event the County exercises its right to terminate this MOU, the County may, at its option, upon such termination, either directly undertake performance of the services or arrange with other Persons to perform the services with or without a written agreement. This right of termination is in addition to any other rights of the County upon a failure of LSI to perform its obligations under this MOU.

LSI shall not be entitled to any further revenues from Collection operations authorized hereunder and conducted from and after the date of termination.

10.4 Possession of Records Upon Termination. In the event of termination for an event of default, the LSI shall furnish the County with a list of LSI's Customers and billing of accounts for Collection services subject to this MOU.

10.5 County's Remedies Cumulative; Specific Performance. The County's rights to terminate the MOU under Section 10.3 and to take possession of the LSI's records under Section 10.4 are not exclusive, and the County's termination of the MOU and/or the imposition of Liquidated Damages shall not constitute an election of remedies. Instead, these rights shall be in addition to any and all other legal and equitable rights and remedies which the County may have.

By virtue of the nature of this MOU, the urgency of timely, continuous and high quality service, the lead time required to effect alternative service, and the rights granted by County to LSI, the remedy of damages for a breach hereof by LSI is inadequate and County shall be entitled to injunctive relief (including but not limited to specific performance).

10.6 Liquidated Damages.

(a) General. The County and LSI find that as of the time of the execution of this MOU, it is impractical, if not impossible, to reasonably ascertain the extent of damages which shall be incurred by County as a result of a breach by LSI of its obligations under this MOU. The factors relating to the impracticability of ascertaining damages include, but are not limited to, the fact that: (i) damage results to members of the public who are denied services or denied quality or reliable service; (ii) such breaches cause inconvenience, anxiety, frustration, and deprivation of the benefits of the MOU to individual members of the general public for whose benefit this MOU exists, in subjective ways and in varying degrees of intensity which are incapable of measurement in precise monetary terms; and (iii) the termination of this MOU for such breaches, and other remedies are, at best, a means of future correction and not remedies which make the public whole for past breaches.

(b) Service Performance Standards; Liquidated Damages for Failure to Meet Standards. The County and LSI further acknowledge that consistent, reliable Collection services are of utmost importance to County and that County has considered and relied on LSI's representations as to its quality of service commitment in awarding the exclusive rights under this MOU. The County and LSI recognize that some quantified standards of performance are necessary and appropriate to ensure consistent and reliable service and performance. The County and LSI further recognize that if LSI fails to achieve the performance standards, or fails to submit required documents in a timely manner, County and its residents and businesses may suffer damages, and that it is, and will be, impractical and extremely difficult to ascertain and determine the exact amount of damages which County will suffer. Therefore, without prejudice to County's right to treat such non-performance as an event of default under this Section, the Parties agree that the Liquidated Damages amounts established in Exhibit C of this MOU and

the following liquidated damage amounts represent a reasonable estimate of the amount of such damages considering all of the circumstances existing on the Effective Date of this MOU, including the relationship of the sums to the range of harm to County that reasonably could be anticipated and the anticipation that proof of actual damages would be costly or impractical.

LSI agrees to pay the amounts set forth in the Schedule of Liquidated Damages, Exhibit C.

Before assessing Liquidated Damages, County shall give LSI notice of its intention to do so. Liquidated Damages will only be assessed after LSI has been given the opportunity but failed to rectify the damages as described in this MOU. The notice will include a brief description of the incident(s) and non-performance. The County may review (and make copies at its own expense) information in the possession of LSI relating to incident(s) and/or non-performance. County may, within ten (10) calendar days after issuing the notice, request a meeting with LSI. County may present evidence of non-performance in writing and through testimony of its employees and others relevant to the incident(s) and non-performance. County will provide LSI with a written explanation of his or her determination on each incident(s) and non-performance prior to authorizing the assessment of Liquidated Damages under this Section 10.6. The decision of County shall be final and LSI shall not be subject to, or required to exhaust, any further administrative remedies.

(c) Amount. County may assess Liquidated Damages for each calendar day or event, as appropriate, that LSI is determined to be liable in accordance with this MOU in the amounts specified in Exhibit C.

(d) Timing of Payment. LSI shall pay any Liquidated Damages assessed by County within ten (10) calendar days of the date the Liquidated Damages are assessed.

10.7 Excuse from Performance.

Each Party shall be excused from performing its respective obligations hereunder and from any obligation to pay Liquidated Damages if it is prevented from so performing by reason of floods, earthquakes, other acts of nature, war, civil insurrection, riots, labor unrest, acts of any government (including judicial action), and other similar catastrophic events which are beyond the control of and not the fault of the Party claiming excuse from performance hereunder. Labor unrest, including but not limited to strike, work stoppage or slowdown, sick-out, picketing, or other concerted job action conducted by LSI's employees or directed at LSI is not an excuse from performance. In the event of such labor unrest, LSI shall submit a written plan to the County within forty-eight (48) hours of the labor unrest describing LSI's plan to be obligated to continue to provide service notwithstanding the occurrence of any or all of such events explaining how Collection services shall be modified or adjusted in terms of Collection hours, Collection days, staffing, etc.

In the case of labor unrest or job action directed at a third party over whom LSI has no control, the inability of LSI to provide services in accordance with this MOU due to the unwillingness or failure of the third party to (i) provide reasonable assurance of the safety of LSI's employees while providing such services, or (ii) make reasonable accommodations with respect to Container placement and point of Delivery, time of Collection, or other operating circumstances to minimize any confrontation with pickets or the number of persons necessary to make Collections shall, to that limited extent, excuse performance. The foregoing excuse shall be conditioned on LSI's cooperation in performing Collection services at different times and in different locations.

The Party claiming excuse from performance shall, within five (5) calendar days after such Party has notice of such cause, give the other Party notice of the facts constituting such cause and asserting its claim to excuse under this Section.

If either Party validly exercises its rights under this Section, the Parties hereby waive any claim against each other for any damages sustained thereby.

The partial or complete interruption or discontinuance of LSI's services caused by one (1) or more of the events described in this Section shall not constitute an event of default by LSI under this MOU. Notwithstanding the foregoing, however, if LSI is excused from performing its obligations for any of the causes listed in this Section for a period of thirty (30) calendar days or more, the County shall nevertheless have the right, in its sole discretion, to terminate this MOU by giving ten (10) calendar days' written notice to LSI, in which case the provisions of Section 10.3 shall apply.

10.8 Right to Demand Assurances of Performance.

The Parties acknowledge that it is of the utmost importance to the County and the health and safety of all those members of the public residing or doing business within the County who will be adversely affected by interrupted waste management service, that there be no material interruption in LSI's waste management services it provides to the County and its residents and businesses. If LSI (i) is the subject of any labor unrest including work stoppage or slowdown, sick-out, picketing or other concerted job action; (ii) appears in the reasonable judgment of County to be unable to regularly pay its bills as they become due; or (iii) is the subject of a civil or criminal judgment or order entered by a Federal, State, regional or local agency for violation of an Applicable Law, and the County believes in good faith that LSI's ability to perform under this MOU has thereby been placed in substantial jeopardy, the County may, at its option and in addition to all other remedies it may have, demand from LSI reasonable assurances of timely and proper performance of this MOU, in such form and substance as the County believes in good faith is reasonably necessary in the circumstances to evidence continued ability to perform under this MOU. If LSI fails or refuses to provide satisfactory assurances of timely and proper performance in the form and by the date required by County, such failure or refusal shall be an event of default for purposes of Section 10.1.

11. Amendments

11.1 This MOU may be amended, modified or supplemented only by a writing signed by the City, the County, and LSI. If the County Board of Supervisors changes the boundaries of County Collection Service Zone No. 1, the Parties agree to meet to discuss whether this MOU shall be amended to reflect the new boundaries.

11.2 If the City and LSI amend the LSI Agreement in any manner that may impact the services provided by LSI in County Collection Service Zone No. 1, then the Parties agree to meet and confer for the purpose of amending this MOU consistent with the amendment to the LSI Agreement.

12. Miscellaneous

12.1 Authority. The City and the County agree that each has taken the appropriate steps necessary to authorize and approve this MOU. The City Council took action at its meeting on _____, and approved the terms and conditions of this MOU, and authorized execution of this final MOU. The County Board of Supervisors took action at its meeting on November 6, 2012, and approved the terms and conditions of this MOU and authorized execution of the final MOU. LSI agrees that it has the authority to enter into and perform it obligations under this MOU.

12.2 Assignment.

No Party shall assign its rights nor delegate or otherwise transfer its obligations under this MOU to any other Person without the prior written consent of the other Parties, which permission shall not be

unreasonably withheld. Any such assignment made without the consent of the other Parties shall be void and the attempted assignment shall constitute a material breach of this MOU.

For purposes of this Section, "assignment" shall include, but not be limited to: (i) a sale, exchange or other transfer of substantially all of LSI's assets dedicated to service under this MOU to a third party; (ii) a sale, exchange or other transfer of ten (10) percent or more of the outstanding common stock of LSI; (iii) any reorganization, consolidation, merger, recapitalization, stock issuance or re-issuance, voting trust, pooling agreement, escrow arrangement, liquidation or other transaction to which LSI or any of its shareholders is a party which results in a change of ownership or control of thirty (30) percent or more of the value or voting rights in the stock of LSI; and, (iv) any combination of the foregoing (whether or not in related, contemporaneous or sequential transactions) which has the effect of any such transfer or change of ownership and/or control of LSI. For purposes of this Section, the term "proposed assignee" shall refer to the proposed transferee(s) or other successor(s) in interest pursuant to the assignment. Assignment may exclude a change in ownership of LSI's assets or stocks which occurs for interfamilial planning purposes only and does not involve a change in the management of the Agreement or services performed hereunder. Reorganizations, mergers, consolidations, sales of equity or assets or similar transactions between or among entities owned by the same ultimate parent, including but not limited to LSI and regardless of which entity is the survivor, do not constitute an assignment; however, LSI shall provide the County with thirty (30) days written notification of its plans and provide an explanation of any potential impacts related to the provision of services under this Agreement.

If LSI requests the County's consideration of and consent to an assignment, the County may deny or approve such request in its sole discretion, the standard for the County's consent to any assignment shall be whether LSI (or, if applicable, a new entity succeeding to the rights, duties and obligations of LSI under this MOU), after the assignment, has sufficient financial and operational capability to adequately and faithfully render the services called for in this MOU for the remaining Term of this MOU. In no event shall the County's consent be unreasonably withheld, conditioned or delayed. LSI shall undertake to pay the County its reasonable expenses for attorneys' fees and investigation costs necessary to investigate the suitability of any proposed assignee, and to review and finalize any documentation required as a condition for approving any such assignment.

12.3 Notices. All notices and other communications under this MOU shall be in writing and shall either be personally delivered to a representative of the Parties at the address below or deposited in the United States mail, first class postage prepaid, addressed as follows. Any Party may change its address for notices by giving written notice to the other Parties in the manner set forth above.

If to County:	Alameda County Community Development Agency 224 West Winton Ave, Room 110 Hayward, CA 94544 Attn: Community Development Director
With Copy to:	Office of the County Counsel County of Alameda 1221 Oak Street, Suite 450 Oakland, CA 94612
If to City:	City of Livermore City Clerk 1052 S. Livermore Ave. Livermore, CA 94550

With a Copy to:	City of Livermore Public Works Department 3500 Robertson Park Road Livermore, CA 94550 Attn: Judy Erlandson
If to LSI:	Livermore Sanitation, Inc. 7000 National Drive Livermore, CA 94550 Attn: Louis Pellegrini, President
With Copy to:	Cohen & Ostler, APC 455 N. Whisman Road, Suite 100 Mountain View, CA 94043 Attn: David Cohen

12.4 Entire Agreement. This MOU, including all recitals, exhibits and schedules hereto and the LSI Agreement as modified hereby, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior or contemporaneous understandings, negotiations, representations, promises, memoranda and agreements, oral or written, by or between the Parties, with respect to the subject matter hereof. No representations, inducements, promises, or agreements have been made in connection with this MOU by any Party, or anyone acting on behalf of any Party, other than those expressly set forth in this MOU.

12.5 Binding on Successors. The provisions of this MOU shall inure to the benefit to and be binding on the successors and permitted assigns of the Parties.

12.6 Waiver. No waiver of any provision of this MOU shall be binding unless executed in writing by the Party making the waiver. No waiver of any provision of this MOU shall be deemed to constitute a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver unless the written waiver so specifies.

12.7 Governing Law. This MOU is entered into in and shall be governed by and construed in accordance with the internal laws of the State of California.

12.8 Severability. If any term or provision of this MOU is ever determined to be invalid or unenforceable for any reason, such term or provision shall be severed from this MOU without affecting the validity or enforceability of the remainder of this MOU.

13. LSI Agreement Provisions That Do Not Apply. Notwithstanding any other provision in this MOU: (a) the City shall have no jurisdiction over LSI's services provided to County Customers; (b) the County shall have no jurisdiction over LSI's services provided to City Customers; (c) the County shall not have the right to direct changes in LSI's services to County Customers pursuant to Section 4.3 of the LSI Agreement (except with the consent of LSI and the City and in accordance with such Section 4.3); (d) LSI shall not be obligated to post a performance bond in favor of the County pursuant to Section 9.6 of the LSI Agreement; and (e) the County shall have no right to acquire, take possession of or use any equipment or other property used or useful in the Collection, Transporting, Processing and Disposing of Solid Waste, Recyclable Materials or Compostable Materials pursuant to Article 10 or Article 11 of the LSI Agreement.

IN WITNESS WHEREOF, this MOU has been approved by the Parties and is effective as of the Effective Date.

CITY OF LIVERMORE

By: _____
Name: Troy Brown
Its: Assistant City Manager

Date: 1/3/13

COUNTY OF ALAMEDA

By: _____
Date: NOV 0 6 2012

Attest: James Robles, Deputy
Clerk of the Board of Supervisors

APPROVED AS TO FORM:

_____
By: Amara Morrison
Assistant City Attorney

APPROVED AS TO FORM:

Donna R. Ziegler, County Counsel

by Name: _____
Deputy County Counsel

LIVERMORE SANITATION, INC.
A California Corporation

By: _____
Name: Louie Pellegrini
Its: President

Date: 12-7-2012

EXHIBIT A
MAPS OF COUNTY COLLECTION SERVICE ZONE 1
Densely Populated and Rural Areas

[See Attached]

Memorandum of Understanding Between the City of Livermore, Alameda County and Livermore Sanitation, Inc. Regarding Solid Waste and Recycling Services

Exhibit A-1 - County Collection Service Zone 1

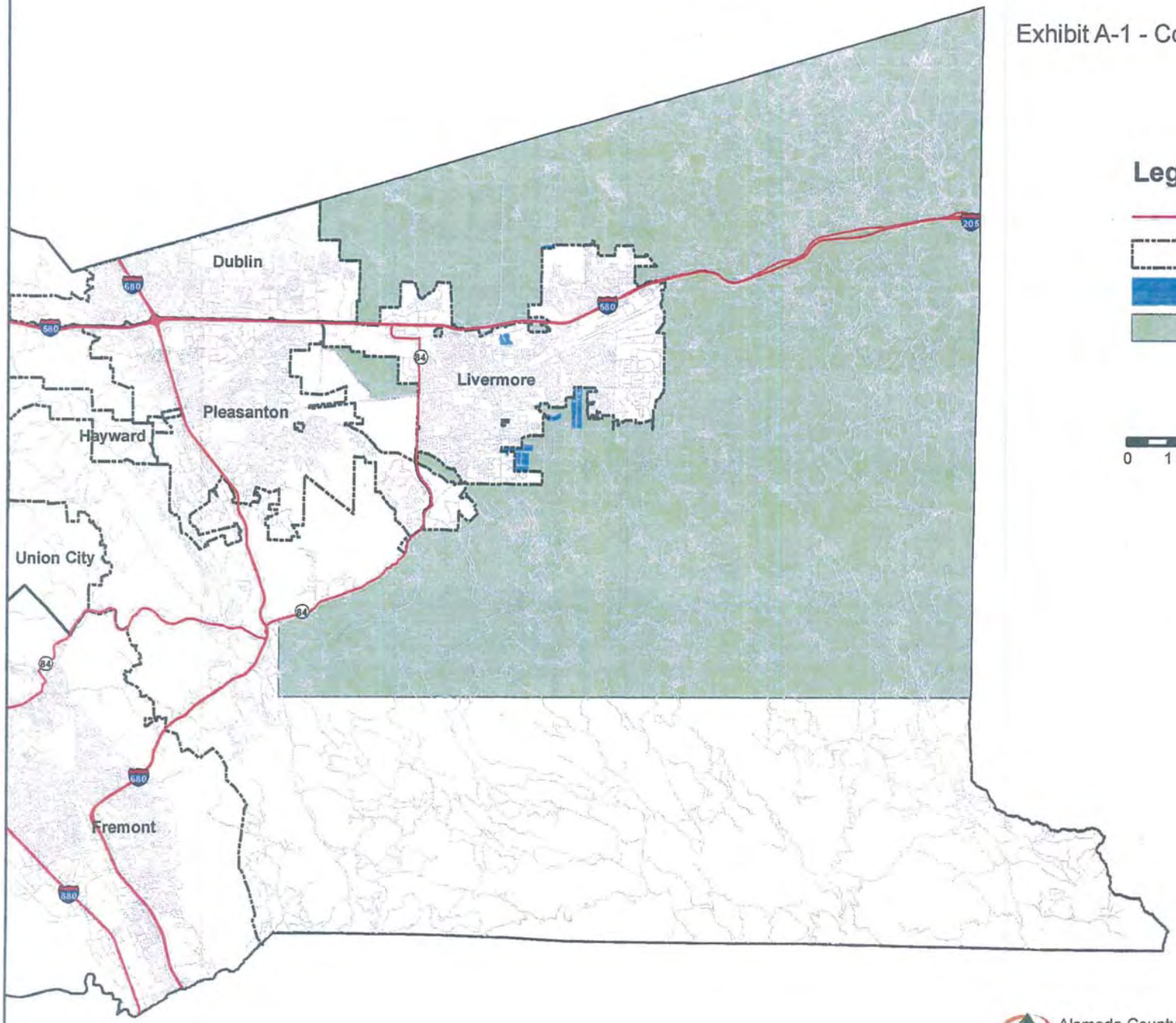


EXHIBIT A

Alameda County Community Development Agency October 2012

This map is representational only. Data are not survey precise.

Exhibit A-2 - Densely Populated Areas

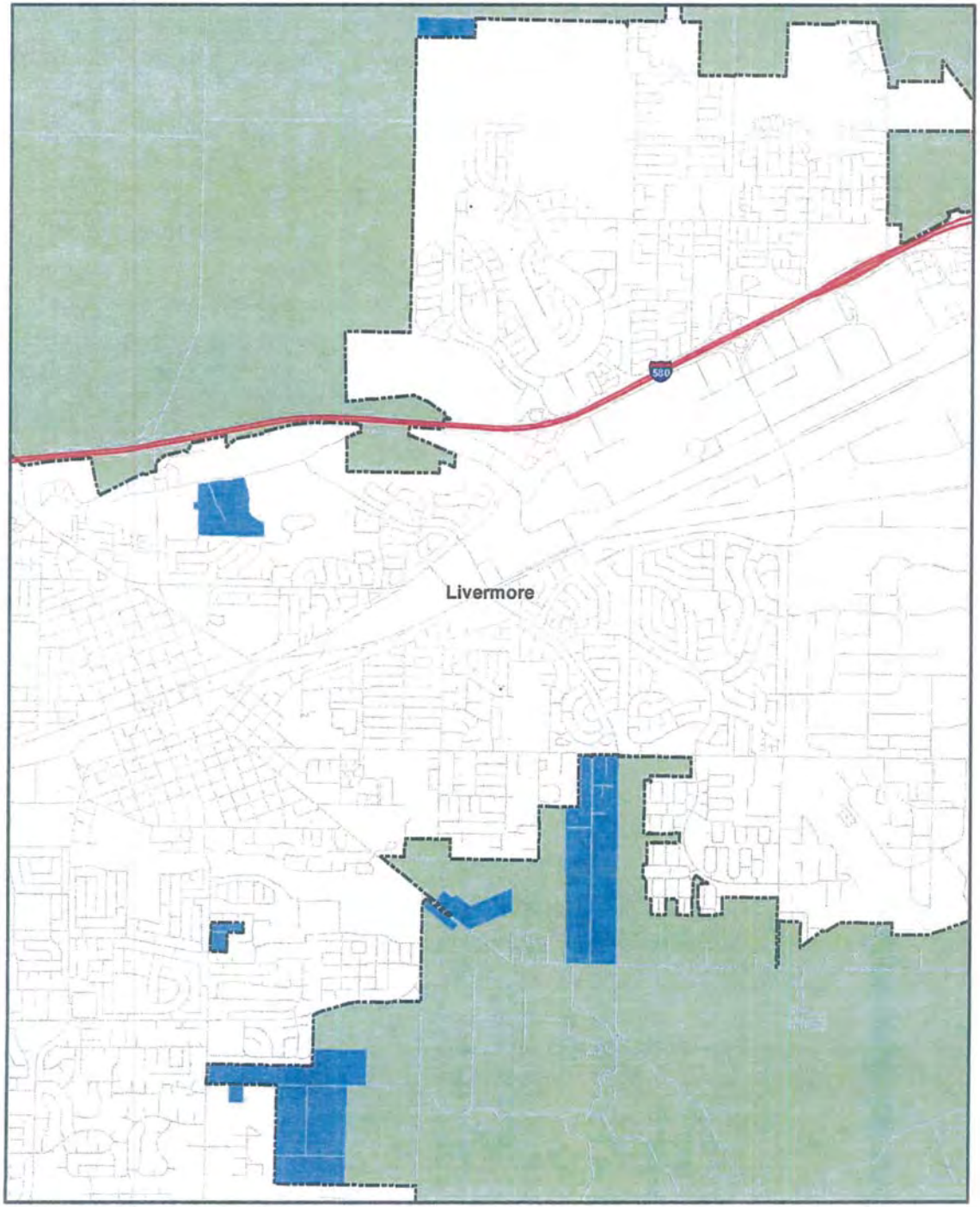


EXHIBIT A

Alameda County Community Development Agency October 2012

This map is representational only. Data are not survey precise.

EXHIBIT B
RATE SCHEDULES FOR COUNTY COLLECTION SERVICE ZONE 1

[See Attached]

Alameda County Collection Zone No. 1
Densely Populated Area

Basic Service Menu for Residents of Single-Family Homes

(Rates valid from July 1, 2012 through June 30, 2013)

Basic Weekly Collection Service* – Billed Quarterly

Container Size	Curbside Quarterly Rate	Backyard or Sideyard Quarterly Rate**
20-gallon Solid Waste Cart*	$50.28	$69.66
32-gallon Solid Waste Cart*	$80.88	$127.68
64-gallon Solid Waste Cart*	$160.02	$259.32
96-gallon Solid Waste Cart*	$258.63	$415.02

* Rate is based on size of Garbage cart but includes one 96-gallon cart for Organics and one 96-gallon cart for Recyclables. Customers can request smaller cart sizes for organics and/or recyclables; however, the quarterly rate will be the same as listed above.

** Backyard/sideyard service is provided for no additional charge to residents with disabilities; a form is required.

Rates for Bulky Items and E-Waste On-Call Pick-Up Service*

Material Type	Examples	Rate Per Pickup
E-Waste	Cell Phones, CPUs, Monitors, Copiers, Fax Machines, Laptops, Mouse, Keyboards, Printers, Televisions, Radios, Stereos, Speakers, Telephones, VCRs, DVDs, and Camcorders.	$25.76
Major Appliances	'Air Conditioners, Refrigerators, Freezers or any items containing oil, fuel or Freon.	$128.82
Bulky Items	Gas & electric powered push style lawn mowers, and other large items: bathtubs, furniture, bicycles, used exercise equipment, beds, box springs, tires...etc. (Please contact us to verify additional items).	$64.41 (per item)

* There is no charge for cell phones collected through the **curbside program**, or for e-waste/appliances collected through the **Cleanup Program**.

EXHIBIT A

Miscellaneous Service

Service	Description of Service	Rate per Occurrence
Handy Hauler Service (4 Cubic Yard Bin; Temporary Use)*	Per placement and removal of 4 cubic yard bin provided for occasional use.	$165.48
	Per day for rental of 4 cubic yard bin in excess of 7 days.	$32.45
	Per pull and return of 4 cubic yard bin (pull and return involves the collection of garbage at the premises and leaving the empty handy hauler on the premises).	$119.13
Cart Replacement	Charge if customer requires cart replacement in excess of one replacement per year (not applicable in cases of theft or damage from regular use).	$86.50
Trip Charge	If driver must return due to resident error, such as failure to place cart curbside before collection time, overfilled cart, incorrect cart placement, contaminated materials.	$14.99
Cart Delivery/Pick-Up	Charge if customer requests a change in cart size more than once per year.	$14.99
Organics Overage	Company supplied Kraft bag paid for in advance (contact us to order).	$10.31
Organics Overage	Customer supplied Kraft Bag.	$6.44
Special Construction/ Landscape	Doing a special construction, demolition or landscaping project? Now you can order a debris box.	Click Here to Get Rates

* Handy Hauler service is recommended for residents who have already used or are not eligible to use the Cleanup Program.

Additional On-Call Pick-Up Service for Single-Family Garbage Cart

(Cost per Pick-Up)

	Container Size		
	32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26
Pick-Up Other than Regularly Scheduled Day	$11.25	$24.21	$39.26

EXHIBIT A

Additional On-Call Pick-Up Service for Single-Family Recyclables Cart

(Cost per Pick-Up)

	Container Size		
	32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26
Pick-Up Other than Regularly Scheduled Day	$11.25	$24.21	$39.26

Additional On-Call Pick-Up Service for Single-Family Organics Cart

(Cost per Pick-Up)

	Container Size		
	32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26
Pick-Up Other than Regularly Scheduled Day	$11.25	$24.21	$39.26

Basic Service Menu
Cleanup / Bulky Item Collection Program
Setout Tips / FAQs
Household Hazardous & E-Waste Programs
Forms
Publications & Resources

EXHIBIT A

Alameda County Collection Zone No. 1
Rural Area

Basic Service Menu for Residents of Single-Family Homes

(Rates valid from July 1, 2012 through June 30, 2013)

Basic Weekly Collection Service* – Billed Quarterly

Container Size	Curbside Quarterly Rate
20-gallon Solid Waste Cart	$71.72
32-gallon Solid Waste Cart or 1 - 32 gallon Bag	$89.04
64-gallon Solid Waste Cart or 2 - 32 gallon Bags	$149.48
96-gallon Solid Waste Cart or 3 - 32 gallon Bags	$234.23

Additional On-Call Pick-Up Service for Single-Family Garbage Cart (Cost per Pick-Up)

	Container Size		
	20-32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26

EXHIBIT A

Alameda County Collection Zone No. 1
Commerical Garbage

RATES FOR COMMERCIAL BIN CUSTOMERS

(Rates valid from July 1, 2012 through June 30, 2013)

Garbage Collection Service*
Billed Monthly

	Loose Materials					
	Pick-Ups per Week					
Bin Size	**1**	**2**	**3**	**4**	**5**	**6**
1 cubic yard	$116.72	$238.11	$364.16	$494.89	$630.29	$786.65
2 cubic yard	$233.43	$476.21	$743.74	$1,010.73	$1,287.25	$1,606.13
3 cubic yard	$350.16	$729.44	$1,115.62	$1,547.72	$1,971.15	$2,409.18
4 cubic yard	$466.88	$972.59	$1,518.52	$2,063.62	$2,628.20	$3,277.88
5 cubic yard	$595.95	$1,241.09	$1,898.15	$2,632.23	$3,252.37	$4,179.38
6 cubic yard	$715.14	$1,489.31	$2,277.77	$3,158.68	$4,022.84	$5,015.26
7 cubic yard	$834.33	$1,737.54	$2,711.70	$3,685.13	$4,787.30	$5,965.27

	Compacted Materials					
	Pick-Ups per Week					
Bin Size	**1**	**2**	**3**	**4**	**5**	**6**
1 cubic yard	$233.45	$476.22	$728.32	$989.78	$1,260.58	$1,573.30
2 cubic yard	$466.87	$952.42	$1,487.48	$2,021.47	$2,574.49	$3,212.26
3 cubic yard	$700.32	$1,458.89	$2,231.24	$3,095.44	$3,942.30	$4,818.36
4 cubic yard	$933.76	$1,945.18	$3,037.03	$4,127.24	$5,256.40	$6,555.75
5 cubic yard	$1,191.89	$2,482.18	$3,796.30	$5,264.46	$6,704.75	$8,358.77
6 cubic yard	$1,430.29	$2,978.63	$4,555.54	$6,317.36	$8,045.68	$10,030.52
7 cubic yard	$1,668.66	$3,475.07	$5,423.40	$7,370.26	$9,574.60	$11,930.54

Additional On-Call Pick-Up for Garbage Bin (Cost per Pick-Up)

	Loose Materials						
	Container Size						
	1 cu yd	**2 cu yd**	**3 cu yd**	**4 cu yd**	**5 cu yd**	**6 cu yd**	**7 cu yd**
Pick-Up On Regularly Scheduled Day	$29.83	$59.65	$89.49	$119.28	$178.93	$208.74	$238.57
Pick-Up Other than Regularly Scheduled Day	$52.99	$81.45	$110.16	$138.56	$190.50	$224.15	$257.80

	Compacted Materials						
	Container Size						
	1 cu yd	**2 cu yd**	**3 cu yd**	**4 cu yd**	**5 cu yd**	**6 cu yd**	**7 cu yd**
Pick-Up On Regularly Scheduled Day	$59.66	$119.29	$178.99	$238.56	$357.85	$417.49	$477.12
Pick-Up Other than Regularly Scheduled Day	$105.99	$162.89	$220.32	$277.13	$381.00	$448.30	$515.59

EXHIBIT A

Miscellaneous Services

Services	Description of Services	Rate per Occurrence
Handy Hauler Service (4 Cubic Yard Bin; Temporary Use)	Per placement and removal of 4 cubic yard bin provided for occasional use.	$165.48
	Per day for rental of 4 cubic yard bin in excess of 7 days	$32.45
	Per pull and return of 4 cubic yard bin ("pull and return" refers to the emptying and leaving of handy hauler for repeat use on same premises)	$119.13
Cart Replacement	Charge if Customer requires Cart replacement in excess of one replacement per year at no cost for damage or theft (not applicable in cases of theft or damage from regular use)	$86.50
Trip Charge (for Bin)	If driver must return due to Customer error (such as failure to make Bin accessible before Collection time, overfilled Bin, incorrect Bin placement, contaminated materials)	$14.70
Trip Charge (for Carts)	If driver must return due to customer error (such as failure to make Cart accessible before collection time, overfilled Cart, incorrect Cart placement, contaminated materials)	$14.99
Overage Charge - Garbage	Per cubic yard rate.	$22.50
Overage Charge - Recyclables	Per cubic yard rate.	$22.50
Overage Charge - Organics	Per cubic yard rate.	$22.50
Standby Charge	Charge for waiting for access to Cart/Bin or for Cart/Bin to be loaded.	$85.36
Lost Lock	Fee for replacing lost lock.	$29.91
Steam Cleaning Bin	Charge per visit.	$151.79
Steam Cleaning Cart	Charge per visit.	$86.50

EXHIBIT A

Alameda County Collection Zone No. 1

RATES FOR COMMERCIAL CART SERVICE CUSTOMERS

(Rates valid from July 1, 2012 through June 30, 2013)

Garbage Collection – Cart Service (Cost per month)

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Recycling Cart	$32.77	$66.86	$102.26	$138.96	$176.99	$216.31
64-gallon Recycling Cart	$70.54	$143.89	$220.08	$299.08	$380.91	$465.54
96-gallon Recycling Cart	$114.43	$233.43	$357.02	$485.19	$617.92	$755.23

Additional On-Call Pick-Up Service for Garbage Cart (Cost per Pick-Up)

	Container Size 32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26
Pick-Up Other than Regularly Scheduled Day	$11.25	$24.21	$39.26

Recyclables Collection Rates for Carts (Cost per Month)

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Recycling Cart	$9.83	$20.06	$30.68	$41.69	$53.10	$64.89
64-gallon Recycling Cart	$21.16	$43.17	$66.02	$89.72	$114.27	$139.66
96-gallon Recycling Cart	$34.33	$70.03	$107.11	$145.56	$185.38	$226.57

Additional On-Call Pick-Up Service for Recyclables Cart (Cost per Pick-Up)

	Container Size 32-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$11.25	$24.21	$39.26
Pick-Up Other than Regularly Scheduled Day	$11.25	$24.21	$39.26

EXHIBIT A

Organics Collection Rates for Carts
(Cost per Month)

Container Size	Pick-Ups per Week					
	1	2	3	4	5	6
32-gallon Organics Cart	$16.39	$33.43	$51.13	$69.48	$88.49	$108.16
64-gallon Organics Cart	$35.27	$71.95	$110.04	$149.54	$190.45	$232.77
96-gallon Organics Cart	$57.22	$116.72	$178.51	$242.59	$308.96	$377.62

EXHIBIT A

Alameda County Collection Zone No. 1
Commerical Recycling Bins

Recycling Collection Rates
Billed Monthly

(Rates valid from July 1, 2012 through June 30, 2013)

Recyclables Rates – Bin Service (Cost per Month per Bin)

	Loose Materials					
	Pick-Ups per Week					
Bin Size	1	2	3	4	5	6
1 cubic yard	$35.02	$71.43	$109.25	$148.47	$189.09	$236.00
2 cubic yard	$70.03	$142.86	$223.12	$303.22	$386.17	$481.84
3 cubic yard	$105.05	$218.83	$334.69	$464.32	$591.35	$722.75
4 cubic yard	$140.06	$291.78	$455.56	$619.09	$788.46	$983.36
5 cubic yard	$178.78	$372.33	$569.44	$789.67	$1,005.71	$1,253.82
6 cubic yard	$214.54	$446.79	$683.33	$947.60	$1,206.85	$1,504.58
7 cubic yard	$250.30	$521.26	$813.51	$1,105.54	$1,436.19	$1,789.58

	Compacted Materials					
	Pick-Ups per Week					
Bin Size	1	2	3	4	5	6
1 cubic yard	$70.03	$142.87	$218.50	$296.93	$378.17	$471.99
2 cubic yard	$140.06	$285.73	$446.25	$606.44	$772.35	$963.68
3 cubic yard	$210.10	$437.67	$669.37	$928.63	$1,182.92	$1,445.51
4 cubic yard	$280.13	$583.55	$911.11	$1,238.17	$1,576.92	$1,966.73
5 cubic yard	$357.57	$744.65	$1,138.89	$1,579.34	$2,011.42	$2,507.63
6 cubic yard	$429.09	$893.59	$1,366.66	$1,895.21	$2,413.71	$3,009.16
7 cubic yard	$500.60	$1,042.52	$1,627.02	$2,211.08	$2,872.38	$3,579.16

Additional On-Call Pick-Up for Recyclables Bin (Cost per Pick-Up)

	Loose Materials						
	Container Size						
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	7 cu yd
Pick-Up On Regularly Scheduled Day	$29.83	$59.65	$89.49	$119.28	$178.93	$208.74	$238.57
Pick-Up Other than Regularly Scheduled Day	$52.99	$81.45	$110.16	$138.56	$190.50	$224.15	$257.80

	Compacted Materials						
	Container Size						
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	7 cu yd
Pick-Up On Regularly Scheduled Day	$59.66	$119.29	$178.99	$238.56	$357.85	$417.49	$477

EXHIBIT A

Alameda County Collection Zone No. 1
Commerical Organic Bins

Recycling Collection Rates
Billed Monthly

(Rates valid from July 1, 2012 through June 30, 2013)

Organics – Bin Service (Cost per Month per Bin)

	Loose Materials					
	Pick-Ups per Week					
Bin Size	1	2	3	4	5	6
1 cubic yard	$58.36	$119.06	$182.08	$247.44	$315.15	$393.33
2 cubic yard	$116.72	$238.10	$371.87	$505.37	$643.62	$803.06
3 cubic yard	$175.08	$364.72	$557.81	$773.86	$985.58	$1,204.59
4 cubic yard	$233.44	$486.30	$759.26	$1,031.81	$1,314.10	$1,638.94
5 cubic yard	$297.97	$620.55	$949.07	$1,316.12	$1,676.19	$2,089.69
6 cubic yard	$357.57	$744.66	$1,138.88	$1,579.34	$2,011.42	$2,507.63

	Compacted Materials					
	Pick-Ups per Week					
Bin Size	1	2	3	4	5	6
1 cubic yard	$116.72	$238.11	$364.14	$494.89	$630.29	$786.65
2 cubic yard	$233.43	$476.21	$743.74	$1,010.73	$1,287.25	$1,606.13
3 cubic yard	$350.16	$729.44	$1,115.62	$1,547.72	$1,971.15	$2,409.18
4 cubic yard	$466.88	$972.59	$1,518.52	$2,063.62	$2,628.20	$3,277.88
5 cubic yard	$595.95	$1,241.09	$1,898.15	$2,632.23	$3,352.37	$4,179.39
6 cubic yard	$715.14	$1,489.31	$2,277.77	$3,158.68	$4,022.84	$5,015.26

Additional On-Call Pick-Up for Organics Bin (Cost per Pick-Up)

	Loose Materials						
	Container Size						
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	7 cu yd
Pick-Up On Regularly Scheduled Day	$29.83	$59.65	$89.49	$119.28	$178.93	$208.74	$238.57
Pick-Up Other than Regularly Scheduled Day	$52.99	$81.45	$110.16	$138.56	$190.50	$224.15	$257.80

	Compacted Materials						
	Container Size						
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	7 cu yd
Pick-Up On Regularly Scheduled Day	$59.66	$119.29	$178.99	$238.56	$357.85	$417.49	$477.12
Pick-Up Other than Regularly Scheduled Day	$105.99	$162.89	$220.32	$277.13	$381.00	$448.30	515.59

EXHIBIT A

DEBRIS BOX AND COMPACTOR RATES

(Rates valid from July 1, 2012 through June 30, 2013)

Per-Pull Charges and Disposal/Processing Rates

Customer shall be charged a per-pull rate each time its drop box or compactor box is serviced. In addition, customer will be charged for each ton of material collected at rates listed below. Per ton charges will be calculated after materials are collected.

Material Type	Drop Box Size	Charge	Disposal & Processing Rates
Garbage	15	$364.24	$35.26
	20	$485.73	$35.26
	30	$728.59	$35.26
	40	$971.46	$35.26
Compacted Garbage	12	$874.31	$35.26
	15	$1,092.89	$35.26
	16	$1,165.75	$35.26
	20	$1,457.19	$35.26
	24	$1,748.62	$35.26
	25	$1,821.48	$35.26
	30	$2,185.78	$35.26

EXHIBIT A

	40	$2,914.37	$35.26
Dirt	6	$218.58	$26.00
Concrete	6	$218.58	$13.00
Brick	6	$218.58	$34.00

Construction & Demolition Materials Debris Box Rates

	15	$364.24	$74.00
	20	$485.73	$74.00
	30	$728.59	$74.00
	40	$971.46	$74.00
Metal	15	$364.24	$74.00
	20	$485.73	$74.00
	30	$728.59	$74.00
	40	$971.46	$74.00
Wood	15	$364.24	$58.00
	20	$485.73	$58.00
	30	$728.59	$58.00
	40	$971.46	$58.00
Organics	15	$364.24	$55.00
	20	$485.73	$55.00
	30	$728.59	$55.00
	40	$971.46	$55.00

EXHIBIT A

Material Type	Drop Box Size	Charge	Disposal & Processing Rates
Compacted Organics	12	$773.73	$55.00
	15	$967.16	$55.00
	16	$1,031.64	$55.00
	20	$1,289.55	$55.00
	24	$1,547.45	$55.00
	25	$1,611.93	$55.00
	30	$1,934.32	$55.00
	40	$2,579.09	$55.00
Recyclables	15	$364.24	n/a
	20	$485.73	n/a
	30	$728.59	n/a
	40	$971.46	n/a
Compacted Recyclables	12	$874.31	n/a
	15	$1,092.89	n/a
	16	$1,165.75	n/a
	20	$1,457.19	n/a

EXHIBIT A

	24	$1,748.62	n/a
	25	$1,821.48	n/a
	30	$2,185.78	n/a
	40	$2,914.37	n/a

Rates for Miscellaneous Service for Debris Boxes and Compactor Boxes

Services	Description of Services	Rate per Occurence
Cancellation Service	All box sizes	$119.51
Demurrage Charge	Rate for rental of Drop Box or Compactor in excess of 7 days	$4.77
Placement Charge	All box sizes	$64.50
White Good (Large Appliances)	Per Item	$68.00
Mattress	Per Item	$58.00

EXHIBIT A

Special Landfill Handling Fee	All box sizes	$300.00
Certificate Of Destruction	All box sizes	$300.00
Relocation Fee	All box sizes	$96.28

EXHIBIT A

EXHIBIT C
SCHEDULE FOR PERFORMANCE ADJUSTMENTS
LIQUIDATED DAMAGES FOR FAILURE TO MEET STANDARDS

LSI may be assessed Liquidated Damages in the event LSI fails to fulfill its obligations with regards to the events listed in this Exhibit in accordance with the terms and conditions of the MOU with regards to the time frame for accomplishing each event and nature of the responsibility associated with the event unless otherwise stated in this Exhibit. Refer to Section 10.6 of the MOU for procedures for assessing Liquidated Damages.

Collection Reliability		
1.	For failure to maintain the collection schedule for a portion of a route or entire route on the scheduled day (unless non-collection was warranted pursuant to this MOU.)	$25.00/ container
2.	For each failure over fifteen (15) annually to collect Solid Waste, which has been properly set out for collection from an established service recipient account on the scheduled collection day.	$150.00
3.	For each failure to collect missed collections within 24 hours of receipt of the Complaint:	$300.00
4.	For each failure to collect Solid Waste, Recyclable Materials or Compostable Materials which has been properly set out for collection, from the same service recipient on two (2) consecutive scheduled pick ups.	$150.00
5.	For each failure to notify the appropriate authorities of reportable quantities of Hazardous Waste per Section 5.11 of the LSI Agreement.	$500.00
6.	For each failure over five (5) annually to commence service to a new County Customer within seven (7) calendar days after order received and account number established or failure to deliver a different Container size to a County Customer within seven (7) Business Days of request or failure to deliver kitchen pail, Multi-family personal Recycling bins, Commercial Recycling or Compostable bins for internal use within the timeframe required by Article 5 of the LSI Agreement, as may be applicable per this MOU.	$150.00
7.	For each failure over five (5) annually to deliver kitchen pails, Multi-family reusable Recycling bags for tenants, Commercial Recycling or Compostable bins for internal use within the timeframe required by Article 5, as may be applicable per this MOU.	$150.00
Collection Quality		
8.	For each occurrence over five (5) annually of unreasonable leaking or Unacceptable Spillage of Solid Waste, Recyclable Materials, or Compostable Materials and failure to pick up or clean up such material immediately:	$300.00
9.	For each occurrence over twelve (12) annually of failure to replace containers in original position, upright, with lids attached to or on Carts or Bins:	$150.00

10.	For each failure over twenty-four (24) annually of not closing gate, crossing planted areas or other damage to private property	$300.00
11.	For each occurrence over five (5) annually of collecting Solid Waste, Recyclable Materials, and Compostable Materials during unauthorized hours.	$300.00
12.	For each occurrence over twelve (12) of excessive noise.	$300.00
13.	For each failure over twelve (12) annually of not tagging containers which are left:	$150.00
14.	For each occurrence over five (5) annually of damage to property that is not repaired in 30 days.	$250.00
15.	For each occurrence of mixing Recyclable Materials, Solid Waste, and Compostable Materials during Collection.	$150.00
16.	Failure to deliver materials to Approved Disposal Site, Approved Recyclables Processing Site, or Approved Composting Site (depending on the type of material)	$150.00/ton
Customer Responsiveness		
17.	For each occurrence of unreasonably discourteous behavior	$500.00
18.	For each failure to respond to and initiate a remedy to a complaint from a County Customer within eight (8) working hours after notification by the County.	$300
19.	For each failure to answer the telephone or answering machine from a County Customer during the hours specified in Section 6.9.4 of the LSI Agreement	$300
20.	For each failure to respond to service requests/calls from a County Customer within 24 hours as specified in Section 6.9.4 of the LSI Agreement	$300
21.	For each failure to return calls from County Customers received during non-business hours no later than 5:00 p.m. of the following Business Day	$300
22.	For each occurrence over five (5) annually for complaints from County Customers regarding waiting on hold for more than two (2) minutes as specified in Section 6.9 of the LSI Agreement.	$150
Reporting and Performance Adjustments*		
23.	For each day that a Monthly Report to the County is late.	$100.00/day
24.	For each day that a Quarterly Report to the County is late.	$200.00/day
25.	For each day a Semi-Annual Report to the County is late.	$300.00/day
26.	For each day an Annual Report to the County is late:	$300.00/day

Public Education		
27.	Failure to prepare and distribute the service information brochure to County Customers as required by Section 5.2(a) of this MOU	$150.00/day
28.	Failure to provide annual notification to County Multi-Family and Commercial Customers as required by Section 5.2(b) of this MOU	$300.00/day.
29.	Failure to provide the County a reasonable opportunity to review and comment on public education materials, as required by Section 5.2(c) of this MOU.	$150.00/day
Miscellaneous		
30.	Failure to perform any of the obligations set forth in this MOU not specifically stated above and not corrected or proceeding in good faith to correct within twenty-four (24) hours upon twenty-four (24) hour Notification by County.	$150.00/day

* Any report shall be considered late until such time as a correct and complete report is received by City. For each calendar day a report is late, the daily Performance Adjustment shall be as indicated in the Reporting and Performance Adjustment section above.

In placing Designee's initials at the places provided, LSI and the County each specifically confirm the accuracy of the statements made above and the fact that both LSI and the County have had ample opportunity to consult with legal counsel and obtain an explanation of the Liquidated Damage provisions at the time that the MOU was made.

LSI

Initial here: _____

County

Initial here: _____

EXHIBIT D

CREDIT CALCULATION FOR ALLOCATION OF O/H AND DEPRECIATION TO COUNTY OF ALAMEDA

[See Attached]

Livermore Sanitation, Inc
Allocation of O/H and Depreciation to County of Alameda
Credits Summary

Summary			
Reallocation			
From General and Administrative (6D)	$	23,920.00	
From Vehicle Maintenance (6D)	$	7,100.53	
From Container Maintenance (6D)	$	1,128.06	
Frontloader Depreciation Credit	$	8,209.75	
Residential Depreciation Credit	$	5,833.34	
Total Credits			$ 46,191.67

Credits to be applied to annual rate Application as line item credits and index per Exhibit I in Index Year
For Cost Based rate Adjustment years
the attached allocations table (Customer Counts) shall be applied to determine allocation of line item costs for G&A, Vehicle Maintenance and Container Maintenance
Frontloader Depreciation Credit for use of Frontloader Equipment shall be based upon
Frontloader depreciation allocation which is determined by frontloader lifts

Residential Depreciation Credit for use of Residential Equipment shall be based upon
Residential depreciation allocation which is determined by Residental Customer Count

EXHIBIT A

Livermore Sanitation, Inc
Allocation of O/H and Depreciation to County of Alameda
Allocation Methodology

	Cart	Cart	Commercial / Multi-family (Form 6B)						Drop Box (Form 6C)				
Rural	Compostables Recyclables	Compostables Close In	Solid Waste	Recyclable Materials	Compostables	County Solid Waste	County Recyclable Materials	County Compostables	Solid Waste	Recyclable Materials	County Solid Waste Drop Box	County Recyclable Materials Drop Box	TOTAL
169	0	169	1,633	1,633	1,633	62	0	0	86	0	0	0	78,055
217%	0.000%	0.217%	2.092%	2.092%	2.092%	0.079%	0.000%	0.000%	0.110%	0.000%	0.000%	0.000%	100.000%
			110,032	62,088	84,928	4,784	4,784						266,616
			41%	23%	32%	2%	2%						100%
169	0	169	0	0	0	0	0						73,007
231%	0.000%	0.231%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

EXHIBIT A

Total Frontloader Depreciation			$ 228,767.44
Lifts Franchise	257,048	96.41%	$ 220,557.70
Lifts County	9,568	3.59%	$ 8,209.75
Total Lifts	266,616		$ 228,767.44

Total Residential Depreciation Depreciation			$ 664,390.56
Franchise Customers	72,366	99.12%	$ 658,557.22
County residential Customers	641	0.88%	$ 5,833.34
Total Lifts	73,007		$ 664,390.56

ALAMEDA COUNTY BOARD OF SUPERVISORS

MINUTE ORDER

The following was action taken by the Board of Supervisors on November 6, 2012

Approved as Recommended ☑ **Other** ☐

Unanimous ☑ **Carson** ☐ **Chan** ☐ **Haggerty** ☐ **Valle** ☐ **Miley** ☐ **- 5**
Vote Key: N=No; A=Abstain; X=Excused

Documents accompanying this matter:

☑ **Resolution(s)** 2012-367 and 2012-382
☐ **Ordinance(s)** _____
☐ **Contract(s)** _____

File No. 28538
Item No. 24

Copies sent to:

Liz McElligott QIC 50701

Special Notes:

I certify that the foregoing is a correct copy of a Minute Order adopted by the Board of Supervisors, Alameda County, State of California.
ATTEST:
Clerk of the Board
Board of Supervisors

By: James Ribbes
Deputy

EXHIBIT A

Approved as to form:
Donna R. Ziegler, County Counsel

By: _____
William M. Fleishhacker
Deputy County Counsel

THE BOARD OF SUPERVISORS OF THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA

RESOLUTION NO. R- 2012- 367

RESOLUTION GRANTING LIVERMORE SANITATION, INC. EXCLUSIVE RIGHTS TO PROVIDE SOLID WASTE AND RECYCLING SERVICES WITHIN COUNTY COLLECTION SERVICE ZONE NO. 1 AND APPROVING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, LIVERMORE SANITATION, INC., AND THE COUNTY

WHEREAS, the County of Alameda desires to improve solid waste and recycling service to unincorporated residents and businesses in the vicinity of the City of Livermore to respond to numerous complaints from unincorporated residents about the inconsistency of collection services provided and fees charged in the unincorporated area; and

WHEREAS, the County of Alameda is in support of the county-wide 75% solid waste diversion goal contained in the Waste Reduction and Recycling Initiative Charter Amendment (Measure D), adopted by the voters in November 1990; and

WHEREAS, improving solid waste and recycling service to the unincorporated area would benefit County residents and further the County's efforts to reach the diversion goal in Measure D; and

WHEREAS, Livermore Sanitation, Inc. (LSI) provides exclusive solid waste and recycling services to the City of Livermore pursuant to a Franchise Agreement with the City; and

WHEREAS, in order to facilitate improved solid waste and recycling services, the County desires to have LSI provide exclusive collection services to the unincorporated Livermore area similar to those services provided within the corporate limits of the City of Livermore; and

WHEREAS, Chapter 6.40 of Title 6 of the County General Ordinance Code gives the Board of Supervisors the authority to establish County Collection Service Zones and to grant exclusive rights to solid waste haulers for the collection of solid waste, compostable materials and recyclable materials within such zones; and

WHEREAS, County Collection Service Zone No. 1 was established by Resolution No. 2012 - ___, approved by the Board of Supervisors on November 6, 2012; and

WHEREAS, the County desires to grant exclusive rights to LSI to provide collection services within County Collection Service Zone No, 1, and desires to have the specific scope, nature and requirements of the provision of such services to be as set forth in a Memorandum of Understanding entered into by and between the County, LSI, and the City of Livermore.

NOW, THEREFORE, BE IT RESOLVED that pursuant to Section 6.40.290 of the County General Ordinance Code, and subject to the exception provided in Section 6.40.300, the Board of Supervisors does hereby grant Livermore Sanitation, Inc. exclusive rights to provide services for the collection of solid waste, compostable materials, and recyclable materials within County Collection Service Zone No. 1; and

BE IT FURTHER RESOLVED that the specific scope, nature, and requirements of the provision of such services shall be as provided in the Memorandum of Understanding between the City of Livermore, Livermore Sanitation, Inc., and the County of Alameda, which is hereby approved by the Board of Supervisors, and which is attached hereto as Exhibit A.

THE FOREGOING was **PASSED** and **ADOPTED** by a majority vote of the Alameda County Board of Supervisors this **6** day of **November , 2012**, to wit:

AYES: Supervisors: Carson, Chan, Haggerty, Valle & President Miley – **5**

NOES: None

EXCUSED: None

Nate Miley

PRESIDENT, BOARD OF SUPERVISORS

File No: **28538**
Agenda No: **24**
Document No: **C-2012-155**
Resolution No: **R-2012-367**

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Supervisors, Alameda County, State of California
ATTEST:
Clerk of the Board
Board of Supervisors

By: James Robles
Deputy

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Exhibit A

Memorandum of Understanding between the City of Livermore, Livermore Sanitation, Inc., and the County of Alameda

(See attached)

EXHIBIT A

Approved as to form:
Donna R. Ziegler, County Counsel

By: _____
William M. Fleishhacker
Deputy County Counsel

THE BOARD OF SUPERVISORS OF THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA

RESOLUTION NO. R- 2012- 382

RESOLUTION ESTABLISHING COUNTY COLLECTION SERVICE ZONE NO. 1 IN ACCORDANCE WITH CHAPTER 6.40 OF TITLE 6 OF THE COUNTY GENERAL ORDINANCE CODE

WHEREAS, the County of Alameda desires to improve solid waste and recycling service to unincorporated residents and businesses in the vicinity of the City of Livermore to respond to numerous complaints from unincorporated residents about the inconsistency of collection services provided and fees charged in the unincorporated area; and

WHEREAS, Chapter 6.40 of Title 6 of the County General Ordinance Code gives the Board of Supervisors the authority to establish County Collection Service Zones and to grant exclusive rights to solid waste haulers for the collection of solid waste, compostable materials and recyclable materials within such zones; and

WHEREAS, granting exclusive rights for the collection of solid waste, compostable materials and recyclable materials to Livermore Sanitation, Inc. would facilitate improved solid waste and recycling service to the unincorporated Livermore area; and

WHEREAS, the establishment of a County Collection Service Zone in the unincorporated area around the City of Livermore is necessary to facilitate the granting of exclusive rights to Livermore Sanitation, Inc; and

WHEREAS, the boundaries of the territory proposed to be included in County Collection Zone No. 1 are as set forth in Exhibit A; and

WHEREAS, County Collection Service Zone No. 1 will be comprised of two geographic areas: the Densely-Populated Area adjacent to the city boundary and the Rural Area further away from the city boundary; and

WHEREAS, the street addresses of the properties included in the designated Densely Populated Area are listed in Exhibit B;

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors does hereby establish County Collection Service Zone No. 1, as set forth and described in Exhibit A, attached hereto and by this reference incorporated herein.

THE FOREGOING was **PASSED** and **ADOPTED** by a majority vote of the Alameda County Board of Supervisors this **6** day of **November , 2012**, to wit:

AYES: Supervisors: Carson, Chan, Haggerty, Valle & President Miley – **5**

NOES: None

EXCUSED: None

PRESIDENT, BOARD OF SUPERVISORS

File No: **28538**
Agenda No: **24**
Document No: **C-2012-155**
Resolution No: **R-2012-382**

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Supervisors, Alameda County, State of California
ATTEST:
Clerk of the Board
Board of Supervisors

By: James Robles
Deputy

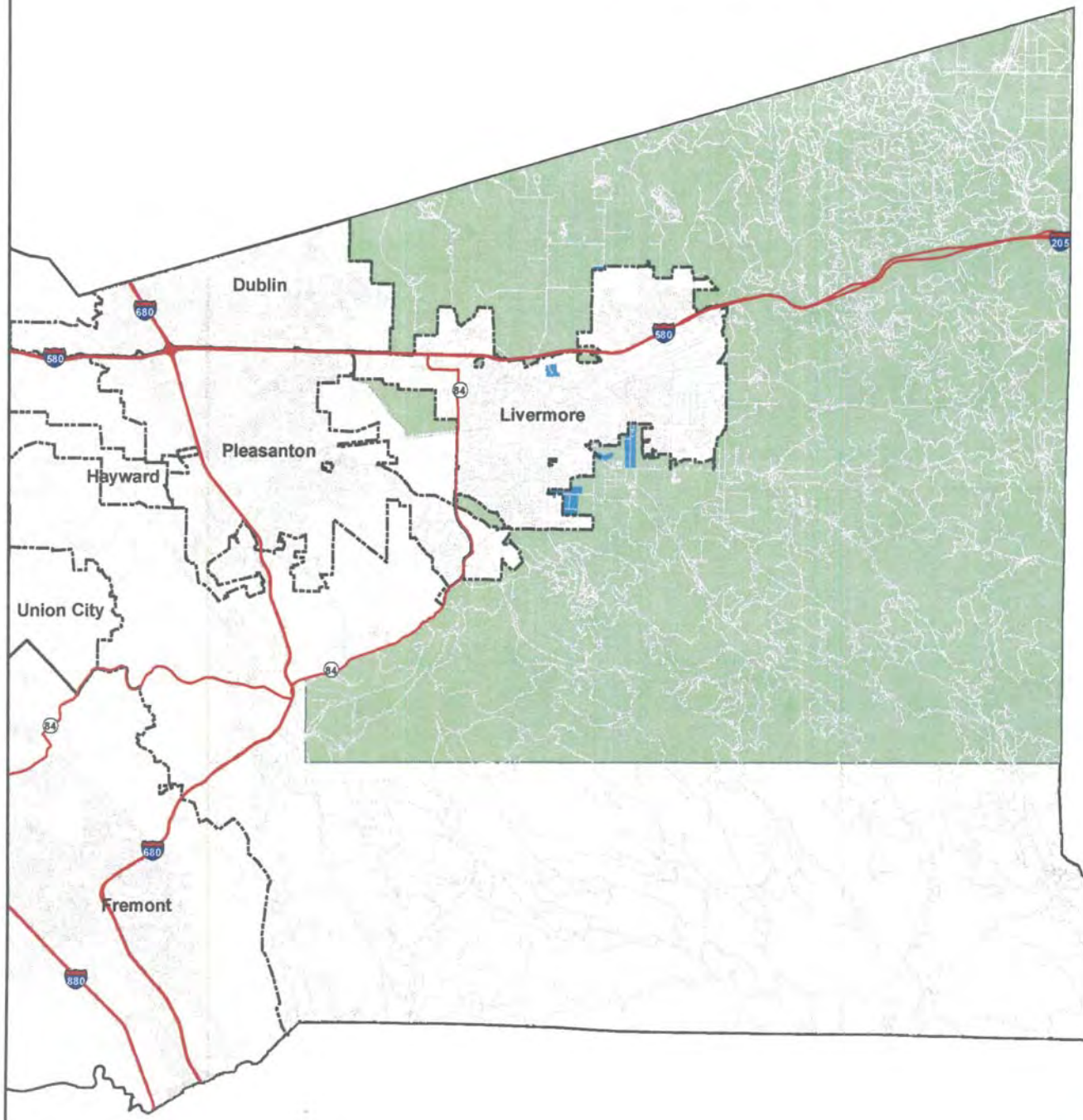
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Exhibit A
County Collection Service Zone No. 1

(See attached)

Memorandum of Understanding Between the City of Livermore, Alameda County and Livermore Sanitation, Inc. Regarding Solid Waste and Recycling Services

Exhibit A-1 - County Collection Service Zone 1



Legend

- Highways
- City Limits
- Densely Populated Areas
- Rural Area

0 1 2 4 Miles

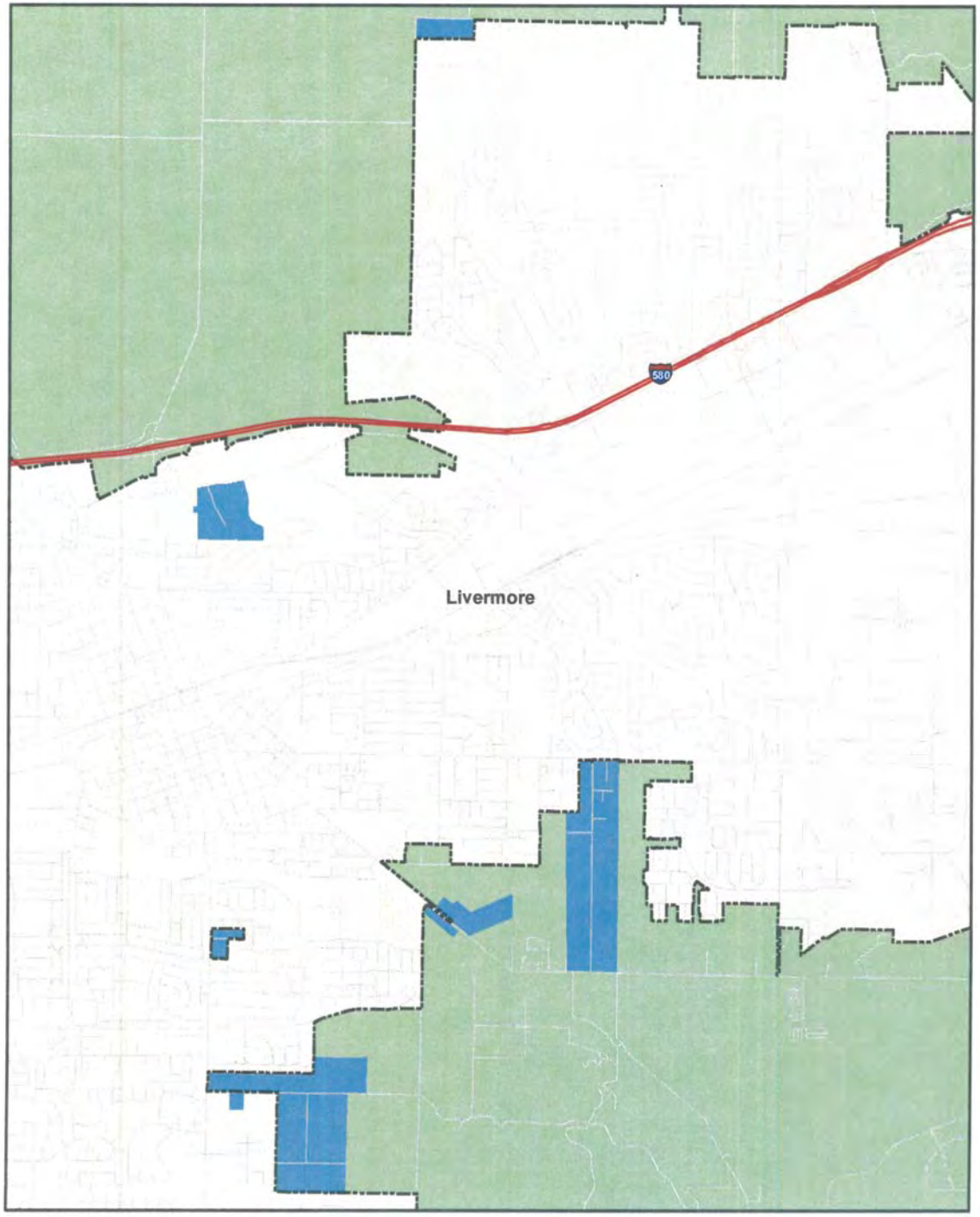
N

EXHIBIT A

Alameda County Community Development Agency October 2012

This map is representational only. Data are not survey precise.

Exhibit A-2 - Densely Populated Areas



Legend

- Highways
- City Limits
- Densely Populated Areas
- Rural Area

0 0.25 0.5 1 Miles

N

EXHIBIT A

Alameda County Community Development Agency October 2012

This map is representational only. Data are not survey precise.

Exhibit B
List of Street Addresses within the Densely-Populated Area

1620 Arroyo Rd
1434 Buena Vista Ave
1442 Buena Vista Ave
1450 Buena Vista Ave
1473 Buena Vista Ave
1474 Buena Vista Ave
1522 Buena Vista Ave
1551 Buena Vista Ave
1565 Buena Vista Ave
1578 Buena Vista Ave
1601 Buena Vista Ave
1630 Buena Vista Ave
1651 Buena Vista Ave
1656 Buena Vista Ave
1732 Buena Vista Ave
1740 Buena Vista Ave
1746 Buena Vista Ave
1755 Buena Vista Ave
1762 Buena Vista Ave
1763 Buena Vista Ave
1780 Buena Vista Ave
1826 Buena Vista Ave
1888 Buena Vista Ave
1900 Buena Vista Ave
1901 Buena Vista Ave
1912 Buena Vista Ave
1969 Buena Vista Ave
1970 Buena Vista Ave
1972 Buena Vista Ave
2027 Buena Vista Ave
2052 Buena Vista Ave
2067 Buena Vista Ave
2075 Buena Vista Ave
2080 Buena Vista Ave
2086 Buena Vista Ave
2098 Buena Vista Ave
2112 Buena Vista Ave
2130 Buena Vista Ave
2137 Buena Vista Ave
2164 Buena Vista Ave
2169 Buena Vista Ave
2182 Buena Vista Ave
2187 Buena Vista Ave
2211 Buena Vista Ave
2230 Buena Vista Ave
2243 Buena Vista Ave
2244 Buena Vista Ave
2249 Buena Vista Ave
2252 Buena Vista Ave
2262 Buena Vista Ave
2272 Buena Vista Ave
2288 Buena Vista Ave
2360 Buena Vista Ave
2368 Buena Vista Ave
2383 Buena Vista Ave
2440 Buena Vista Ave
2476 Buena Vista Ave
2512 Buena Vista Ave
2552 Buena Vista Ave
2600 Buena Vista Ave
2694 Edwards Ln
2926 Edwards Ln
2089 N Livermore Ave
2250 N Livermore Ave
2268 N Livermore Ave
2294 N Livermore Ave
2300 N Livermore Ave
1880 S Livermore Ave
1890 S Livermore Ave
1960 S Livermore Ave
1960 S Livermore Ave
1969 S Livermore Ave
2060 S Livermore Ave
2100 Marina Ave
2200 Marina Ave
2251 Marina Ave
2268 Marina Ave
2364 Marina Ave
2390 Marina Ave
2416 Marina Ave
2466 Marina Ave
2480 Marina Ave
2520 Marina Ave
2560 Marina Ave
2565 Marina Ave
2596 Marina Ave
2634 Marina Ave
2645 Marina Ave
2680 Marina Ave
2720 Marina Ave
2750 Marina Ave
2827 Marina Ave
2949 Marina Ave
2980 Marina Ave
3053 Marina Ave
3130 Marina Ave
3150 Marina Ave
3246 Marina Ave
3364 Marina Ave
3374 Marina Ave
3384 Marina Ave
2020 Pleasant View Ln
2100 Pleasant View Ln
2143 Pleasant View Ln
2242 Pleasant View Ln
2280 Pleasant View Ln
2350 Pleasant View Ln
2418 Pleasant View Ln
2486 Pleasant View Ln
2600 Reed Ave
2601 Reed Ave
2622 Reed Ave
2799 Reed Ave
2830 Reed Ave
2839 Reed Ave
2940 Reed Ave
3052 Reed Ave

FIRST AMENDMENT TO MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, ALAMEDA COUNTY AND LIVERMORE SANITATION, INC. REGARDING SOLID WASTE AND RECYCLING SERVICES AND CONFIRMATION OF CONSENT TO ASSIGNMENT

THIS FIRST AMENDMENT ("**2023 Amendment**"), dated for reference purposes as of January 1, 2023, is entered into by and between the CITY OF LIVERMORE, a municipal corporation (the "**City**"), the COUNTY OF ALAMEDA, a political subdivision of the State of California ("**County**"), and LIVERMORE SANITATION, INC., a California corporation ("**LSI**") and WASTE CONNECTIONS US, INC., a Delaware corporation ("**Waste Connections**") (each from time to time hereafter referred to individually as a "**Party**" and collectively as the "**Parties**"), with respect to that *Memorandum Of Understanding Between The City Of Livermore, Alameda County And Livermore Sanitation, Inc. Regarding Solid Waste And Recycling Service*s dated for reference purposes as of November 6, 2012 ("**2012 MOU**" and collectively with this 2023 Amendment the "**MOU**").

RECITALS

This Amendment is entered into by the Parties based on the following facts, findings, and determinations:

A. The City and LSI are parties to the *Amended and Restated Agreement for Solid Waste, Recyclable Materials, and Compostable Materials Services* dated May 9, 2011 (the "**LSI Agreement"**) that provided services within the corporate limits of the City, which was then amended by the *Third Amended and Restated Agreement For Solid Waste, Recyclable Materials, and Compostable Materials Services* dated April 27, 2020, and which was further amended by a *First Amendment* and then on November 28, 2022 by a *Second Amendment To Third Amended And Restated Franchise Agreement* (collectively the "**Amended LSI Agreement**"); and

B. On November 6, 2012 the County granted authority to LSI to provide services for the collection of solid waste, recyclable materials, and compostable materials in County Collection Zone No. 1 and thereafter the City, LSI and the County entered into the 2012 MOU in which LSI provided services in the County Collection Zone as set forth in the LSI Agreement as modified by the 2012 MOU; and

C. LSI, Waste Connections and other parties have entered a Stock Purchase Agreement, dated as of April 27, 2022 (the "**Purchase Agreement**"); and

D. On or about December 1, 2022, at a closing (the "**Closing**") in accordance with the Purchase Agreement, the current shareholders of LSI sold all the common stock in LSI (the "**LSI Shares**") to Waste Connections, which resulted in a change in majority control of LSI from the current owners; and

E. The County has reviewed the documents prepared and considered by the City related to the Purchase Agreement including the Staff Report, Waste Connection Letter of Commitment, and the HFH Assignment Review Report on the November 28, 2022 City Council Agenda, agenda item 5.8, in which the City documented the terms and conditions upon which it relied to consent to the sale and assignment of LSI Shares to Waste Connections (the "**Assignment**") as set forth in the Purchase Agreement and the Amended LSI Agreement. The County relies on these same representations and documents to consent to the Assignment in accordance with Section 12.2 of the 2012 MOU and notified the Parties of its intent to enter into this 2023 Amendment for documenting that consent; and

F. Whereas, California Senate Bill 1383 of 2016, the Short-lived Climate Pollutant Reduction Act of 2016 ("**SB 1383**") (which added Sections 39730.5, 39730.6, and 39730.8 to the California Health and Safety Code, and added Chapter 13.1 (commencing with Section 42652) to Part 3 of Division 30 of the Public Resources Code), took effect on January 1, 2017, setting Statewide Organic Waste disposal reduction

targets of 50 percent by 2020 and 75 percent by 2025, and requiring the California Department of Resources Recycling and Recovery ("**CalRecycle**") to develop regulations to reduce organics in landfills as a source of methane; and

G. Whereas, in November 2020, CalRecycle finalized the Short-lived Climate Pollutants Organic Waste Reductions Regulations (the "**SLCP**" or "**SB 1383 Regulations"**) which establish the regulatory requirements for jurisdictions, generators, haulers, solid waste facilities, and other entities, which are contained in Title 14 of the California Code of Regulations; and

H. The County desires to have similar collection services within the unincorporated areas surrounding the City to those provided to the City under the Amended LSI Agreement, to meet compliance with SB 1383, and the City desired to assist the County by modifying the 2012 MOU to provide such services.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and obligations set forth in this Amendment, the Parties hereby agree as follows:

1. Assignment.

1.1 Consent. County consents to the Assignment and LSI shall continue to possess all of its rights, titles and interests in the MOU. LSI hereby agrees to keep, perform, fulfill, and be bound by all of the terms, covenants and conditions required to be kept, performed, and/or fulfilled under the MOU.

1.2 Guaranty. Waste Connections shall execute and deliver a guaranty in the form set forth in Exhibit A, subject to any edits as to form as approved by the County Counsel, guarantying Contractor's performance of the MOU, as it may be amended. Such executed guaranty shall be provided within 10 days of execution of this Amendment.

1.3 Condition to Consent. As material consideration for the County's consent to the Assignment, the Parties agree to amend the 2012 MOU as set forth in this Amendment, collectively the MOU.

2. Section 2, Term of the 2012 MOU, is amended as follows:

Section 2.1 is renumbered 2.1 (a) and the following is added:

> **2.1.(b) Amendment Effective Date**. The Effective Date of this 2023 Amendment shall be the date that the City, the County and LSI sign this MOU, following approval of the City Council and the Board of Supervisors.

Section 2.2 is deleted in its entirety and replaced with the following:

> **2.2 Term**. The term of this MOU shall be from the MOU Effective Date until the date that is the earlier of: (a) the end of the Term of the Amended LSI Agreement including any extensions; (b) the date that the Amended LSI Agreement is terminated by the City or LSI in accordance with the Amended LSI Agreement; (c) the date this MOU is terminated in accordance with its terms.

3. Section 3, Amendment of LSI Agreement, is amended by adding the following:

> The City hereby consents to LSI's continuing to provide services to County Customers on the terms and conditions as set forth in the 2012 MOU as revised in the Amendment,

collectively the MOU. The City further agrees to formally incorporate the provisions of the MOU in the Amended LSI Agreement when it is next amended or restated.

4. Section 4, Scope of Services, Subsection 4.2, Collection Services, is deleted in its entirety and replaced with the following:

> **4.2 Collection Service Required Services and Standards**. LSI shall provide Solid Waste, Compostable Materials and Single-Stream Recyclable Materials Collection services to County Customers that subscribe to and pay for LSI's Collection services in County Collection Service Zone No. 1 in accordance with the Amended LSI Agreement to County Customers. LSI shall provide those services in compliance with SB 1383 and the SB1383 Regulations, and as set forth in Article 5, Collections Services, of the Amended LSI Agreement, with the exception that LSI shall not provide the services under Sections 5.5, City Facilities and Events Collection and 5.6 Provision of Services to Schools.

5. Section 5, Other Services, Subsection 5.2, Public Education, (a), is deleted in its entirety and replaced with the following:

> **5.2(a) Education and Technical Assistance**. LSI shall provide the same services to County and County Customers as it provides to City and City Customers pursuant to Article 5.17, Public Education and Technical Assistance, of the Amended LSI Agreement. This specifically includes education for compliance with the SB 1383 Regulations.

6. Record Keeping and Reporting Required by SB 1383. LSI shall provide service level account data and other data necessary to assist County in monitoring generator compliance and preparing annual reports relative to compliance with SB 1383.

7. Exhibit C. Section 10, Default and Remedies, Subsection 10.6 Liquidated Damages is amended by deleting Exhibit C, Schedule of Liquidated Damages, and replacing it with the attached Exhibit C, Schedule of Liquidated Damages.

8. Notices. **Section 12.3, Notices**, is amended by updating the addresses as follows:

If to County:	Alameda County Community Development Agency 224 West Winton Ave., Room 111 Hayward, CA 94544 Attn: Community Development Director
With Copy to:	Office of the County Counsel County of Alameda 1221 Oak Street, Suite 450 Oakland, CA 94612

If to City:	City of Livermore Public Works Department 1052 S. Livermore Ave. Livermore, CA 94550 Attn: Judy Erlandson, City of Livermore
With copy to:	City Clerk 1052 S. Livermore Ave. Livermore, CA 94550
If to LSI:	Livermore Sanitation, Inc. 7000 National Drive Livermore, CA 94550 Attn: Adam Gooderham, Division Vice President
With Copy to:	Waste Connections US, Inc. 3 Waterway Square Place, Suite 110 The Woodlands, TX 77380 Attn: Senior Vice President, Deputy General Counsel
If to Waste Connections:	Waste Connections US, Inc. 4359 Town Center Blvd, Suite 215 El Dorado Hills, CA 95762 Attn: Ronald J. Mittelstaedt, President and Chief Executive Officer
With Copy to:	Waste Connections US, Inc. 3 Waterway Square Place, Suite 110 The Woodlands, TX 77380 Attn: Senior Vice President, Deputy General Counsel

9. Miscellaneous

9.1 Consistent Services. Except as expressly modified by this First Amendment, all the terms and conditions of the 2012 MOU are and remain in full force and effect. It is the intent of this 2023 Amendment that LSI provide services to County in accordance and consistent with the Amended LSI Agreement.

9.2 Authority. The City and the County agree that each has taken the appropriate steps necessary to authorize and approve this Amendment. LSI agrees that it has the authority to enter into and perform its obligations under this Amendment and the 2012 MOU.

9.3 Entire Agreement. This 2023 Amendment and the 2012 MOU, collectively the MOU, including all recitals, exhibits and schedules hereto, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior or contemporaneous understandings, negotiations, representations, promises, memoranda and agreements, oral or written, by or between the Parties. No representations, inducements, promises, or agreements have been made in connection with this MOU by any Party, or anyone acting on behalf of any Party, other than those expressly set forth in this MOU.

9.4 Severability. If any term or provision of this MOU is ever determined to be invalid or unenforceable for any reason, such term or provision shall be severed from this MOU without affecting the validity or enforceability of the remainder of this MOU.

IN WITNESS WHEREOF, this FIRST AMENDMENT TO MOU has been approved by the Parties and is effective upon Execution of all Parties.

CITY OF LIVERMORE

By: DocuSigned by: Marianna Marysheva ED4155E315544CC...

Name: Marianna Marysheva

Its: City Manager

Date: 9/27/2023

APPROVED AS TO FORM:

DocuSigned by: Tara Mazzanti 77CBF62F0AD740D...

Livermore Assistant/City Attorney

DocuSigned by: Jas Sidhu 5A184069A43A4F7...

Livermore Risk Manager/Analyst

COUNTY OF ALAMEDA

By: DocuSigned by: Sandra Rivera 4C216765DCDF437...

Name: Sandra Rivera

Its: CDA Director

Date: 9/27/2023

APPROVED AS TO FORM:

County of Alameda Office of the County Counsel

DocuSigned by: Caitlyn M. Gulyas 648710A22864451...

LIVERMORE SANITATION, INC.,
A California Corporation

By: DocuSigned by: Ron Mittelstaedt E936328AEB8348E...

Name: Ronald J. Mittelstaedt

Its: President and Chief Executive Officer

Date: 9/13/2023

WASTE CONNECTIONS US, INC.,
A Delaware Corporation

By: DocuSigned by: Ron Mittelstaedt F936328AFB8348F...

Name: Ronald J. Mittelstaedt

Its: President and Chief Executive Officer

Date: 9/13/2023

EXHIBIT A

THIS GUARANTY (the "Guaranty") is given as of the ____ day of _____, 2023, by Waste Connections US, Inc., a Delaware corporation, ("GUARANTOR"), to the County of Alameda("COUNTY").

THIS GUARANTY is made with reference to the following facts and circumstances:

A. Livermore Sanitation, Inc., a California corporation (the "CONTRACTOR") and COUNTY have executed that *MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, ALAMEDA COUNTY AND LIVERMORE SANITATION, INC. REGARDING SOLID WASTE AND RECYCLING SERVICES* for purposes of reference November 6, 2012, and are entering into that FIRST AMENDMENT TO MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF LIVERMORE, ALAMEDA COUNTY AND LIVERMORE SANITATION, INC. REGARDING SOLID WASTE AND RECYCLING SERVICES AND CONFIRMATION OF CONSENT TO ASSIGNMENT (collectively the “Agreement”) which is incorporated herein by this reference.

B. Guarantor has proposed acquiring the common stock of CONTRACTOR as acknowledged that certain First Amendment to the Agreement, which constitutes an assignment under the Agreement.

C. COUNTY is willing to consent to the assignment of the Agreement as set forth in the the Agreement provided that GUARANTOR executes this Guaranty.

D. GUARANTOR is providing this Guaranty to induce COUNTY to approve the assignment of the Agreement.

NOW, THEREFORE, in consideration of the foregoing, GUARANTOR agrees as follows:

1. Guaranty of the Agreement. GUARANTOR hereby irrevocably and unconditionally guarantees to the COUNTY the complete and timely performance, satisfaction and observation by CONTRACTOR of each and every term and condition of the Agreement which CONTRACTOR is required to perform, satisfy or observe. In the event that CONTRACTOR fails to perform, satisfy or observe any of the terms or conditions of the Agreement, GUARANTOR will promptly and fully perform, satisfy or observe them in the place of the CONTRACTOR. GUARANTOR hereby guarantees prompt payment to COUNTY of each and every sum due from CONTRACTOR to COUNTY under the Agreement, as and when due from time to time, and the prompt performance of every other task and duty required to be performed by the CONTRACTOR under the Agreement.

2. GUARANTOR’s Obligations Are Absolute. The obligations of the GUARANTOR hereunder are direct, immediate, absolute, continuing, unconditional and unlimited and, with respect to any payment obligation of CONTRACTOR under the Agreement, shall constitute a guarantee of payment and not of collection, and are not conditioned upon the genuineness, validity, regularity or enforceability of the Agreement.

3. Waivers and Subordination. The GUARANTOR shall have no right to terminate this Guaranty or to be released, relieved, exonerated or discharged from its obligations under Section 1 hereof for any reason whatsoever, including, without limitation: (1) the insolvency, bankruptcy, reorganization or cessation of existence of the CONTRACTOR; (2) any amendment, modification or waiver of any provision of the Agreement or the extension of its Term (as defined in the Agreement); (3) the actual or purported rejection of the Agreement by a trustee in

bankruptcy, or any limitation on any claim in bankruptcy resulting from the actual or purported termination of the Agreement; (4) any waiver, extension, release or modification with respect to any of the obligations of the Agreement guaranteed hereunder or the impairment or suspension of any of COUNTY's rights or remedies against CONTRACTOR; or (5) any merger or consolidation of the CONTRACTOR with any other organization, or any sale, lease or transfer of any or all the assets of the CONTRACTOR.

The GUARANTOR hereby waives any and all rights, benefits and defenses under California Civil Code Sections 2809, 2815, 2819, 2845, 2849, 2850, 2899 and 3433 and under or based upon, directly or directly, California Code of Civil Procedure Sections 580a, 580b, 580d and 726, if applicable, and all other rights permitted to be waived by California Civil Code Section 2856(a) including, without limitation, the right to require COUNTY to (a) proceed against CONTRACTOR, (b) proceed against or exhaust any security or collateral COUNTY may hold now or hereafter hold, or (c) pursue any other right or remedy for GUARANTOR's benefit, and agree that COUNTY may proceed against GUARANTOR for the obligations guaranteed herein without taking any action against CONTRACTOR or any other guarantor or pledgor and without proceeding against or exhausting any security or collateral COUNTY may hold now or hereafter hold. COUNTY may unqualifiedly exercise in its sole discretion any or all rights and remedies available to it against CONTRACTOR or any other guarantor or pledgor without impairing COUNTY's rights and remedies in enforcing this Guarantee. The GUARANTOR hereby waives and agrees to waive at any future time at the request of COUNTY, to the extent now or then permitted by applicable law, any and all rights which the GUARANTOR may have or which at any time hereafter may be conferred upon it, by statute, regulation or otherwise, to avoid any of its obligations under, or to terminate, cancel, quit or surrender this Guaranty. Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more of the following shall not affect the liability of the GUARANTOR hereunder: (a) at any time or from time to time, without notice to the GUARANTOR, the time for CONTRACTOR's performance of or compliance with any of its obligations under the Agreement is extended, or such performance or compliance is waived; (b) the Agreement is modified or amended in any respect; (c) any other indemnification with respect to CONTRACTOR's obligations under the Agreement or any security therefor is released or exchanged in whole or in part or otherwise dealt with; (d) any assignment of the Agreement is effected which does not require COUNTY's approval; or (e) any termination or suspension of the Agreement arising by reason of a default by CONTRACTOR.

The GUARANTOR hereby expressly waives diligence, presentment, demand for payment or performance, protest and all notices whatsoever, including, but not limited to, notices of non-payment or non-performance, notices of protest, notices of any breach or default, and notices of acceptance of this Guaranty. If all or any portion of the obligations guaranteed hereunder are paid or performed, GUARANTOR's obligations hereunder shall continue and remain in full force and effect in the event that all or any part of such payment or performance is avoided or recovered directly or indirectly from COUNTY as a preference, fraudulent transfer or otherwise, irrespective of (a) any notice of revocation given by GUARANTOR or CONTRACTOR prior to such avoidance or recovery, or (b) payment in full of any obligations then outstanding.

The GUARANTOR expressly subordinates and waives its rights to subrogation, reimbursement, contribution or indemnity with respect to performance by GUARANTOR of the obligations of CONTRACTOR guaranteed hereby, until such time as COUNTY receives payment or performance in full of all such obligations.

4. **Term**. This Guaranty is not limited to any period of time, but shall continue in full force and effect until all of the terms and conditions of the Agreement have been fully performed by CONTRACTOR, and GUARANTOR shall remain fully responsible under this Guaranty without regard to the acceptance by COUNTY of any performance bond or other collateral to assure the performance of CONTRACTOR's obligations under the Agreement. GUARANTOR shall not be released of its obligations hereunder so long as there is any claim by COUNTY against

CONTRACTOR arising out of the Agreement based on CONTRACTOR's failure to perform which has not been settled or discharged.

5. **No Waivers by COUNTY**. No delay on the part of COUNTY in exercising any rights under this Guaranty or failure to exercise such rights shall operate as a waiver of such rights. No notice to or demand on GUARANTOR shall be a waiver of any obligation of GUARANTOR or right of COUNTY to take other or further action without notice or demand. No modification or waiver by COUNTY of any of the provisions of this Guaranty shall be effective unless it is in writing and signed by COUNTY and by GUARANTOR, nor shall any waiver by COUNTY be effective except in the specific instance or matter for which it is given.

6. **Attorney's Fees**. In addition to the amounts guaranteed under this Guaranty, GUARANTOR agrees to pay reasonable attorney's fees and all other reasonable costs and expenses incurred by COUNTY in enforcing this Guaranty, or in any action or proceeding arising out of or relating to this Guaranty, including any action instituted to determine the respective rights and obligations of the parties hereunder.

7. **Governing Law; Jurisdiction**. This Guaranty is and shall be deemed to be a contract entered into in and pursuant to the laws of the State of California and shall be governed and construed in accordance with the laws of California without regard to its conflicts of laws rules for all purposes, including, but not limited to, matters of construction, validity and performance. As the Agreement is made and performed in Alameda County, GUARANTOR agrees that any action brought by COUNTY to enforce this Guaranty may be brought in Alameda Superior Court or the Northern District of California as applicable. GUARANTOR appoints the following person as its agent for service of process in California:

Corporation Service Company
DBA CSC – Lawyer Incorporating Service
2710 Gateway Oaks Dr., Ste. 150N
Sacramento, California 95833

8. **Severability**. If any portion of this Guaranty is held to be invalid or unenforceable, such invalidity shall have no effect upon the remaining portions of this Guaranty, which shall be severable and continue in full force and effect.

9. **Binding on Successors**. This Guaranty shall inure to the benefit of COUNTY and its successors and shall be binding upon GUARANTOR and its successors, including a successor entity formed by a merger or consolidation, a transferee of substantially all of its assets, and its shareholders in the event of its dissolution or insolvency.

10. **Authority**. GUARANTOR represents and warrants that it has the corporate power to give this guaranty, that its execution of this Guaranty has been authorized by all necessary action under its Articles of Incorporation and by-laws, and that the person signing this Guaranty on its behalf has authority to do so.

11. **Notices.** Notice shall be given in writing, deposited in the U.S. mail, registered *or* certified, first class postage prepaid, addressed as follows:

If to County: Alameda County Community Development Agency
224 West Winton Ave., Room 111
Hayward, CA 94544
Attn: Community Development Director

With Copy to: Office of the County Counsel
County of Alameda
1221 Oak Street, Suite 450
Oakland, CA 94612

To GUARANTOR: Ron Mittelstaedt
President and CEO
Waste Connections, Inc
4359 Town Center Blvd, Suite 215
El Dorado Hills, CA 95762

with a copy to:

Waste Connections US, Inc.
3 Waterway Square Place, Suite 110
The Woodlands, TX 77380
Attention: Senior Vice President, Deputy General Counsel

The parties may change the address to which notice is to be sent by giving the other party notice of the change.

IN WITNESS WHEREOF, GUARANTOR has executed this Guaranty on the day and year first above written.

WASTE CONNECTIONS US, INC.,
A Delaware Corporation

DocuSigned by:
By: Ron Mittelstaedt
E936328AEB8348E...

Name: Ronald J. Mittelstaedt

Its: President and Chief Executive Officer

Date: 9/13/2023

EXHIBIT C
SCHEDULE FOR PERFORMANCE ADJUSTMENTS
LIQUIDATED DAMAGES FOR FAILURE TO MEET STANDARDS

LSI may be assessed Liquidated Damages in the event LSI fails to fulfill its obligations with regards to the events listed in this Exhibit in accordance with the terms and conditions of the MOU with regards to the time frame for accomplishing each event and nature of the responsibility associated with the event unless otherwise stated in this Exhibit. Refer to Section 10.6 of the MOU for procedures for assessing Liquidated Damages. References to MOU means the Memorandum of Understanding (2012) as amended by the First Amendment (2023).

Collection Reliability		
1.	For failure to maintain the collection schedule for a portion of a route or entire route on the scheduled day (unless non-collection was warranted pursuant to this MOU).	$25.00/container
2.	For each failure over fifteen (15) annually to collect Solid Waste, which has been properly set out for collection from an established service recipient account on the scheduled collection day.	$150.00
3.	For each failure to collect missed collections within 24 hours of receipt of the Complaint.	$300.00
4.	For each failure to collect Solid Waste, Recyclable Materials or Compostable Materials which has been properly set out for collection from the same service recipient on two (2) consecutive scheduled pickups.	$150.00
5.	For each failure to notify the appropriate authorities of reportable quantities of Hazardous Waste per Section 5.11 of the LSI Agreement.	$500.00
6.	For each failure over five (5) annually to commence service to a new County Customer within seven (7) calendar days after order received and account number established or failure to deliver a different Container size to a County Customer within seven (7) Business Days of request or failure to deliver kitchen pail, Multi-family Personal Recycling Bins, Commercial Recycling or Compostable Bins for internal use within the timeframe required by Article 5 of the LSI Agreement, as may be applicable per this MOU.	$150.00
7.	For each failure over five (5) annually to deliver kitchen pails, Multi-family Reusable Recycling Bags for tenants, Commercial Recycling or Compostable Bins for internal use within the timeframe required by Article 5, as may be applicable per this MOU.	$150.00
Collection Quality		
8.	For each occurrence over five (5) annually of unreasonable leaking or Unacceptable Spillage of Solid Waste, Recyclable Materials, or Compostable Materials, and failure to pick up or clean up such material immediately.	$300.00

9.	For each occurrence over twelve (12) annually of failure to replace containers in original position, upright, with lids attached to or on Carts or Bins.	$150.00
10.	For each failure over twenty-four (24) annually of not closing gate, crossing planted areas, or other damage to private property.	$300.00
11.	For each occurrence over five (5) annually of collecting Solid Waste, Recyclable Materials, and Compostable Materials during unauthorized hours.	$300.00
12.	For each occurrence over twelve (12) of excessive noise.	$300.00
13.	For each failure over twelve (12) annually of not tagging containers which are left.	$150.00
14.	For each occurrence over five (5) annually of damage to property that is not repaired in 30 days.	$250.00
15.	For each occurrence of mixing Recyclable Materials, Solid Waste, and Compostable Materials during Collection.	$150.00
16.	Failure to deliver materials to Approved Disposal Site, Approved Recyclables Processing Site, or Approved Composting Site (depending on the type of material).	$150.00/ton
Customer Responsiveness		
17.	For each occurrence of unreasonably discourteous behavior.	$500.00
18.	For each failure to respond to and initiate a remedy to a complaint from a County Customer within eight (8) working hours after notification by the County.	$300.00
19.	For each failure to answer the telephone or answering machine from a County Customer during the hours specified in Section 6.9.4 of the LSI Agreement.	$300.00
20.	For each failure to respond to service requests/calls from a County Customer within 24 hours as specified in Section 6.9.4 of the LSI Agreement.	$300.00
21.	For each failure to return calls from County Customers received during non-business hours no later than 5:00 p.m. of the following Business Day.	$300.00
22.	For each occurrence over five (5) annually for complaints from County Customers regarding waiting on hold for more than two (2) minutes as specified in Section 6.9 of the LSI Agreement.	$150.00
Reporting and Performance Adjustments*		
23.	For each day that a Monthly Report to the County is late.	$100.00/day
24.	For each day that a Quarterly Report to the County is late.	$200.00/day

25.	For each day a Semi-Annual Report to the County is late.	$300.00/day
26.	For each day an Annual Report to the County is late.	$300.00/day
* Any Report shall be considered late until such time as a correct and complete Report is received by County. For each calendar day a Report is late, the daily Performance Adjustment shall be as indicated in the Reporting and Performance Adjustment section above.		
Public Education		
27.	Failure to prepare and distribute the service information brochure to County Customers as required by Section 5.2 of the MOU.	$150.00/day
28.	Failure to provide annual notification to County Multi-Family and Commercial Customers as required by Section 5.2 of the MOU.	$300.00/day
29.	Failure to provide the County a reasonable opportunity to review and comment on public education materials, as required by Section 5.2(c) of the MOU.	$150.00/day
30.	For failure to employ personnel for County education as specified in Section 5.17 of the Amended LSI Agreement.	$150.00/day
31.	Failure to meet with County contact in accordance with the MOU and Amended LSI Agreement.	$150.00/day
32.	Failure to send initial mailing to residents.	$300.00/day
33.	Failure to prepare and distribute "how-to" brochure/calendar to residents.	$150.00/day
34.	Failure to prepare and distribute to residents door hanger, flyer, or mailer regarding specific collection day, holiday, Christmas tree, and cleanup event schedules.	$150.00/day
35.	Failure to conduct community presentations targeted at residents.	$150.00/day
36.	Failure to prepare and mail quarterly newsletter to all residents.	$150.00/day
37.	Failure to send initial mailing to businesses.	$300.00/day
38.	Failure to prepare and distribute "how-to" brochures for each of the five business types.	$150.00/day
39.	Failure to conduct training meetings for businesses.	$150.00/day
40.	Failure to meet with business associations.	$150.00/day
41.	Failure to conduct commercial waste audits.	$150.00/audit
42.	Failure to conduct multi-family waste audits.	$150.00/audit

43.	Failure to provide comprehensive report of findings and suggestions to each company for which an audit was performed.	$150.00/day
44	Failure to perform other public education and outreach efforts required by the MOU including Exhibits C and C-1 of the Amended LSI Agreement.	$150.00/day
45	Failure to prepare and annually update a recycling resource guide.	$150.00/day
47	Failure to maintain accurate and complete information on LSI's dedicated webpage for the County.	$150.00/day
Miscellaneous		
48.	Failure to perform any of the obligations set forth in this MOU not specifically stated above and not corrected, or proceeding in good faith to correct, within twenty-four (24) hours upon twenty-four (24) hour notification by County.	$150.00/day

In placing Designee's initials at the places provided, LSI and the County each specifically confirm the accuracy of the statements made above and the fact that both LSI and the County have had ample opportunity to consult with legal counsel and obtain an explanation of the Liquidated Damage provisions at the time that the 2023 Amendment was made.

LSI/WC
Initial here: DS KM

County
Initial here: DS SR

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF THE THIRD AMENDED AND RESTATED AGREEMENT, INCLUDING RATE METHODOLOGY AND RATE ADJUSTMENTS, WITH LIVERMORE SANITATION, INC., AND EXPRESSLY APPROVING THE RATE ADJUSTMENTS FOR RATE PERIOD ELEVEN EFFECTIVE JANUARY 1, 2021 THROUGH JUNE 30, 2021, AND RATE PERIOD TWELVE EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2022

On September 28, 2009, the Livermore City Council entered into a franchise agreement for solid waste collection services: *Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services* (City Council Resolution No. 2009-189).

On May 9, 2011, the City Council adopted the *Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services* (City Council Resolution No. 2011-069).

On September 8, 2014, the City Council adopted Resolution No. 2014-141 approving the *Second Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services* (the "Franchise Agreement").

On June 8, 2015, the City Council adopted Resolution No. 2015-075 approving the Special Rate Review Amendment to the Franchise Agreement.

On November 9, 2015, the City Council adopted Resolution No. 2015-157 approving the Second Amendment to the Franchise Agreement.

On December 11, 2017, the City Council directed staff to negotiate additional benefits and services for the community in exchange for an extension of the Franchise Agreement.

On October 14, 2019, City staff presented options for term extensions and programmatic enhancements for the Franchise Agreement. At that meeting, the City Council directed staff to negotiate a franchise agreement extension for a ten year term with the option to extend the agreement for up to an additional five years at the City's sole discretion.

On November 25, 2019, the City Council adopted Resolution No. 2019-190 to extend the expiration date of the Franchise Agreement for one year to allow City staff and Livermore Sanitation, Inc. time to complete negotiations for a third amended and restated agreement for solid waste, recyclable materials, and compostable materials services.

Staff negotiated and recommended for approval changes to update the current Franchise Agreement with Livermore Sanitation, Inc. ("LSI") to:

- Extend the term by ten years, until June 30, 2030, with the option for up to a five-year extension at the City's sole discretion;
- Allow the purchase of new equipment, including vehicles and upgrades to LSI's

Compressed Natural Gas fueling station;
- Modify the recyclable materials costs methodology;
- Prepare for new state legislation (e.g. SB 1383);
- Approve rates for Fiscal Year 2020/2021 (Rate Year 11) and Fiscal Year 2021/2022 (Rate Year 12), which delays the rate increase in Rate Year 11 due to the community impacts from the COVID-19 pandemic; and
- Describe infrastructure, programmatic enhancements, and other minor administrative changes.

On April 27, 2020, the City Council considered staff's recommendations together with the proposed amendments to the Franchise Agreement, and testimony at a noticed City Council meeting.

Following the review, the City Council agreed to the recommended amendments to the Franchise Agreement.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that the City Manager is authorized to sign, on behalf of the City of Livermore, the *Third Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services*, attached hereto as Exhibit A. A copy of the original agreement, and all subsequent amendments thereto, are on file in the Office of the City Clerk.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that rate adjustments requested by Livermore Sanitation Inc. for Rate Period 11, effective January 1, 2021 through June 30, 2021, and for Rate Period 12, effective July 1, 2021 through June 30, 2022, as recommended by staff and consistent with the methodology in the agreement and in response to the COVID-19 pandemic, are hereby approved.

On motion of Vice Mayor Woerner, seconded by Council Member Carling, the foregoing resolution was passed and adopted on April 27, 2020, by the following vote:

AYES:	Council Members Carling, Coomber, Munro, Vice Mayor Woerner, Mayor Marchand
NOES:	None
ABSENT:	None
ABSTAIN:	None

ATTEST:

Marie Weber
City Clerk

Date: April 29, 2020

APPROVED AS TO FORM:

Jason Alcala
City Attorney

Exhibit A – Third Amended and Restated Agreement

EXHIBIT A

20-200

THIRD AMENDED AND RESTATED AGREEMENT

BETWEEN
THE CITY OF LIVERMORE

AND

LIVERMORE SANITATION, INC.

FOR SOLID WASTE, RECYCLABLE MATERIALS, AND COMPOSTABLE MATERIALS SERVICES

April 27, 2020

Resolution No. 2020-051

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Q Contract Between The Livermore Valley Joint Unified School District and Livermore Sanitation, Inc.

Third Amended and Restated Agreement between the City of Livermore and Livermore Sanitation, Inc.

For Solid Waste, Recyclable Materials and Compostable Materials Services

THIS THIRD AMENDED AND RESTATED AGREEMENT is made and entered into as of the 28th day of April, 2020, by and between the City of Livermore (hereinafter "the City") and Livermore Sanitation, Inc. (hereinafter referred to as the "Contractor").

RECITALS

This Agreement is entered into with reference to the following facts and circumstances:

WHEREAS; the Legislature of the State of California, by enactment of the California Integrated Waste Management Act of 1989, AB 939, (California Public Resources Code Section 40000 et seq.), has declared that it is in the public interest to authorize and require local agencies to make adequate provisions for Solid Waste Collection within their jurisdiction;

WHEREAS; the State of California has found and declared that the amount of refuse generated in California, coupled with diminishing Disposal Site space and potential adverse environmental impacts from landfilling and the need to conserve natural resources, have created an urgent need for State and local agencies to enact and implement an aggressive integrated waste management program. The State has, through enactment of the AB 939 and subsequent related legislation including, but not limited to: the Jobs and Recycling Act of 2011 (AB 341), the Event and Venue Recycling Act of 2004 (AB 2176), SB 1016 (Chapter 343, Statutes of 2008), the Compostable Organics Management Act of 2014 (AB 1594), the Mandatory Commercial Organics Recycling Act of 2014 (AB 1826), and the Short-Lived Climate Pollutants Bill of 2016 (SB 1383), directed the responsible State agency, and all local agencies, to promote Disposal Site Diversion and to maximize the use of feasible waste reduction, re-use, Recycling and Composting options in order to reduce the amount of refuse that must be Disposed of in Disposal Sites;

WHEREAS; SB 1383 establishes regulatory requirements for jurisdictions, Generators, haulers, Solid Waste facilities, and other entities to achieve the Organic Waste Disposal reduction targets; and,

WHEREAS; SB 1383 requires jurisdictions to implement Collection programs, meet Processing facility requirements, conduct contamination monitoring, provide education, maintain records, submit reports, monitor compliance, and fulfill other requirements; and the City of Livermore has chosen to delegate some of its responsibilities to Contractor through this Agreement; and,

WHEREAS; in 1990 the Alameda County Waste Reduction and Recycling Initiative Charter Amendment established a County-wide Solid Waste Diversion rate goal of seventy-five percent (75%) by 2010;

WHEREAS; on November 26, 2007, the City of Livermore adopted a resolution establishing a Solid Waste Diversion goal of seventy-five percent (75%) by 2015 to support the County-wide Diversion goal of seventy-five percent (75%);

WHEREAS; in 2010, the Alameda County Source Reduction and Recycling Board ("StopWaste") adopted a Strategic Plan including a new waste Diversion goal: by 2020, less than 10 percent of what winds up in Alameda County's landfills will be readily Recyclable or Compostable;

WHEREAS; through its recent membership in the Alameda County Climate Protection Project, the City of Livermore has committed to reducing its greenhouse gas emissions; and the United States Environmental Protection Agency has found that greenhouse gas emissions could be significantly reduced through Recycling, especially the Recycling of paper;

WHEREAS; the City Council authorized participation in the Alameda County Waste Management Authority's Mandatory Recycling Ordinance Phase 1 on February 13, 2012 effective July 1, 2012; and Phase 2 on October 14, 2013 effective July 1, 2014; to require that all Commercial and Multi-Family Customers Divert Recyclable Materials and Organics such as Food Scraps, yard waste, and food-contaminated paper;

WHEREAS; under Title 8, Section 8.08, Solid Waste Management of the City of Livermore Municipal Code, the City has the authority to provide for the Collection, Transport, Processing, marketing, and Disposal of Solid Waste, Recyclable Materials and Compostable Materials through a franchise agreement;

WHEREAS; pursuant to California Public Resources Code Section 40059(a)(2), the City has determined that the public health, safety, and well-being require that an exclusive right be awarded to a qualified contractor to provide for the Collection of Solid Waste, Recyclable Materials, and Compostable Materials, and other services related to meeting the City's seventy-five percent (75%) Diversion goal;

WHEREAS; the City Council further declares its intent to approve and maintain reasonable Rates for the Collection, Transportation and Recycling, Processing, Composting and/or Disposal of Solid Waste, Recyclable Materials, and Compostable Materials;

WHEREAS; the City Council desires, having determined through a competitive procurement for services that Contractor, by demonstrated experience, reputation and capacity is qualified to provide for both the Collection of Solid Waste, Recyclables Materials, and Compostable Materials within the corporate limits of the City and the Transportation of such material to appropriate places of Processing, Recycling, Composting and/or Disposal, that Contractor be engaged to perform such services on the basis set forth in this Agreement;

WHEREAS; The Agreement Between The City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials, and Compostable Materials Services was approved by the City Council of the City of Livermore on September 28, 2009.

WHEREAS; On May 9, 2011, the City Council adopted Resolution No. 2011-069 approving the Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services.

WHEREAS; On September 8, 2014, the City Council adopted Resolution No. 2014-141 approving the Second Amended and Restated Agreement Between the City of Livermore and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials Services (the "Prior Agreement").

WHEREAS; On June 8, 2015, the City Council adopted Resolution No. 2015-075 approving the Special Rate Review Amendment to the Prior Agreement.

WHEREAS; On November 9, 2015, the City Council adopted Resolution No. 2015-157 approving the Second Amendment to the Prior Agreement regarding Processing costs at the Alameda County Industries, LLC, Materials Recovery Facility (SRRA) which have been incorporated into the Rates approved by the City Council; and

WHEREAS; the Parties now desire to update the Prior Agreement to: extend the term of the Prior Agreement, ensure the City's ongoing regulatory compliance, and to provide for expanded services.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions contained in this Agreement and for other good and valuable consideration, the Parties agree as follows:

ARTICLE 1.
DEFINITIONS

For purposes of this Agreement, unless a different meaning is clearly required, the following terms shall have the following meanings and be capitalized throughout this Agreement:

1.1 AB 341

"AB 341" means the California Jobs and Recycling Act of 2011 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]), also commonly referred to as "AB 341", as amended, supplemented, superseded, and replaced from time to time.

1.2 AB 1594

"AB 1594" means California Public Resources Code Section 41781.3 et seq., pursuant to which, commencing January 1, 2020, the use of green material as landfill alternative daily cover does not constitute Diversion through Recycling and shall be considered Disposal.

1.3 AB 1826

"AB 1826" means the Organic Waste Recycling Act of 2014 (Chapter 727, Statutes of 2014 modifying Division 30 of the California Public Resources Code), also commonly referred to as "AB 1826," as amended, supplemented, superseded, and replaced from time to time.

1.4 Act

"Act" means the California Integrated Waste Management Act of 1989 (California Public Resources Code Section 40000 et seq.), as amended, supplemented, superseded and replaced from time to time.

1.5 Affiliate

"Affiliate" means all businesses (including corporations, limited and general partnerships and sole proprietorships) which provide services or products related to services under this Agreement and which are directly or indirectly related to Contractor by virtue of direct or indirect Ownership interest or common management. They shall be deemed to be "Affiliated with" Contractor and included within the term

"Affiliates" as used herein. An Affiliate shall include: (i) a business in which Contractor has a direct or indirect Ownership interest, (ii) a business, which has a direct or indirect Ownership interest in Contractor and/or (iii) a business, which is also Owned, controlled or managed by any business or individual which has a direct or indirect Ownership interest in Contractor. For the purposes of this definition, "Ownership" means ownership as defined in the constructive ownership provisions of Section 318(a) of the Internal Revenue Code of 1986, as in effect on the date here, provided that ten percent (10%) shall be substituted for fifty percent (50%) in Section 318(a)(2)(C) and in Section 318(a)(3)(C) thereof; and Section 318(a)(5)(C) shall be disregarded. For purposes of determining ownership under this paragraph and constructive or indirect ownership under Section 318(a), ownership interest of less than ten percent (10%) shall be disregarded and percentage interests shall be determined on the basis of the percentage of voting interest or value which the ownership interest represents.

1.6 Agreement

"Agreement" means this Third Amended and Restated Agreement, including all exhibits, and any future amendments hereto between the City and Livermore Sanitation, Inc. for Solid Waste, Recyclable Materials and Compostable Materials services described herein.

1.7 Agreement Fee

"Agreement Fee" means the fee paid by Contractor to City for the privilege to hold the exclusive rights granted by this Agreement.

1.8 Alameda County Mandatory Recycling Ordinance

"Alameda County Mandatory Recycling Ordinance" means Alameda County Waste Management Authority Ordinance No 2012-1 adopted on January 25, 2012, as amended, supplemented, superseded, and replaced from time to time.

1.9 Alameda County Plant Debris Ban

"Alameda County Plant Debris Ban" means Alameda County Waste Management Authority Ordinance No 2008-1 adopted on January 28, 2009, as amended, supplemented, superseded, and replaced from time to time.

1.10 Alternative Landfill Cover

"Alternative Landfill Cover" means cover material used at a Disposal Site, other than earthen materials, placed on the surface of the refuse fill area as daily cover, intermediate cover, or final cover to control blowing Litter, fires, odor, scavenging and vectors; or, means materials used as soil amendments for erosion control and landscaping. Food Scraps, Yard Trimmings, and Other Targeted Compostables shall not be used as Alternative Landfill Cover."

1.11 Appliance

"Appliance" means any domestic or Commercial device, including, but not limited to, a washing machine, clothes dryer, hot water heater, dehumidifier, conventional oven, microwave oven, stove, refrigerator, freezer, air conditioner, trash compactor, and Residential furnace.

1.12 Applicable Law

"Applicable Law" means all federal, State, and local laws, regulations, rules, orders, judgments, degrees, permits, approvals, or other requirement of any governmental agency having jurisdiction over the Collection, Transportation, Processing, and Disposal of Solid Waste, Recyclable Materials, and Compostable Materials that are in force on the Effective Date and as they may be enacted, issued or amended during the Term of this Agreement.

1.13 Approved Composting Site

"Approved Composting Site" means the Blossom Valley Organics North Composting Site operated by Grover Landscape Services, Inc. at 3909 Gaffery Road in Vernalis, California, which was selected by Contractor, and approved by the City Contract Manager.

1.14 Approved Construction and Demolition Debris (C&D) Processing Site

"Approved C&D Processing Site" means the Republic Services Vasco Road, LLC facility at 4001 N. Vasco Road in Livermore, California, which was selected by Contractor, and approved by the City Contract Manager.

1.15 Approved Disposal Site

"Approved Disposal Site" means the landfill commonly known as Vasco Road Sanitary Landfill, which is owned and operated by Republic Services Vasco Road, LLC, a wholly-owned subsidiary of Republic Services, Inc., and located at 4001 North Vasco Road in unincorporated Alameda County, California. This Disposal Site was selected by the City and approved for Disposal of Solid Waste Collected by the Contractor.

1.16 Approved Facility(ies)

"Approved Facility(ies)" means the Approved C&D Processing Site, Approved Composting Site, Approved Disposal Site, and/or the Approved Recyclables Processing Site, individually or collectively.

1.17 Approved Recyclables Processing Site

"Approved Recyclables Processing Site" means the Alameda County Industries, LLC Processing Site at 610 Aladdin Avenue in San Leandro, California, which was selected by Contractor, and approved by the City Contract Manager.

1.18 Billings

"Billings" means any and all statements of charges for services rendered, howsoever made, described or designated by Contractor, or made by another for City or Contractor, presented to Customers that are serviced by Contractor for the Collection of Solid Waste, Recyclable Materials, and Compostable Materials under this Agreement.

1.19 Bin(s)

"Bin(s)" means a detachable metal Container with a capacity of one to seven (1 to 7) cubic yards and hinged lid(s), which may have wheels, and that is serviced by a front-end loading or rear-end loading Collection truck.

1.20 Bin Service

"Bin Service" means service provided to Customers for Solid Waste Collection using Bins as defined in Section 1.19. Bin Service may be used by Commercial Premises, Multi-Family Premises, or Single-Family Premises generating large volumes of Solid Waste.

1.21 Bulky Item

"Bulky Item" means discarded Appliances, furniture, tires, carpets, mattresses, and similar large items which require special Collection due to their size or nature, but can be Collected without the assistance of special loading equipment (such as forklifts or cranes) and without violating vehicle load limits. It does not include abandoned automobiles, large auto parts, or trees.

1.22 Business Days

"Business Days" mean days during which City offices are open to do business with the public.

1.23 Cart(s)

"Cart(s)" means a wheeled plastic Container with varying capacities of twenty (20), thirty-two (32), sixty-four (64), and ninety-six (96) gallons that is equipped with a hinged lid designed for mechanical pickup by an automated or semi-automated Collection vehicle. The 32-gallon Cart is a Cart with 32 gallons of capacity in the Cart body and 3 gallons in the domed lid for a total capacity of 35 gallons.

1.24 Cart Service

"Cart Service" means Collection services provided to Customers using Carts as defined in Section 1.23. Cart Service may be used by Single-Family Premises, Multi-Family Premises, or Small Commercial Generators.

1.25 Change in Law

"Change in Law" means any of the following events or conditions which has a material and adverse effect on the performance by the Parties of their respective obligations under this Agreement (except for payment obligations):

A. The enactment, adoption, promulgation, issuance, modification, or written change in administrative or judicial interpretation on or after the Effective Date of any Applicable Law; or

B. The order or judgment of any governmental body, on or after the Effective Date, to the extent such order or judgment is not the result of willful or negligent action, error or omission or lack of reasonable diligence of the City or of the Contractor, whichever is asserting the occurrence of a Change in Law; provided, however, that the contesting in good faith or the failure in good faith to contest any such order or judgment shall not constitute or be construed as such a willful or negligent action, error or omission or lack of reasonable diligence.

1.26 City

"City" means the City of Livermore, a municipal corporation, and all the territory lying within the municipal boundaries of the City as presently existing or as such boundaries may be modified during the Term.

1.27 City Contract Manager

"City Contract Manager" means the Public Works Director or his or her designee.

1.28 Collection (or variation thereof)

"Collection" means the removal and Transportation of Solid Waste from the place where it was generated to a Disposal Site and/or the removal and Transportation of Recyclable Materials, Compostable Materials, and other Salvageable Materials from the place where such materials were generated to a Processing Site.

1.29 Commencement Date

"Commencement Date" means the date specified in Section 3.1 when Collection, Transportation, Processing, and Disposal services required by this Agreement shall be provided.

1.30 Commercial

"Commercial" means of, from or pertaining to non-Residential Premises where business activity is conducted, including, but not limited to, retail sales, services, wholesale operations, manufacturing and industrial operations, but excluding businesses conducted upon Residential property which are permitted under applicable zoning regulations and are not the primary use of the property.

1.31 Compactor

"Compactor" means a mechanical apparatus that compresses materials. Compactors include two (2) to four (4) cubic yard Bin Compactors serviced by front-end loader Collection trucks and six (6) to forty (40) cubic yard Drop Boxes serviced by roll-off Collection trucks.

1.32 Complaint

"Complaint" means written or orally communicated statements made by members of the public, Owners or Occupants of properties served by Contractor, or officers, employees or agents of City alleging non-performance or deficiencies in performance of Contractor's duties and obligations under this Agreement, or otherwise alleging a violation by Contractor of the provisions of this Agreement.

1.33 Compost (or Composting)

"Compost (or Composting)" "Compost" has the same meaning as in 14 CCR § 17896.2(a)(4).

1.34 Compost Product

"Compost Product" means the product resulting from the controlled biological decomposition of Compostable Materials that are Source Separated from the municipal Solid Waste stream, or which are separated at a centralized facility.

1.35 Compostable Materials (or Compostables)

"Compostable Materials" or "Compostables" means those Discarded Materials that the City's Code permits, directs, and/or requires Generators to include for Collection in a Container, which is specifically designated for Compostable Materials. No Discarded Material shall be considered to be Compostable Materials, however, unless it is separated from Solid Waste and Recyclable Material. Compostable

Materials include Yard Trimmings, Food Scraps, Food-Contaminated Paper, and Other Targeted Compostables.

1.36 Compostable Plastics

"Compostable Plastics" means plastic materials that meet the ASTM D6400 standard for Compostability.

1.37 Composting Site

"Composting Site" means any plant, facility, or site used for the Processing and Composting of Compostable Materials for the purpose of making Compost, mulch, or other marketable material.

1.38 Construction and Demolition Debris

"Construction and Demolition Debris" also abbreviated "C&D Debris" in this Agreement, means used or discarded construction materials (not including Solid Waste) removed from Premises during the construction or renovation of a structure resulting from construction, remodeling, repair or demolition operations on any pavement, house, Commercial building, or other structure.

1.39 Container

"Container" means a receptacle for temporary storage of Solid Waste, Compostable Materials, or Recyclable Materials to be Collected by Contractor. Container includes a Cart, Bin, Drop Box, or Compactors.

1.40 Contractor

"Contractor" means Livermore Sanitation, Inc., a corporation organized and operating under the laws of the State of California and its officers, directors, employees, agents, companies and Subcontractors.

1.41 Contractor's Compensation

"Contractor's Compensation" means the monetary compensation received by Contractor from Customers in return for services provided by Contractor in accordance with this Agreement, and pursuant to Article 8.

1.42 Contractor's Proposal

"Contractor's Proposal" means the proposal submitted by Contractor on April 13, 2009 for provision of Solid Waste, Recyclables, and Compostable Materials services in the City and certain supplemental written materials, which are included as Exhibit M to this Agreement and are incorporated by reference; and the proposal submitted by Contractor on December 6, 2019 for provision of Solid Waste, Recyclables, and Compostable Materials services in the City and certain supplemental written materials, which are included as Exhibit G1 to this Agreement and are incorporated by reference. If there is a conflict between Exhibit M and Exhibit G1, Exhibit G1 shall prevail.

1.43 County

"County" means the County of Alameda, located within the State of California.

1.44 Curb or Curbside

"Curb or Curbside" means the location for placement of a Cart for pick-up by Single-Family Customers, which shall be on the street against the face of the curb, or where no street curb exists, the Container shall be placed on the Customer's property at a location that is not more than five (5) feet from the outside edge of the street. In the case of condominiums and townhomes receiving Single-Family service, placement of Carts shall be adjacent to each Residential unit at a location agreed upon by both Contractor and Customer.

1.45 Customer

"Customer" means the Person to whom Contractor submits Billing invoices and from whom collects payment for Collection services provided to a Premises. The Customer may be the Occupant or Owner of the Premises provided that the Owner of the Premises shall be responsible for payment of Collection services if an Occupant of a Premises, which is identified as the Customer of Owner's Premises, fails to make such payment.

1.46 Delivery

"Delivery" means placement of Solid Waste, Recyclable Materials, or Compostable Materials by a Generator in a receptacle or at a location that is designated for Collection pursuant to the City's Municipal Code.

1.47 Designated Waste

"Designated Waste" means non-Hazardous Waste which may pose special Disposal problems because of its potential to contaminate the environment and which may be Disposed of only in Class II Disposal Sites or Class III Disposal Sites pursuant to a variance issued by the California Department of Health Services. Designated Waste consists of those substances classified as Designated Waste by the State of California, in California Water Code Section 13173.

1.48 Discarded Material

"Discarded Material" means Solid Waste, Recyclable Materials, Organic Materials, Bulky Items or Construction and Demolition Debris placed by a Generator in a Container, receptacle or at a location that is designated for Collection pursuant to the City's Municipal Code.

1.49 Disposal (or Disposed, or any variation thereof)

"Disposal" or "Disposed," or any variation thereof, means the final disposition of Solid Waste Collected by the Contractor at a Disposal Site approved by the City. Disposal does not include Alternative Landfill Cover so long as City and State regulations consider Alternative Landfill Cover as Diversion under the Act.

1.50 Disposal Site(s)

"Disposal Site(s)" means a facility for ultimate Disposal of Solid Waste.

1.51 Diversion

"Diversion" means activities that reduce or eliminate the amount of Solid Waste from Solid Waste Disposal including, but not limited to, Recycling and Composting.

1.52 Diversion Level

"Diversion Level" means the percentage equal to the Tonnage Diverted by Contractor divided by the Tonnage Collected by Contractor multiplied by 100, which reflects the accomplishments of the Contractor's Diversion programs.

1.53 Drop Box

"Drop Box," sometimes known as a "roll-off" or "debris box," means a wheeled or sledded Container or Compactor, generally with a capacity of six (6) to forty (40) cubic yards, suitable for storage of Solid Waste, Recyclable Materials or Compostable Materials that is separately serviced by a truck, which Transports the Drop Box and the materials contained within to a Disposal Site, Processing Site, Transfer Station, or Composting Site.

1.54 Drop Box/Compactor Service

"Drop Box/Compactor Service" means the service requested by any Generator requiring Drop Boxes or roll-off Compactors for Collection of Solid Waste, Recyclable Materials or Compostable Materials.

1.55 Edible Food

"Edible Food" means food that is fit to be consumed. Edible Food is not Solid Waste if it is recovered and not discarded. Nothing in this Agreement requires or authorizes the recovery of Edible Food that does not meet the food safety requirements of the California Retail Food Code.

1.56 Effective Date

"Effective Date" means the date on which the latter of the Parties signs the Agreement and the date on which Contractor may begin to take actions and incur costs in preparation to provide Collection, Transportation, and Processing Services required by this Agreement.

1.57 E-Waste

"E-Waste" means discarded electronic equipment including, but not limited to, televisions, computer monitors, central processing units (CPUs), laptop computers, computer peripherals (including external hard drives, keyboards, scanners, and mice), printers, copiers, facsimile machines, radios, stereos, stereo speakers, VCRs, DVDs, camcorders, microwaves, telephones, cellular telephones, and other electronic devices. Some E-Waste or components thereof may be Hazardous Waste or include Hazardous Substances and thus require special handling, Processing, or Disposal.

1.58 Excluded Waste

"Excluded Waste" means Hazardous Substance, Hazardous Waste, Infectious Waste, Designated Waste, volatile, corrosive, biomedical, infectious, biohazardous, and toxic substances or material, waste that Contractor reasonably believes would, as a result of or upon Disposal, be a violation of local, State or Federal law, regulation or ordinance, including land use restrictions or conditions, waste that cannot be Disposed of in Class III landfills, waste that in Contractor's reasonable opinion would present a significant risk to human health or the environment, cause a nuisance or otherwise create or expose Contractor or City to potential liability; but not including de minimis volumes or concentrations of waste of a type and amount normally found in Residential Solid Waste after implementation of programs for the safe Collection, Recycling, treatment, and Disposal of batteries and paint in compliance with Sections 41500

and 41802 of the California Public Resources Code. Excluded Waste does not include Used Motor Oil and Filters, or household batteries when properly placed for Collection by Contractor as set forth in this Agreement.

1.59 Food Recovery Organization

"Food Recovery Organization" means an entity that primarily engages in the collection or receipt of Edible Food from Commercial Edible Food Generators and distributes that Edible Food to the public for consumption directly or through entities, including, but not limited to:

A. A food bank as defined in Section 113783 of the Health and Safety Code;

B. A nonprofit charitable organization as defined in Section 113841 of the Health and Safety Code; and,

C. A nonprofit charitable temporary food facility as defined in Section 113842 of the Health and Safety Code.

1.60 Food Recovery Service

"Food Recovery Service" means a Person or entity that collects and transports Edible Food from an Edible Food Generator to a Food Recovery Organization or other entities for Food Recovery.

1.61 Food Scraps

"Food Scraps" means those Discarded Materials that will decompose and/or putrefy including (i) all kitchen and table food waste, (ii) animal or vegetable waste that is generated during or results from the storage, preparation, cooking or handling of food stuffs, (iii) discarded paper that is contaminated with Food Scraps; (iv) fruit waste, grain waste, dairy waste, meat and fish waste; and, (v) non-Recyclable paper or contaminated paper. Food Scraps are a subset of Compostable Materials.

1.62 Franchise Monitoring and Enforcement Fee

"Franchise Monitoring and Enforcement Fee" means the fee paid by Contractor to the City to offset expenses associated with the City's franchise monitoring and enforcement costs.

1.63 Generator

"Generator" means any Person as defined by Section 40170 of the Public Resources Code, whose act or process produces Solid Waste, Recyclable Materials, or Compostable Materials as defined in the Public Resources Code, or whose act first causes Solid Waste to become subject to regulation.

1.64 Government Customer

"Government Customer" means any Federal, State or local district or agency (including school districts and other Special Districts) located within the City limits of the City of Livermore.

1.65 Gross Rate Revenue

"Gross Rate Revenue" means the actual monies remitted to Contractor by Customers, which shall be determined in accordance with Generally Accepted Accounting Principles.

1.66 Gross Revenue

"Gross Revenue" means the revenue realized at the time of Contractor service delivery, which shall be determined in accordance with Generally Accepted Accounting Principles.

1.66 Hazardous Substance

"Hazardous Substance" means any of the following: (a) any substances defined, regulated or listed (directly or by reference) as "Hazardous Substances", "hazardous materials", "Hazardous Wastes", "toxic waste", "pollutant" or "toxic substances" or similarly identified as hazardous to human health or the environment, in or pursuant to (i) the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, 42 USC §9601 et seq. (CERCLA); (ii) the Hazardous Materials Transportation Act, 49 USC §1802, et seq.; (iii) the Resource Conservation and Recovery Act, 42 USC §6901 et seq.; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7901 et seq.; and (vii) California Water Code §13050; (b) any amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified as hazardous or toxic or regulated under any other applicable federal, State or local environmental laws currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl's ("PCBs"), petroleum, natural gas and synthetic fuel products, and by-products.

1.67 Hazardous Waste

"Hazardous Waste" means all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code Sections 25117, 25110.02, and 25115, or in the future amendments to or recodifications of such statutes, or identified and listed as Hazardous Waste by the U.S. Environmental Protection Agency, pursuant to the Federal Resource Conservation and Recovery Act (42 USC Section 6901, et seq.), all future amendments thereto and all rules and regulations promulgated thereunder. Hazardous Waste includes hazardous wood waste.

1.68 Holidays

"Holidays" are defined as New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day for the purposes of planning the Collection schedule.

1.69 Household Hazardous Waste

"Household Hazardous Waste" means Hazardous Waste generated at Residential Premises within the City.

1.70 Infectious Waste

"Infectious Waste" means medical or biomedical waste generated at hospitals, public or private medical clinics, dental offices, research laboratories, pharmaceutical industries, blood banks, mortuaries, veterinary facilities and other similar establishments that are identified in Health and Safety Code Section 25117.5.

1.71 Large Event

"Large Event" means an event, including, but not limited to, a sporting event or a flea market, that charges an admission price, or is operated by a local agency, and serves an average of more than 2,000 individuals

per day of operation of the event, at a location that includes, but not limited to, a public, nonprofit, or privately owned park, parking lot, golf course, street system, or other open space when being used for an event.

1.71 Large Venue

"Large Venue" means a permanent venue facility that annually seats or serves an average of more than 2,000 individuals within the grounds of the facility per day of operation of the venue facility. For purposes of this Agreement, a venue facility includes, but is not limited to, a public, nonprofit, or privately owned or operated stadium, amphitheater, arena, hall, amusement park, conference or civic center, zoo, aquarium, airport, racetrack, horse track, performing arts center, fairground, museum, theater, or other public attraction facility. For purposes of this Agreement, a site under common Ownership or control that includes more than one Large Venue that is contiguous with other Large Venues in the site, is a single Large Venue.

1.72 Liquidated Damages

"Liquidated Damages" means the amounts owed by Contractor to City for failure to meet specific quantifiable standards of performance as described in Section 11.6 and Exhibit F.

1.73 Litter

"Litter" means any quantity of Solid Waste, Recyclable Materials, or Compostable Materials, which is not placed in a Container.

1.74 Livermore Valley Joint Unified School District

"Livermore Valley Joint Unified School District" means the public school district located in Livermore, California.

1.75 Mandatory Recycling Ordinance

"Mandatory Recycling Ordinance" means the Alameda County Waste Management Authority's Ordinance 2012-01. The City of Livermore City Council consented to participate in Phase 1 of the Mandatory Recycling Ordinance on February 13, 2012, and the City of Livermore City Council consented to participate in Phase 2 of the Mandatory Recycling Ordinance on October 14, 2013.

1.76 Multi-Family

"Multi-Family" means any Residential complex, other than a Single- Family Premises, used for Residential purposes, which has centralized Solid Waste, Recyclable Materials, and Compostable Materials Collection service for all Residential units in the building and may be billed as one address.

1.77 Neighborhood Preservation Fee

"Neighborhood Preservation Fee" means the fee paid by Contractor to City to aid the City's Community Development Department which assists in resolving health, safety, and public nuisance problems that may adversely affect the quality of life for citizens of the City pursuant to Section 7.6.

1.78 Nonputrescible Waste

"Nonputrescible Waste" means Solid Waste which is not subject to decomposition by microorganisms.

1.79 Occupant

"Occupant" means and includes every tenant or Person who is in possession of, is the inhabitant of, or has the care and control of, an inhabited Single-Family Premises, Multi-Family Premises, or Commercial Premises.

1.80 On-Call Multi-Family Clean-Up Service

"On-Call Multi-Family Clean-Up Service" means the program described in Section 5.2.2.B.

1.81 On-Call Single-Family Clean-Up Service

"On-Call Single-Family Clean-Up Service" means the program described in Section 5.2.2.A.

1.82 Organic Waste

"Organic Waste" means Solid Wastes containing material originated from living organisms and their metabolic waste products including, but not limited to food, Yard Trimmings, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges, or as otherwise defined by SB 1383. Paper products, printing and writing paper, biosolids, and digestate are defined by SB 1383.

1.83 Organics or Organic Materials

See "Compostables" or "Compostable Materials"

1.84 Other Targeted Compostables

"Other Targeted Compostables" means those Discarded Materials that will decompose and/or putrefy including waxed cardboard, wooden packaging such as crates, and untreated and unpainted wallboard. Other Targeted Compostables exclude Yard Trimmings and Food Scraps. Other Targeted Compostables are a subset of Compostable Materials.

1.85 Owner

"Owner" means the Person holding legal title to the land or building.

1.86 Party or Parties

"Party or Parties" refers to the City and Contractor, individually or together.

1.87 Person

"Person" includes an individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.

1.88 Premises

"Premises" means any land or building in the City where Solid Waste, Recyclable Materials, or Compostable Materials are generated or accumulated.

1.89 Processing

"Processing" means to prepare, treat, or convert through some special method, including, but not limited to, baling, crushing, shredding, chipping, grinding, extracting, mechanical or hand classification and any other method of handling Recyclable Materials, Organic Materials, and Construction and Demolition Debris by the Contractor at the Approved Facility(ies).

1.90 Processing Site

"Processing Site" means any plant or site used for the purpose of sorting, cleansing, treating or reconstituting Salvageable Material for the purpose of making such material available for reuse. Activities that may be undertaken at a Processing Facility include, but are not limited to, Processing Compostable Materials and Recyclable Materials.

1.91 Property Manager

"Property Manager" means an individual or company that is hired to oversee the day-to-day operations of a unit of real estate.

1.92 Putrescible Waste

"Putrescible Waste" means Solid Wastes originated from living organisms and their metabolic waste products and from petroleum, which contains naturally produced organic compounds and which are biologically decomposable by microbial and fungal action into the constituent compounds of water, carbon dioxide and other simpler organic compounds.

1.93 Rate

"Rate" means the dollar unit to be charged a Customer by Contractor for providing Solid Waste Collection, Transportation, and Disposal, Recyclable Materials Collection, Transportation, and Processing services, Compostable Materials Collection, Transportation, and Processing services, and other extra services.

1.94 Rate Period

"Rate Period" means a twelve (12) month period, commencing July 1 and concluding June 30.

1.95 Rate Review and Performance Review Fee

"Rate Review and Performance Review Fee" means the fee paid by Contractor to City to offset costs of contracting with a consultant in order to review the Contractor Rate adjustment application pursuant to Section 7.4 and conduct a review of Contractor's performance pursuant to Section 6.17.

1.96 Recyclable Materials or Recyclables

"Recyclable Materials or Recyclables" means those non-hazardous Residential or Commercial materials or by-products which are set aside, handled, packaged, or offered for Collection in a manner different from Solid Waste, for the purpose of being reused or Processed and then returned to the economic mainstream in the form of commodities. For the purposes of this Agreement, Recyclable Materials shall be those Discarded Materials that the City Municipal Code permits, directs and/or requires Generators to set out in a Container, which is specifically designated for Recyclable Materials, for Collection for the purpose of

Recycling. No Discarded Material shall be considered to be Recyclable Material unless it is separated from Solid Waste and Compostable Material. Recyclable Materials may include, but are not limited to:

- Paper Materials: Newspaper, corrugated cardboard, mixed paper, cereal boxes, office paper, junk mail, phone books, magazines, and colored paper including incidental paper scraps and envelopes.
- Containers: Glass bottles and jars, aluminum cans, metal cans, milk containers, all #1 to #7 plastic containers, aseptic packaging, milk cartons, film plastic, and empty aerosol cans.
- Motor oil and filters: Used motor oil and oil filters (for Single-Family Customers and Multi-Family with Carts).
- Construction and Demolition Debris in Drop Boxes, as Construction and Demolition Debris is not accepted in Carts, Bins, or Compactors.
- Other: Plastic bags, E-Waste peripherals, rigid plastics, hard cover books, and scrap metal/aluminum under 40 pounds.

1.97 Recycling

"Recycling" means the process of sorting, cleansing, treating and reconstituting Recyclable Materials at a Processing Site and returning such materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products. Recycling does not include transformation as defined in the Public Resources Code Section 40201.

1.98 Related Party Entity

"Related Party Entity" means any Affiliate which has financial transactions with Contractor pertaining to this Agreement that has been approved by the City. For the purposes of this Agreement, Related Party Entities shall include Alameda County Industries, LLC, the Owner and operator of the Approved Recyclables Processing Site.

1.99 Residential

"Residential" shall mean of, from, or pertaining to a Single-Family Premises or Multi-Family Premises, including Single-Family homes, apartments, condominiums, townhouse complexes, mobile home parks, and cooperative apartments. Residential Customers may be charged per Commercial Rates as described in Exhibit H for Bin Service, Drop Box/Compactor Service, or for additional Cart Service beyond one time per week Collection.

1.100 Residential Premises

"Residential Premises" means a site occupied by a building zoned for Residential occupation where Solid Waste, Recyclable Materials, or Compostable Materials are generated or accumulated. No place used primarily for business purposes shall be considered a Residential unit.

1.101 Residue or Residual (or any variation thereof)

"Residue or Residual (or any variation thereof)" means those materials which, after Processing, are Disposed rather than Recycled due to either the lack of markets for materials or the inability of the Processing Site to capture and recover the materials.

1.102 Re-Use Vendor

"Re-Use Vendor" means a vendor (e.g., St. Vincent DePaul, Goodwill Industries, or other non-profit or for-profit organizations) that will collect used furniture and other re-usable items for purposes of reuse rather than Disposal.

1.103 Route Review(s)

"Route Review(s)" mean a visual inspection of Containers along a hauler route for the purpose of determining contamination, and may include mechanical methods such as the use of cameras with a view of the hopper and using video object recognition technology.

1.104 Salvageable Material

"Salvageable Material" means those Discarded Materials that may be reused in their existing form or may be reused after some form of Processing including, but not limited to, Compostable Materials and Recyclable Materials.

1.105 SB 1383

"SB 1383" means the Short-Lived Climate Pollutants Act of 2016 (an act to add Sections 39730.5, 39730.6, 39730.7, and 39730.8 to the Health and Safety Code, and to add Chapter 13.1 [commencing with Section 42652] to Part 3 of Division 30 of the Public Resources Code, relating to methane emissions), also commonly referred to as "SB 1383," as amended, supplemented, superseded, and replaced from time to time.

1.106 Service Level

"Service Level" means and refers to the number and size of a Customer's Container(s) and the frequency of Collection service.

1.107 Service Type

"Service Type" refers separately to the following types of Solid Waste, Recyclable Materials, Compostable Materials and Food Scraps Collection services for each of the following types of services: Single-Family, Multi-Family Cart Service, Multi-Family Bin Service, Commercial Cart Service, Commercial Bin Service, Drop Box/Compactor Service, and City facilities service.

1.108 Single-Family

"Single-Family" means each unit used for or designated as a Single-Family Premises, including each unit of a duplex, triplex, townhouse or condominium which receives individual Solid Waste, Recyclable Materials, and/or Compostable Materials Collection services.

1.109 Single-Stream Recyclable Material

"Single-Stream Recyclable Material" means Recyclable Materials Collected in one stream that includes both paper and mixed container materials placed in one Container. For the purposes of this Agreement, Single-Stream Recyclable Materials include those Recyclable Materials specified in Section 1.96 except for Construction and Demolition Debris.

1.110 Small Commercial Generator

"Small Commercial Generator" means any Commercial Generator which generates less than ninety-six (96) gallons of Solid Waste per week and which subscribes to Cart Service for all Collection services.

1.111 Solid Waste

"Solid Waste" means all Putrescible and Nonputrescible solid, semisolid, and associated liquid waste, including garbage, trash, refuse, rubbish, ashes, industrial wastes, dewatered, treated or chemically fixed sewage sludge which is not a Hazardous Waste, special waste, and other discarded solid and semi-Solid Wastes, which the City Municipal Code requires Generators within the City to set out for Collection. Solid Waste does not include the following:

- Salvageable Materials set out for Collection in a Container, which is specifically designated for Recyclable Materials or Compostable Materials, or any other City-approved Container;
- Hazardous Waste;
- Low-level radioactive waste;
- Infectious Waste provided that Infectious Waste, whether treated or untreated, is not Disposed of at a Solid Waste facility. Infectious Waste which has been treated and which is deemed to be Solid Waste shall be considered Solid Waste under this definition;
- Abandoned automobiles;
- Compostables; and,
- Construction and Demolition Debris.

Solid Waste includes Salvageable Materials only when such materials are included for Collection in a Solid Waste Container.

1.112 Source Separated

"Source Separated" means the segregation from Solid Waste, by the Generator, of materials designated for separate Collection for some form of materials recovery or special handling.

1.113 Special District

"Special District" means a local agency formed to provide specialized services within defined geographic boundaries.

1.114 State

"State" means the State of California.

1.115 StopWaste.Org

"StopWaste" means the Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board and the Energy Council operating as one public agency.

1.116 Storage Capacity

"Storage Capacity" means the capacity of the Contractor to store Recyclable Materials under the terms of its facility permits

1.117 Street Sweeping Services Fee

"Street Sweeping Services Fee" means the fee paid by Contractor to City to offset costs of street sweeping services as pursuant to Section 7.3.

1.118 Subcontractor

"Subcontractor" means a party who has entered into a contract, express or implied, with the Contractor for the performance of an act that is necessary for the Contractor's fulfillment of its obligations under this Agreement and approved by the City in accordance with Section 12.6 of this Agreement for services such as, but not limited to, Collection, Transportation, Processing, Diversion, sales or marketing of Recyclable Materials or Compostable Materials, staffing, public education, Customer service, and Billing, or other service whose cost is a substantial portion of the Contractor's total annual cost. Notwithstanding any other provision in this Agreement, vendors providing materials, supplies, or professional business services to Contractor, and Approved Facilities that are not Affiliates of Contractor, shall not be considered Subcontractors for any purpose under this Agreement.

1.119 Supermarket

"Supermarket" means a full-line, self-service retail store with gross annual sales of two million dollars ($2,000,000), or more, and which sells a line of dry grocery, canned goods, or nonfood items and some perishable items.

1.120 Temporary Homeless Encampment

"Temporary Homeless Encampment" means a transient or interim gathering or community residing out of doors on a site with services provided and supervised by a sponsor or managing agency comprised of temporary enclosures (tents and other forms of portable shelter that are not permanently attached to the ground), which may include common areas designed to provide food, living and sanitary services to occupants of the encampment.

1.121 Term

"Term" means the duration of this Agreement, as provided for in Article 3.

1.122 Third Party Fee(s)

"Third Party Fee(s)" means a defined fee or surcharge that is levied or assessed on each Solid Waste, Recycling, or Compostables account by a third party other than the City or Contractor, either identified in this Agreement or which may be levied or imposed by a third party during the Term of this Agreement, including, by way of example, fees levied by the Alameda County Waste Management Authority.

1.123 Tier One Commercial Edible Food Generators

"Tier One Commercial Edible Food Generator" means a Commercial Edible Food Generator that is one of the following:

- Supermarket.
- Grocery Store with a total facility size equal to or greater than 10,000 square feet.
- Food Service Provider.
- Food Distributor.

- Wholesale Food Vendor.

1.124 Tier Two Commercial Edible Food Generators

"Tier Two Commercial Edible Food Generator" means a Commercial Edible Food Generator that is one of the following:

- Restaurant with 250 or more seats, or a total facility size equal to or greater than 5,000 square feet.
- Hotel with an on-site food facility and 200 or more rooms.
- Health Facility with an on-site food facility and 100 or more beds.
- Large Venue.
- Large Event.
- A State agency with a cafeteria with 250 or more seats or total cafeteria facility size equal to or greater than 5,000 square feet.
- A Local Education Agency facility with an on-site food facility.

1.125 Ton (or Tonnage)

"Ton (or Tonnage)" means a unit of measure for weight equivalent to two thousand (2,000) standard pounds where each pound contains sixteen (16) ounces.

1.126 Transfer

"Transfer" means the act of moving the materials Collected by Contractor in their route vehicles into larger vehicles for Transport to other facilities for the purpose of Processing or Disposing of such materials.

1.127 Transfer Station

"Transfer Station" includes those facilities utilized to receive Solid Waste, Recyclable Materials, or Compostable Materials, temporarily store, and Transfer the materials from smaller to larger vehicles for transport.

1.128 Transformed

"Transformed" means incinerated, pyrolysised, distilled, gasified or biologically converted in a way other than Composted.

1.129 Transportation

"Transportation" means the act of conveyance from one place to another or state of being transported.

1.130 Unacceptable Spillage

"Unacceptable Spillage" means any Solid Waste, Recyclable Materials or Compostable Materials spilled or left at an established Collection site by Contractor after Collection, with the exception that small particles of grass clippings, leaves, and other small Yard Trimmings will not be considered Unacceptable Spillage.

1.131 Used Motor Oil and Filter

"Used Motor Oil and Filter" means motor oil and oil filter that has been used in a motor vehicle, and subsequently removed from such vehicle.

1.132 Used Oil Recovery Kit

"Used Oil Recovery Kit" means a kit containing: one (1) reusable plastic jug of at least one (1) gallon capacity with a watertight screw-on top to contain used motor oil; one (1) plastic disposable resealable bag of sufficient capacity to accommodate one (1) used motor oil filter; and, a flyer, brochure, or other informational media approved by the City Contract Manager intended to educate Customers about the Used Motor Oil and Filter Collection program and the benefits resulting from the proper handling of Used Motor Oil and Filters. The Used Oil Recovery Kit is to be provided to Customers by Contractor to recover Used Motor Oil and Filters from Single-Family and Multi-Family residents.

1.133 U-Waste

"U-Waste" means all wastes as defined by Title 22, Subsections 66273.1 through 66273.9 of the California Code of Regulations. These include, but are not limited to, batteries, fluorescent light bulbs, mercury switches, and E-Waste.

1.134 Vehicle Impact Fee

"Vehicle Impact Fee" means the fee paid by Contractor to reimburse the City for street maintenance costs incurred as a result of Collection Vehicles traveling on City streets pursuant to Section 7.5.

1.135 Yard Trimmings

"Yard Trimmings" means those Discarded Materials that will decompose and/or putrefy, including, but not limited to, green trimmings, grass, weeds, leaves, prunings, branches, dead plants, brush, tree trimmings, dead trees, small pieces of unpainted and untreated wood, and other types of Organic Waste. Yard Trimmings are a subset of Compostable Materials. Yard Trimmings placed for Collection may not exceed six (6) inches in diameter and five (5) feet in length.

ARTICLE 2. REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR

2.1 Corporate Status

Contractor is a corporation duly organized, validly existing and in good standing under the laws of the State of California. It is qualified to transact businesses in the State of California and has the power to own its properties and to carry on its business as now owned and operated and as required by this Agreement.

2.2 Corporate Authorization

Contractor has the authority to enter into and perform its obligations under this Agreement. The Board of Directors of Contractor (or the shareholders, if necessary) has taken all actions required by law, its articles of incorporation, its bylaws, or otherwise, to authorize the execution of this Agreement. The Person signing this Agreement on behalf of Contractor has authority to do so, and the Corporate Secretary's Certificate in Exhibit K confirms this. This Agreement constitutes the legal, valid, and binding obligation of the Contractor.

2.3 Agreement Will Not Cause Breach

To the best of Contractor's knowledge, after reasonable investigation, the execution or delivery of this Agreement or the performance of this Agreement by Contractor of its obligations hereunder does not conflict with, violate, or result in breach of: (i) any Applicable Law; or (ii) any term or condition of any judgment, order or decree of any court, administrative agency or other governmental authority, or any Agreement or instrument to which Contractor is a party or by which Contractor or any of its properties or assets are bound, or constitutes a default thereunder.

2.4 No Litigation

To the best of Contractor's knowledge, after reasonable investigation, there is no action, suit, proceeding or investigation, at law or in equity, before or by any court or governmental authority, commission, board, agency or instrumentality decided, pending or threatened against Contractor wherein an unfavorable decision, ruling or finding, in any single case or in the aggregate, would:

A. Materially adversely affect the performance by Contractor of its obligations hereunder;

B. Adversely affect the validity or enforceability of this Agreement; or,

C. Have a material adverse effect on the financial condition of Contractor, or any surety or entity guaranteeing Contractor's performance under this Agreement.

2.5 No Adverse Judicial Decisions

To the best of Contractor's knowledge, after reasonable investigation, there is no judicial decision that affects the validity of this Agreement and may subject this Agreement to legal challenge.

2.6 No Legal Prohibition

To the best of Contractor's knowledge after reasonable investigation, there is no Applicable Law in effect on the date Contractor signed this Agreement that would prohibit the Contractor's performance of its obligations under this Agreement and the transactions contemplated hereby.

2.7 Contractor's Statements

The Contractor's Proposal and any other supplementary information submitted to the City, which the City has relied on in awarding and entering this Agreement, do not: (i) contain any untrue statement of a material fact, or (ii) omit to state a material fact that is necessary in order to make the statements made, in light of the circumstances in which they were made, not misleading.

2.8 Contractor's Investigation

Contractor has made an independent investigation (satisfactory to it) of the conditions and circumstances surrounding the Agreement and the work to be performed hereunder. Contractor has taken such matters into consideration in entering this Agreement to provide services in exchange for the compensation provided for under the terms of this Agreement.

2.9 Ability to Perform

Contractor possesses the business, professional, and technical expertise to: (i) manage, Collect, Transport, and Dispose of Solid Waste; (ii) manage, Collect, Transport, and Process Recyclable Materials, Organic Materials, and Construction and Demolition Debris; and, (iii) record, report, and maintain information as required by this Agreement. Contractor possesses directly or contractually the equipment, facility capacity, information systems, reporting capabilities, and employee resources required to perform this Agreement throughout its Term.

2.10 Voluntary Use of Approved Disposal Site

The Contractor, without constraint and as a free-market business decision in accepting this Agreement, agrees to use the Approved Disposal Site for the purposes of Disposing of all Solid Waste Collected in the City. Such decision by Contractor in no way constitutes a restraint of trade notwithstanding any Change in Law regarding flow control limitations or any definition thereof.

ARTICLE 3.
TERM OF AGREEMENT

3.1 Effective Date and Commencement Date

The Effective Date of this Agreement shall be the date the latter of the two Parties signs the Agreement provided that City Council has taken action approving this Agreement and no restraining order of any kind has been issued.

The Commencement Date of this Agreement shall be July 1, 2010, and shall be the date Contractor commences to provide Collection, Transportation, and Processing services and all other obligations described by this Agreement. During the time between the Effective Date and Commencement Date, Contractor shall perform any and all activities necessary to prepare itself to start Collection, Transportation, and Processing services required by this Agreement on the Commencement Date.

3.2 Conditions to Effectiveness of Agreement

The obligation of City to permit this Agreement to become effective and to perform its undertakings provided for in this Agreement is subject to the satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City.

3.2.1 Accuracy of Representations

The representations and warranties made in Article 2 of this Agreement are true and correct on and as of the Effective Date.

3.2.2 Absence of Litigation

There is no litigation pending on the Effective Date in any court challenging the award or execution of this Agreement or seeking to restrain or enjoin its performance.

3.2.3 Furnishings of Insurance and Bond

Contractor has furnished evidence of the insurance required by Section 9.5 that is satisfactory to the City; provided evidence of its ability to secure the performance bond required by Section 9.6 that will be effective on the Commencement Date of the Agreement.

3.2.4 Secretary's Certification

Exhibit K of this Agreement shall have been signed by the secretary of the Contractor and identifies the name of the Contractor's representative that is authorized to execute this Agreement.

3.3 Term

The Term of this Agreement shall be twenty (20) years from 12:01 a.m. on July 1, 2010 (Commencement Date) to midnight June 30, 2030, unless extended by City pursuant to Section 3.4 or terminated in accordance with Section 11.3.

3.4 Option to Extend Term

At the City's sole discretion, the Term of this Agreement may be extended, for up to sixty (60) months after June 30, 2030, i.e., until June 30, 2035, in one or more periods of at least twelve (12) months each pursuant to the terms and conditions of this Agreement. If the City elects to exercise this option, it shall give written notice of its election, specifying the number of months by which it wishes to extend the Term, to the Contractor, one hundred eighty (180) calendar days prior to the initial expiration date or extended termination date of this Agreement. At the end of the Term, the City may renegotiate the terms and

conditions of the Agreement with the Contractor (subject to agreement by the Parties), or the City may select another means to procure or provide Collection services.

If the City chooses to exercise its right to extend the Agreement and the Contractor demonstrates to the City's satisfaction that Contractor is in default of its loan covenants related to loans secured for equipment, property, or operations for the purposes of performing its obligations of this Agreement, the Parties shall initiate a cost-based rate adjustment process (as described in Article 8 and Exhibit J) to review Contractor's actual costs that will result in Rates being set at a level that should allow Contractor to fulfill its loan covenants, provided that such loan covenants are common in the industry for similar types of loans.

If the Parties agree to extend the Agreement, the Parties shall meet and confer to discuss Collection vehicle and Container acquisition needs and related costs, if any. The equipment replacement plans presented on Contractor's depreciation schedule (on Form 8 in Exhibit G) in Contractor's proposed costs shall serve as the basis for negotiations. The extension to the Agreement may be approved if the Parties agree on how depreciation and interest expenses shall be treated during the extension period. Other terms and conditions of the Agreement may also be renegotiated by the Parties.

The City has no obligation to renegotiate, renew, or extend the rights granted to Contractor beyond the initial twenty-year (20-year) Term of the Agreement.

ARTICLE 4.
SCOPE OF AGREEMENT

4.1 Scope of Agreement

Subject to Section 4.2, the Agreement granted to Contractor shall be exclusive for Collection, Transportation, Processing, and/or Disposal of Solid Waste, Recyclable Materials, Construction and Demolition Debris and Compostable Materials generated in the City, except where otherwise precluded by federal, State and local laws and regulations or where other current programs provide for Collection of Household Hazardous Waste.

The Contractor, or its Subcontractor(s), shall be responsible for the following, as responsibilities may be limited by Section 4.2 or precluded by Applicable Law:

A. Collecting all Solid Waste, Recyclable Materials, Construction and Demolition Debris and Compostable Materials generated in the City and placed by Single-Family, Multi-Family, and Commercial Generators in Containers.

B. Collecting Solid Waste, Recyclable Materials, Construction and Demolition Debris and Compostable Materials from City facilities (as defined in Exhibit A of this Agreement) and at special events (as defined in Exhibit B of this Agreement) and Collecting Solid Waste and Recyclable Materials from public litter and Recycling Containers (as defined and identified in Exhibit A of this Agreement).

C. Transporting Collected materials to the Approved Disposal Site, Approved Composting Site, Approved C&D Processing Site or Approved Recyclables Processing Site.

D. Processing and marketing, or arranging for Processing and marketing of Recyclable Materials, Construction and Demolition Debris and Compostable Materials Collected in the City by Contractor.

E. Providing public education to residents and businesses located in the City as defined in Exhibits C and C1.

F. Providing Customer service and Billing service as necessary to fulfill its obligations under this Agreement.

G. Implementing all services in accordance with the implementation plan in Exhibit D.

H. Furnishing all labor, supervision, vehicles, Containers, other equipment, materials, supplies, and all other items and services necessary to perform its obligations under this Agreement.

I. Paying all expenses related to provision of services required by this Agreement including, but not limited to, taxes, regulatory fees, City fees, utilities, etc.

J. Performing or providing all other services necessary to fulfill its obligations under this Agreement.

K. Providing all services required by this Agreement in a thorough and professional manner so that residents, businesses, and the City are provided timely, reliable, courteous and high-quality service at all times.

L. Performing all services in substantial accordance with the Contractor's Proposal and in full accordance with this Agreement at all times using best industry practice for comparable operations. If the Contractor's Proposal and Agreement conflict, the terms and provisions of the Agreement shall prevail.

M. Complying with Applicable Law.

N. Providing reports in a timely manner with details as requested by the City pursuant to Sections 6.3, 6.4, and 6.5.

The enumeration and specification of particular aspects of service, labor, or equipment requirements shall not relieve Contractor of the duty of accomplishing all other aspects necessary to fulfill its obligations under this Agreement whether such requirements are enumerated elsewhere in the Agreement or not, unless excused in accordance with Section 11.7.

This Agreement grants to Contractor and Customers a permit to encroach on the public right of way, including, if necessary, bike lanes, for that period during which Containers are permitted to be placed in such right of way for Curbside Collection from a Residential or Commercial Customer.

4.2 Limitations to Scope

This Agreement shall be exclusive except as to the following materials listed in this Section. The award of this Agreement shall not preclude the categories of Solid Waste, Recyclable Materials, Construction and Demolition Debris and Compostable Materials listed below from being delivered to and Collected and Transported by others provided that nothing in this Agreement is intended to or shall be construed to excuse any Person from obtaining any authorization from City which is otherwise required by law:

A. **Self-Hauled Materials**. A Commercial business Owner or Resident may Dispose of Solid Waste, Recyclable Materials, Construction and Demolition Debris, and Compostable Materials generated in or on their own Premises with their own vehicle, or their employee's vehicle, consistent with Chapter 8.08 of the City of Livermore Municipal Code.

B. **Donated Materials**. Recyclable Materials and Compostable Materials which are Source Separated at any Premises by the Generator and donated to youth, civic, or charitable organizations;

C. **Donated or Purchased Recyclable or Compostable Materials.** Recyclable Materials and Compostable Materials which are Source Separated at any Premises by the Generator and donated by, or purchased from, the service recipient in a manner consistent with provisions Title 8, Health and Safety, Chapter 8.08, Solid Waste Management of the City's Municipal Code;

D. **Beverage Containers**. Containers delivered for Recycling under the California Beverage Container Recycling and Litter Reduction Act, Section 14500, et seq. California Public Resources Code;

E. **Materials Removed by Customer's Contractor as Incidental Part of Services**. Solid Waste, Recyclable Materials, Compostable Materials and/or Construction and Demolition Debris removed from a Premises by a contractor (e.g., gardener, landscaper, tree-trimming service, or construction contractor) as an incidental part of the service being performed and such contractor removes materials with its own employees and its own vehicles at no additional or separate fee. The determination of whether removal of material is incidental to the services being performed may, for example, be based on whether fees are charged on a volume or hourly basis, and the reasonableness of those fees relative to those charged by third parties for comparable services;

F. **Animal, Grease Waste, and Used Cooking Oil**. Animal waste and remains from slaughterhouse or butcher shops, grease, or used cooking oil;

G. **Sewage Treatment By-Product**. By-products of sewage treatment, including sludge, sludge ash, grit and screenings;

H. **Hazardous Waste and Designated Waste**. Hazardous Waste and Designated Waste regardless of its source; and,

I. **Materials Generated by Government Customers**. Materials generated by Government Customers located in the City, with the exception of federal facilities which are subject to the terms and conditions of this Agreement, provided that the Governmental Customer has arranged services with other Persons or has arranged services with the Contractor through a separate agreement.

Contractor acknowledges and agrees that the City may permit other Persons besides the Contractor to Collect any and all types of materials excluded from the scope of this Franchise, as set forth above, without seeking or obtaining approval of Contractor. If Contractor can produce evidence that other Persons are servicing Collection Containers or are Collecting and Transporting Solid Waste, Recyclable Materials, Compostable Materials and/or Construction and Demolition Debris in a manner that is not consistent with the City's Municipal Code, it shall report the location, the name and phone number of the Person or company to the City along with Contractor's evidence of the violation of the exclusiveness of this Franchise.

The City shall not be responsible for any lost profits or losses claimed by Contractor to arise out of limitations of the scope of the Agreement set forth herein. In such an event, it shall be the responsibility of Contractor to minimize the financial impact to other services being provided as much as possible.

4.3 City-Directed Changes

A. **Types of Changes.** City may, by written notice, direct Contractor to perform additional services or modify existing services. For example, and without limitation, the City may request the following:

1. Collection of certain materials, which were originally Solid Waste, but during the Term can, in the reasonable opinion of the City, be economically Diverted from Disposal;
2. Inclusion of new Diversion programs;
3. Expansion of public education activities;
4. Elimination of programs;
5. Modification of the manner in which Contractor performs existing services;
6. Performance of pilot programs;
7. Implementation of innovative services, which may entail new Collection methods, targeted routing, different kinds of services, different types of Collection vehicles or Collection Containers, and/or new requirements for Generators, but nothing herein shall be construed so as to materially impair the exclusive rights of Contractor granted hereunder;
8. Transportation of materials to an Approved Facility(ies) other than that specified on the Effective Date;
9. Purchase of new Collection vehicles, Containers, or other equipment if the Agreement is extended pursuant to Section 3.4 of this Agreement; and,
10. Implementation of other program or service adjustments as may be determined by the City.

B. **Procedure for Making Changes in Scope.** Contractor shall present, within thirty (30) calendar days of the City Contract Manager's written request, a written proposal to perform additional or modified services. Contractor shall not be compensated for the proposal preparation costs or costs incurred during the negotiation of its proposal for the change in scope of services. At a minimum, the proposal shall contain a complete description of the following:

1. Collection methodology to be employed (equipment, staffing requirements, etc.).
2. Equipment to be used (vehicle number, types, capacity, age, etc.).

3. Labor requirements (number of employees by classification; estimated hours per year per employee).

4. Estimated Customer participation level.

5. Type of materials to be Collected and Containers to be used and estimated volumes per week and per year.

6. Provision for program publicity/education/marketing.

7. Five-year projection of the financial results of the program's operations in a balance sheet and operating statement format including documentation of the key assumptions underlying the projections and the support for those assumptions, giving full effect to the savings or additional costs to existing services.

8. Plans and schedule for implementing the service change.

The City Contract Manager shall review the Contractor's Proposal for the change in scope of services. The City Contract Manager may negotiate with the Contractor to recommend that the City Council amend the Agreement to reflect the change in scope or the City Contract Manager may choose not to negotiate with the Contractor and not recommend that the City Council amend the Agreement.

If the City Contract Manager chooses to negotiate with the Contractor and the Contractor and City cannot agree on terms and conditions of such services within one hundred twenty (120) calendar days from the date when City Contract Manager first requests a proposal from Contractor to perform such services, Contractor acknowledges and agrees that City may permit other Persons besides Contractor to provide additional Solid Waste, Recyclable Materials, and Compostable Materials Collection and Diversion services not otherwise contemplated by this Agreement.

C. **Adjustment to Contractor's Compensation.** If the City directs a change in one or more Approved Facilities, Contractor may be entitled to an adjustment in its compensation in accordance with Section 8.5.

D. **Implementation of New Services.** The Contractor's implementation of the new services, modification to existing service, or change in the Approved Facilities shall occur in a timely, smooth, and seamless manner such that Customers and/or Generators do not experience disruption in Collection services. Contractor shall be responsible for managing the implementation of new or modified Collection services or change in the Approved Facilities and other related services and shall do so in accordance with an implementation plan that has been approved by the City.

E. **Monitoring and Evaluation of Changes in Scope.** At the City Contract Manager's request, the Contractor shall meet with the City Contract Manager to describe the progress of implementing the change in scope. If applicable, and requested by the City Contract Manager, the Contractor shall document the results of the new or modified services on a monthly basis, including, at a minimum, the Tonnage Diverted by material type, the end use or processor of the Diverted materials, the cost per Ton for Transporting and Processing each type of material, and other such information requested by the City Contract Manager that is necessary to evaluate the performance of each program change.

At each status meeting, the City Contract Manager and Contractor shall have the opportunity to revise the program or services based on mutually agreed upon terms, consistent with City Council direction, in accordance with provisions of this Section. The City shall have the right to terminate a program if, in its sole discretion, the Contractor is not achieving the program goals and objectives in a cost-

effective manner. Before such termination, the City Contract Manager shall meet and confer with the Contractor for a period not to exceed ninety (90) calendar days to resolve the City's concerns ("meet and confer period"). Thereafter, the City may utilize a third party to perform these services if the City reasonably believes the third party can improve Contractor's performance and/or cost. Notwithstanding these changes, Contractor shall continue the program during the "meet and confer period" and, thereafter, until the third party takes over the program.

4.4 Transition to Next Contractor at End of Agreement

If applicable, before expiration or earlier termination of this Agreement, Contractor will take direction from the City Contract Manager and subsequent contractor to assist in a timely and orderly transition of services from Contractor to subsequent contractor. In response to the City Contract Manager's direction, Contractor shall provide then-current route lists, which identify each Customer on the route, its Service Level (number of Containers, Container sizes, frequency of Collection, scheduled Collection day), and any special Collection notes, and detailed then-current Customer account and Billing information. Contractor may, but shall not be obliged to, sell Collection vehicles, equipment, or facilities to the next contractor.

4.5 City Free to Negotiate with Third Parties

The City may investigate all options for Collection, Transportation, Processing, and Disposal services that will be scheduled to commence after the expiration of the Term or earlier termination of this Agreement, including disaster debris hauling and monitoring services. Without limiting the generality of the foregoing, the City may solicit proposals from Contractor and from third parties for the provision of Collection, Transportation, Processing, or Disposal of Solid Waste, Recyclable Materials, Construction and Demolition Debris and Compostable Materials services, and any combination thereof. The City may negotiate and execute agreements for such services that will take effect upon the expiration or earlier termination of this Agreement.

ARTICLE 5. COLLECTION SERVICES

5.1 General

The work to be done by Contractor pursuant to this Agreement shall include the furnishing of all labor, supervision, equipment, materials, supplies, and all other items necessary to perform the services required by this Agreement. The enumeration and specification of requirements for particular items of labor or equipment shall not relieve Contractor of the duty to furnish all others, whether enumerated elsewhere in the Agreement or not.

The work to be done by Contractor pursuant to this Agreement shall be accomplished in a thorough and professional manner so that the residents and businesses within the City are provided reliable, courteous, and high-quality service at all times. The enumeration and specification of requirements for particular

aspects of service quality shall not relieve Contractor of the duty of accomplishing all other aspects, whether they are enumerated elsewhere in the Agreement or not.

Contractor acknowledges that the City is committed to Diverting materials from Disposal through the implementation of source reduction, reuse, Recycling and Composting programs and that the City may at some time in the future implement, in accordance with Section 4.3, new programs that may impact the overall quantity or composition of Solid Waste, Recyclable Materials, and Compostable Materials to be Collected by Contractor.

5.2 Solid Waste Services

5.2.1 Single-Family Solid Waste Collection Service

Contractor shall Collect Solid Waste in Contractor-provided Carts once per week from Single-Family Premises and Transport all Solid Waste to the Approved Disposal Site for Disposal.

Contractor shall provide each Customer with a 20-, 32-, 64-, or 96-gallon Cart (or similar sizes approved by the City Contract Manager) as requested by the Customer. For Single-Family Premises, Contractor shall Collect Carts from the Curbside (or at other designated locations for townhomes, condominiums, or attached Single-Family Premises) unless the Occupant is physically unable to place the Container Curbside and such Person has applied for and been approved for a Curbside service exemption due to a disability defined by the Americans with Disabilities Act pursuant to Section 6.16. In such case, Contractor shall Collect Carts from an alternative service location (such as the side yard or back yard) at no additional fee. Customers that are physically capable of moving Carts Curbside may choose to subscribe to side yard or back yard service and Contractor shall Collect Carts from the alternative service location and may charge the Customer for the extra service in accordance with the City-approved Rate on the Rate Schedule in Exhibit H.

Contractor shall replace Solid Waste Carts that have been stolen or damaged at no cost to the Customer not more than once per year. Additional Cart replacements shall be charged to the Customer at a Rate approved by the City as shown on the Rate Schedule in Exhibit H.

5.2.2 On-Call Clean-Up Service

A. **Single Family On-Call Clean-Up Service**

1. **General Requirements.** Contractor shall provide each Single-Family Customer with three (3) On-Call Single-Family Clean-Up Services at the Curb (or at other designated location for townhomes, condominiums, or attached Single-Family Premises) per year at the Customer's request at no charge. The Contractor shall promote, manage, staff, and operate the On-Call Single-Family Clean-Up Service.

   Contractor shall promote the service annually by preparing billing inserts to be included in each Customer's bill and by advertising in a minimum of two (2) local newspapers as approved by the City Contract Manager. The City Contract Manager shall approve all advertisements or public announcements related to On-Call Single-Family Clean-Up Service.

2 **Scheduling.** Contractor shall provide clean-up services Monday through Friday except on Holidays. The Contractor shall provide the service to the Customer within five (5) Business Days

of the Customer's request on a day agreed to by the Customer and Contractor. Contractor may provide additional on-call clean-up services for a Customer beyond three (3) per year, and in such case shall be entitled to charge the Customer for such service at the City-approved Rate on the Rate Schedule in Exhibit H.

3 **Accepted Materials.** During each On-Call Single-Family Clean-Up Service, the Single-Family Customer may deliver Curbside, and Contractor shall accept for Collection, the materials listed below:

a. Up to three (3) cubic yards of Solid Waste, Source Separated Recyclables and Yard Trimmings, including clean, unfinished wood as described in Section 5.2.2.A.5 Collection, Recycling and Reuse Methods.

b. One (1) Appliance or one (1) E-Waste item.

c. Additional Appliances, Bulky Items, and E-Waste items if the Generator or Customer pays an additional fee at the City-approved Rate on the Rate Schedule in Exhibit H.

d. One (1) item of furniture (e.g., sofa, table, bedframe, mattresses, box spring, etc.) weighing no more than one hundred fifty (150) pounds.

Contractor may reject: E-Waste (with the exception that one E-Waste item is allowed if an Appliance is not Collected); liquids or sludges; materials which exceed five (5) feet in length and are not bundled items of furniture that exceed one hundred fifty (150) pounds per item; painted or stained wood; automotive batteries; Used Motor Oil and Filters; pesticides; not Source Separated Construction and Demolition Debris; Plant Debris (in order to comply with the Alameda County Waste Management Authority Ordinance 2008-01); Hazardous Waste; or Infectious Waste. Contractor may reject a single item that weights more than one hundred fifty (150) pounds (excluding Bulky Items) unless Customer has paid an additional fee for service at the City-approved Rate on the Rate Schedule in Exhibit H. Contractor may also reject un-containerized materials, materials that are not bundled, or other items that exceed the Collection abilities as determined by the Contractor and approved by the City Contract Manager.

If the Contractor determines that the Single-Family Customer has set out more than three (3) cubic yards of materials for the Curbside Collection, Contractor agrees to Collect the additional materials that same day. At the Customer's option, the Contractor shall allow the Customer to use their second and/or third On-Call Single-Family Clean-Up Services that same day, if available, or charge the Customer an additional fee to Collect the materials in excess of the three (3) cubic yards, according to the City-approved Rate Schedule in Exhibit H.

Each Customer shall be instructed to place all items to be Collected by Contractor Curbside by 6:00 a.m. on pick-up day to ensure Collection.

4. **Processing and Disposal**. Contractor shall Collect materials and Transport the materials to Approved Facilities with the exception of Appliances and E-Waste that may be delivered to a recycler or dismantling company and furniture and other reusable items that may be delivered to a third party for reuse or Recycling. The site or site(s) and/or Subcontractor(s) that Contractor selects to handle, Process, and/or Dispose of Appliances and E-Waste shall be approved by the City Contract Manager.

5. **Collection, Recycling, and Reuse Methods.** Contractor shall instruct its customer service agents to query each Customer about the amounts and types of materials the Customer plans to set out. The customer service agents shall instruct Customers to separate their materials in order to facilitate Recycling and Composting and shall inform Customers of how exactly to prepare the materials they set out at the Curb. For each On-Call Single-Family Clean-Up Service, the Contractor will dispatch regular route Collection vehicle drivers to the Premises to separately Collect Solid Waste, Recyclable Materials, and/or Compostable Materials. Drivers will document the estimated amount of material removed. Contractor shall Transport materials Collected to the Approved Facilities. All other material (such as Appliances, E-Waste, furniture) that were not Collected by the regular Solid Waste, Recyclable Materials, or Compostable Materials route vehicles will be Collected by a specially-dispatched flat-bed truck. Through Contractor's Collection approach, the following materials, at a minimum, shall be Collected separately and Diverted through Recycling, Composting, or other Diversion efforts: clean, untreated wood and Yard Trimmings, cardboard, and Appliances.

   Contractor shall deliver Appliances to a local recycler, and all other items will be stored at a staging area at the Contractor's Livermore yard. Contractor shall encourage and facilitate the participation of Re-Use Vendor(s) to select and sort out Recyclable and reusable items at the point of Collection or at Contractor's Livermore yard. Marketing of reusable materials that are designated for reuse by the Re-Use Vendor(s) may include clothing, toys, house wares, linens, wood furniture, tables, chairs, working computers, undamaged monitors, cell phones, books, working small Appliances, working VCRs and DVDs, and working stereos.

6. **Handling Bulky Items and E-Waste**. Note that pursuant to Section 5.2.2.A.3, Contractor shall Collect one Appliance or one E-Waste item at no cost per On-Call Single-Family Clean-Up Service. This Section addresses all other Appliances, Bulky Items, and E-Waste items. If the Customer has not paid for removal of Bulky Items or E-Waste, Contractor is not required to Collect the Bulky Item or E-Waste during the On-Call Single-Family Clean-Up Services. In such case, Contractor shall be required to attach a tag to the Bulky Item or E-Waste informing the Generator that the Generator must contact Contractor to arrange for and pay for separate Collection of the Bulky Item and E-Waste. Alternatively, the Generator may contact a Re-Use Vendor for Collection of the Bulky Item.

7. **Handling Major Appliances.** Major Appliances shall be reused, Recycled, or Disposed by Contractor in accordance with requirements of Applicable Law.

B. **Multi-Family On-Call Clean-Up Service**

1. Multi-Family properties will receive a free 20-Yard Drop Box once every 12 months for an On-Call Multi-Family Clean-Up Service.

2. The Multi-Family properties will be allowed to keep the Drop Box for seven consecutive days; and the Box will be removed, emptied, and returned as often as necessary, to a maximum of one time per day Monday through Friday.

3. Contractor will coordinate with the Property Manager and the Property Manager will inform their residents when the On-Call Multi-Family Clean-Up Service will occur.

4. Contractor will create outreach documents to assist the Property Managers with program requirements consistent with Section 5.17 below.

5. Contractor shall provide, on its website, the ability for Customers to electronically request On Call Multifamily Clean-Up Service.

5.2.3 On-Call Bulky Item Collection

Residential and Commercial Customers may make special arrangements with the Contractor for the Collection and Recycling or Disposal of Bulky Items and Contractor shall charge such Customers for Collection of such items in accordance with City-approved Rates on the Rate Schedule in Exhibit H. Contractor shall arrange for repair, refurbishing, or upgrading electronic equipment for donation or resale to the greatest extent practical. Additional requirements related to Bulky Item services include the following:

A. Contractor shall prioritize the re-use and Recycling of Bulky Items. When possible, Contractor shall contact Re-Use Vendors to pick up Appliances, furniture, and other operational or functional items.

B. Appliances and other materials that cannot be re-used should be Recycled by Contractor when possible.

C. Contractor shall Dispose of Bulky Items as a last resort.

5.2.4 Multi-Family Solid Waste Collection Service

Contractor shall Collect Solid Waste from Multi-Family Premises as frequently as scheduled by the Customer, up to six (6) times per week but not less than once per week. Contractor shall offer Multi-Family Premises the option of subscribing to Cart, Bin, Drop Box, or Compactor Service. Contractor shall provide one or more Containers to such Premises as requested by Customer provided that no less than ninety-six (96) gallons of Container capacity is provided for every four (4) dwelling units in the Premises. Contractor shall Collect Solid Waste from Containers at a location selected by the Customer and approved by the City Contract Manager.

Contractor shall open and close gates, push and/or pull Containers, lock and unlock Containers, or perform other services as reasonably necessary to access and empty the Containers and shall not charge Customers any additional fees for such services.

5.2.5 Intentionally Deleted

5.2.6 Commercial and Government Cart Customers Solid Waste Collection Service

Contractor shall Collect Solid Waste from Commercial Premises, and from Government Customers that subscribe to service from Contractor, as frequently as scheduled by the Customer, up to six (6) times per week but not less than once per week with the exception that Nonputrescible Waste segregated for Collection in Drop Boxes or Compactors (serviced by roll-off Collection trucks) may be Collected less than once per week. Contractor shall offer Commercial Premises, and Government Customers that subscribe to service from Contractor, the option of subscribing to Cart, Bin, Drop Box, or Compactor Service. Contractor shall Collect Solid Waste from Containers at a location selected by the Customer and approved by the City Contract Manager.

Commercial and Government Customer Solid Waste Collection shall be performed at a time mutually agreed upon by Contractor and the Customer and which is consistent with allowable Collection hours specified in Section 5.14.3. Contractor shall allow each Commercial Customer or Government Customer to select a Collection service methodology that best suits the needs of its Premises. Specifically, the

Contractor shall offer the following Collection service methodologies to Commercial Customers and to Government Customers:

A. **Individual Cart or Bin Service.** Contractor shall allow each Commercial Premises or Government Customer to use Carts or Bins for Solid Waste Collection. Contractor shall provide each Customer with a choice of one or more Carts with capacities of 32, 64, or 96 gallons (or similar sizes approved by the City Contract Manager) or Bins with capacities ranging from 1 to 7 cubic yards (or similar sizes approved by the City Contract Manager).

B. **Centralized Bin or Cart Service.** Contractor shall allow each Commercial Premises or Government Customer to use Carts or Bins for Solid Waste Collection that are shared by the Occupants of two (2) or more adjacent Commercial Premises or Government Customers. In such case, Contractor shall provide one (1) or more Carts or Bins as requested by Customer(s) provided that no less than 96 gallons (or similar volume) of Container capacity is provided for every four (4) Commercial Premises or Government Customers. Contractor shall provide each Customer with a choice of one or more Carts with capacities ranging from 32 to 96 gallons (or similar sizes approved by the City Contract Manager) or Bins with capacities ranging from 1 to 7 cubic yards (or similar sizes approved by the City Contract Manager).

C. **Drop Boxes and Large Compactors.** Contractor shall allow a Customer to use a Drop Box or Compactor with a roll-off Compactor Container for Solid Waste Collection to meet the Customer's Solid Waste Collection needs. In such case, Contractor shall provide Customer with a choice of Container capacities ranging from 6 to 40 cubic yards (or similar sizes approved by the City Contract Manager). Contractor shall offer Customers the option to purchase or lease Compactors through either the Contractor or an outside vendor.

Contractor shall open and close gates, push and/or pull Containers, lock and unlock Containers, or perform other services as reasonably necessary to access and empty the Containers and shall not charge Customers any additional fees for such services.

Unless otherwise agreed to by the Parties, commencing January 1, 2022, Contractor shall meet the requirement of SB 1383 related to the conduct of annual compliance reviews of Commercial Solid Waste accounts producing over two (2) cubic yards of Solid Waste per week and that produce Organic Waste.

5.2.7 Handy Hauler Service

Contractor shall offer rentals of four-cubic-yard Bins to all Customers for Solid Waste Collection on a temporary basis when Customers are remodeling, cleaning their property, or performing other projects. Contractor shall charge Customers for this service in accordance with City-approved Rates on the Rate Schedule in Exhibit H.

5.3 Recycling Services

5.3.1 General

Contractor shall Collect Single-Stream Recyclable Materials that are commingled in the Customer's Recyclable Materials Collection Container provided that the Customer has Source Separated the Recyclable Materials from Solid Waste. The types of Single-Stream Recyclable Materials to be Collected

by Contractor are specified in Section 1.109. Contractor shall Transport all Recyclable Materials Collected to the Approved Recyclables Processing Site for Processing.

In accordance with Section 4.3, the City may request Contractor to modify its scope of services to include Collection of additional types of Recyclable Materials beyond those materials defined in Section 1.96. If the City requests Collection of additional Recyclable Materials, the Contractor shall not receive additional compensation for Collection service if the Recyclable Materials are placed by Generator in the Recyclable Materials Container unless Contractor can demonstrate that Collection of the additional material(s) requires modifications to Collection routes to accommodate the additional volume of the material(s). An adjustment to Contractor's Rates may be made for changes in Processing costs in accordance with Sections 4.3 and 8.5.

Contractor shall actively work with the Approved Recyclables Processing Site operator throughout the Term of this Agreement to ensure that contamination of the Recyclable Materials Collected under this Agreement and delivered to the Approved Recyclables Processing Facility remains below any limits established by Applicable Law, including, without limitation, SB 1383.

5.3.2 Single-Family Service

A. **General**. Contractor shall Collect all Single-Stream Recyclable Materials from Single-Family Premises once each week on the regularly scheduled Solid Waste Collection day. Contractor shall supply each Single-Family Customer with one (1) Cart for storage and Collection of Single-Stream Recyclable Materials. The Contractor shall provide each Customer a 96-gallon Cart (or similar size approved by the City Contract Manager) unless the Customer requests a smaller Cart size, in which case, the Contractor shall provide a 20-, 32-, or 64-gallon Cart (or similar sizes approved by the City Contract Manager).

B. **Additional Cart**. If a Customer requests a second Recyclables Cart, Contractor shall provide the Cart to the Customer for regular weekly Collection service. The Contractor shall charge the Customer for the extra Recyclables Cart at the Rate approved by the City on the Rate Schedule in Exhibit H.

C. **Collection Location including Disabled Customer Service**. For Single-Family Premises, Contractor shall Collect Carts from the Curb (or at other designated location for townhomes, condos, or attached Single-Family Premises) unless the Occupant is physically unable to place the Container Curbside and such Person has applied for and been approved for a Curbside service exemption due to a disability defined by the Americans with Disabilities Act pursuant to Section 6.16. In such case, Contractor shall Collect Carts from an alternative service location (such as the side yard or back yard) at no additional fee. Customers that are physically capable of moving Carts Curbside may choose to subscribe to side yard or back yard service. In such cases, Contractor shall Collect Carts from the alternative service location and charge the Customer for the extra service in accordance with the City-approved Rate on the Rate Schedule in Exhibit H.

D. **Cart Replacement**. Contractor shall replace Containers, which were specifically designated for Recyclable Materials that have been stolen or damaged at no cost to the Customer not more than once per year. Additional Cart replacements shall be charged to the Customer at a City-approved Rate on the Rate Schedule in Exhibit H.

E. **Setout Instructions and Notices**. Contractor shall instruct Single-Family Customers as to any necessary preparation of materials; the proper placement of Recycling Carts Curbside; and shall notify

Single-Family Generators who fail to follow these instructions. In cases of extreme or repeated failure to comply with the instructions, Contractor may decline to pick up the Recyclable Materials but must notify the Customer of the reason and what steps must be taken by Customer to recommence service.

F. **Used Motor Oil and Filter Collection**. Contractor shall Collect Used Motor Oil and Filters from Contractor-provided Used Oil Recovery Kits placed adjacent to the Carts. Contractor shall Collect Used Motor Oil and Filters once per week from Single-Family Customers who request it if the Customers place the Used Motor Oil and Filters in a Used Oil Recovery Kit provided by the Contractor. Contractor shall provide the Used Oil Recovery Kit to a Residential Customer within two (2) Business Days of such request by Customer at no additional cost to Customer. Contractor shall instruct Customers how to properly use and place Used Oil Recovery Kits for Collection. Upon Collection of a Used Oil Recovery Kit from a Generator, Contractor shall leave a clean, empty, Used Oil Recovery Kit adjacent to the Recyclables Cart. Contractor shall not be required to Collect more than one gallon of used motor oil per individual dwelling unit per week from Single-Family Customers who request it.

G. **Quarterly Textile Collection**. Contractor shall work together with the City Contract Manager to create a program for Curbside Collection of textiles that will occur for five consecutive days (Monday through Friday) once during each quarter. The City Contract Manager and Contractor shall mutually agree to the week that the textile Collection will be performed. Contractor shall notify Customers through a variety of outreach tools including their newsletter and website that, on a specific Collection day, Single-Family Customers have an opportunity to donate used clothing to those in need. Contractor shall instruct Customers to place the dry, clean clothing into a clear plastic trash bag and place it at the Curb with their regular set-out.

Contractor anticipates utilizing its flat-bed truck and Bulky Item pick-up crew and any other employees needed on those five days a quarter to Collect and bring back the bags to Contractor's Livermore yard for consolidation. As a contingency, Contractor may use vehicles from its reserve fleet for the quarterly bagged clothing Collection service. Contractor shall work with several charities to accept the materials on a rotating basis.

H. **Route Reviews**. Unless otherwise agreed to by the Parties, as described in Section 5.17.8 commencing April 1, 2022 Contractor shall conduct Route Reviews of randomly selected Containers for contaminants such that all routes are inspected annually. If contamination is found during Route Reviews, Contractor shall notify the Generator of the Recycling requirements.

5.3.3 Multi-Family, Commercial, and Government Customer Recycling Service

A. **General**. Commercial Customers, and Government Customers that subscribe to Solid Waste Collection service from Contractor (including federal Governmental Customers which are required to utilize the services of Contractor), shall have the option of subscribing to Recyclable Materials Collection services and shall pay Contractor an additional fee for such service in accordance with City-approved Rates on the Rate Schedule in Exhibit H with the exception that Collection of one 96-gallon Recyclables Cart once per week shall be provided at no cost as of the Commencement Date. Contractor shall Collect all Single-Stream Recyclable Materials placed in Containers for Collection from Multi-Family, Commercial Premises, and Government Customers at least once each week and up to six (6) times per week as scheduled by the Customer. Contractor shall provide and shall place Containers in locations determined by the Customer or Property Manager.

Multi-Family, Commercial, and Government Customers' Recyclable Materials Collection shall be performed at a time mutually agreed upon by Contractor and the Customer and which is consistent with allowable Collection hours specified in Section 5.14.3. The City reserves the right per Section 4.3 to direct Contractor to perform additional Commercial Recycling services such as the use of selective routing to Collect clean loads of Recyclable Materials in the event that Contractor is not making adequate progress toward the City's Diversion/Recycling goals.

B. **Expanding Customer Participation and the Alameda County Waste Management Authority's Mandatory Recycling Ordinance**. To expand the participation of Multi-Family, Commercial, and Government Customers in the Recyclables Collection program and to be consistent with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance, Contractor shall provide Recyclables Collection service to all Multi-Family, Commercial, and Government Customers. The Contractor shall supply each Multi-Family Premises with twenty-four (24) gallons of Recycling capacity per week per Residential unit and each Commercial Premises and each Government Customer that subscribes to Solid Waste Collection service from Contractor with one ninety-six (96) gallon Recyclables Cart. Contractor will provide assistance to the Customer to ensure that the Customer has adequate Recyclables Collection capacity to comply with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance.

At least two (2) weeks prior to the scheduled Container delivery, Contractor shall provide written notification to each Customer of the Contractor's obligation to provide each Multi-Family, Commercial, and Government Customer with an adequate level of Recycling service and shall identify the number, size, and quantity of Recycling Containers to be delivered to the Premises and scheduled delivery date. If the Customer objects to this Recycling service prior to or following delivery of the Containers, Contractor shall meet with the Customer at the Customer's Premises and conduct an on-site assessment of the Solid Waste and Recycling services. The Contractor's goal during the assessment shall be to provide assistance to the Customer so that the Customer complies with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance. If the Customer refuses service, the Contractor shall send written notification to the City Contract Manager of such refusal of service with documentation of the refusal including date of notification, date of on-site assessment, name of Customer or Property Manager and contact information. Contractor agrees to cooperate with City Code Enforcement Staff and the Alameda County Waste Management Authority's Mandatory Recycling Ordinance Enforcement Staff as needed in accordance with the terms of the County's Mandatory Recycling Ordinance.

C. **Commercial and Government Customer Service Options**. Contractor shall allow Commercial or Government Customers to select a Collection service method that best suits the needs of its Premises. Specifically, the Contractor shall offer the following choices to Commercial or Government Customers:

1. **Individual Cart or Bin Service**. Contractor shall allow Commercial or Government Customers to use Cart(s) or Bin(s) for Recyclable Materials Collection. Contractor shall provide each Customer with a choice of one (1) or more Carts with capacity of 32, 64, and 96 gallons and with one or more Bins with capacities ranging from 1 to 7 cubic yards (or similar sizes approved by the City Contract Manager).

2. **Centralized Cart or Bin Service**. Contractor shall allow Commercial or Government Customers to use Cart(s) or Bin(s) for Recyclable Materials Collection that are shared by the Occupants of two (2) or more Commercial Premises. In such case, Contractor shall provide one (1) or more Carts or Bins to such Premises as requested by Customer(s).

3. **Drop Boxes and Compactors**. Contractor shall allow Commercial or Government Customers to use a Drop Box or Compactor for Recyclable Materials. In such case, Contractor shall provide Customers with a choice of Container capacities ranging from 10 to 40 cubic yards. Contractor shall offer Customers the option to purchase or lease Compactors through Contractor or an outside vendor.

D. **Container Replacement**. Contractor shall replace Recyclable Materials Containers that have been stolen or damaged, at no cost to the Multi-Family, Commercial, or Government Customer Premises, not more than once per year. Additional replacements shall be charged to the Customer at the City-approved Rate on the Rate Schedule in Exhibit H.

E. **Posters, Signage, and Other Education Materials**. Pursuant to the public education plan in Exhibit C, Contractor shall instruct (as part of the education program) Multi-Family, Commercial Premises, and Government Customers and/or their Property Managers as to any necessary preparation, separation, and placement of Recyclable Materials and shall provide the Property Manager with the following materials to facilitate Customer and tenant education:

1. Educational Recycling posters for strategic placement on the Premises. For Multi-Family Premises, Contractor shall make the posters available for use in areas frequented by tenants (such as in mail rooms, laundry rooms, offices, etc.). For Commercial or Government Customer Premises, the Contractor shall make the posters available for use in areas frequented by employees.

2. Recycling signs at the Recycling Container locations that clearly indicate the types of Recyclables that are accepted and those that are not.

3. Move-In Kits for tenants of Multi-Family units as described in Exhibit C.

4. "How To" Brochures as described in Exhibit C.

Pursuant to Section 6.3.3.F, Contractor shall report its public education efforts to the City Contract Manager on a quarterly basis.

F. **Setout Instructions and Notices**. Contractor shall instruct Multi-Family Customers as to any necessary preparation of materials; the proper placement of Recycling Containers; and shall notify Property Manager who fail to follow these instructions. In cases of extreme or repeated failure to comply with the instructions, Contractor may decline to pick up the Recyclable Materials but must notify the Property Manager of the reason and what steps must be taken by the Property Manager to recommence service.

G. **Notification of Improper Setout**. Contractor shall notify Customers and their Property Managers (if applicable) who fail, or whose residents or employees fail, to follow Recycling instructions provided by Contractor. In cases of extreme or repeated failure to comply with the instructions, Contractor shall notify the City Contract Manager of the Customer's violation of the City's Municipal Code.

H. **Reusable Recyclables Tote Bags for Multi-Family Tenants**. Upon the Customer's request, Contractor shall offer Multi-Family Customers reusable Recyclables tote bags for storage of Recyclables that shall be provided to each tenant unit at no cost to the Customer. Contractor shall promote the availability of the Recyclables tote bags during the site visits with the Owner or Property Manager, and through other Multi-Family public education efforts required by Exhibit C. Contractor shall purchase a sufficient number of Recyclable tote bags to maintain an inventory of bags so that upon a Multi-Family

Customer's request, Contractor can deliver the Recyclables tote bags to the Multi-Family Premises, and distribute the bags (if requested) to each tenant unit at Multi-Family Premises within three (3) weeks of request. Each Recyclables tote bag shall be accompanied by a flyer describing the Recycling program requirements.

The specifications of the Recyclables tote bags for Multi-Family Tenants shall be submitted to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

I. **Internal Recycling Bins for Commercial and Government Customers**. Upon the Customer's request, Contractor shall offer Commercial and Government Customers a variety of Recycling storage bins for use by the Customer inside their Premises to store Recyclables prior to placement of the materials in the outdoor Containers to be serviced by Contractor. Up to three (3) internal Recycling storage bins shall be provided at no cost to the Customer. Contractor shall promote the availability of the internal Recycling storage bins during the site visits with the Owner or Property Manager, and through other Commercial public education efforts required by Exhibit C. Contractor shall purchase a sufficient number of Recycling storage bins to maintain an inventory of bins so that upon a Customer's request, Contractor can deliver the Recycling storage bin(s) to the Commercial Premises or Government within two (2) weeks of request. Each Recycling storage bin shall be accompanied by a flyer describing the Recycling program requirements.

Contractor must submit the Recycling storage bin order (including material and design specifications, colors, and identification marks) to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

J. **Used Motor Oil and Filter Collection**. Contractor shall Collect Used Motor Oil and Filters once per week from Multi-Family Customers, if they receive Solid Waste Service from individual Carts. Contractor shall Collect Used Motor Oil and Filters from Contractor-provided Used Oil Recovery Kits placed adjacent to the Carts, if the Customers place the Used Motor Oil and Filters in a Used Oil Recovery Kit provided by the Contractor. Contractor shall provide the Used Oil Recovery Kit to a Multi-Family Customer within two (2) Business Days of such request by Customer at no additional cost to Customer. Contractor shall instruct Customers how to properly use and place Used Oil Recovery Kits for Collection. Upon Collection of a Used Oil Recovery Kit from a Generator, Contractor shall leave a clean, empty, Used Oil Recovery Kit adjacent to the Recyclables Cart. Contractor shall not be required to Collect more than one gallon of used motor oil per individual dwelling Customer per week from Multi-Family Customers who request it.

K. **Route Reviews**. Unless otherwise agreed to by the Parties, commencing April 1, 2022 Contractor shall conduct Route Reviews of randomly selected Containers for contaminants such that all routes are inspected annually, as described in Section 5.17.8. If contamination is found during Route Reviews, Contractor shall notify the Generator of Recycling requirements.

5.4 Compostable Materials Program

In furtherance of the City's established Diversion goal of seventy-five percent (75%), and to promote compliance with the Alameda County Waste Management Authority Ordinance (2008-01) banning plant debris in unincorporated Alameda County landfills, it is the responsibility of the Contractor to secure

sufficient Compostable Material Composting capacity and ensure that all Compostable Material, excepting Compostable Residue (i.e. "overs") which are not suitable for re-grind and re-introduction into the Compost process, is Diverted from landfilling.

5.4.1 Single-Family Compostables Service

A. **General**. Contractor shall Collect Compostable Materials (including Food Scraps and Other Targeted Compostables) from each Single-Family Customer Curbside once each week on the regularly scheduled Solid Waste Collection day. Compostable Materials shall be Collected and Transported to the Approved Composting Site for the purposes of Composting. Contractor shall instruct Customers as to the types of Compostable Materials accepted for Collection (and those prohibited); any necessary preparation of Yard Trimmings (such as the cutting of large items), Food Scraps, and Other Targeted Compostables; and the appropriate use and placement of Carts designated for Compostable Materials Collection. Subject to the requirements of the Approved Composting Site operator, Contractor shall allow Customer's use of clear and or Compostable bags for the accumulation of Food Scraps and placement in the Compostable Materials Cart. Annually, Contractor shall notify City Contract Manager if the Approved Composting Site operator will accept clear and/or Compostable bags. Contractor shall notify Customers who fail to follow these instructions. In cases of extreme or repeated failure to comply with the instructions, Contractor shall notify the City Contract Manager of the Customer's violation of the City's Municipal Code.

B. **Carts**. Contractor shall supply each Single-Family Customer with one Cart for storage and Collection of Compostable Materials. The Contractor shall provide each Customer a 96-gallon Cart (or similar size approved by the City Contract Manager) unless the Customer requests a smaller Cart size, in which case, the Contractor shall provide a 32- or 64-gallon Cart (or similar sizes approved by the City Contract Manager). If a Customer requests a second Compostables Cart, Contractor shall provide the Cart to the Customer and Collect Compostables on a weekly basis. The Contractor shall charge the Customer for the extra Compostables Cart at the City-approved Rate on the Rate Schedule in Exhibit H.

Contractor shall replace Compostables Carts that have been stolen or damaged at no cost to the Generator not more than once per year. Additional Cart replacements shall be charged to the Generator at a Rate approved by the City as shown on the Rate schedule in Exhibit H.

C. **Kitchen Pails**. Upon Customer request and at no cost to the Customer, or with a new subscription to Residential service, Contractor shall provide Single-Family Customers kitchen pails suitable for the collection and storage of Food Scraps. Contractor shall promote the availability of the kitchen pails through public education efforts required by Exhibit C. Contractor shall purchase a sufficient number of kitchen pails to maintain an inventory of pails so that upon a Single-Family Customer's request, Contractor can assemble (if needed) and deliver the pail to the Single-Family Customer within one (1) week of request. Each kitchen pail shall be accompanied by flyer describing the Compostable Materials program requirements

The kitchen pail shall be made of rigid plastic, and have a capacity of 1.5 to 2.5 gallons, a wire or plastic handle, and a lid. Contractor must submit kitchen pail order (including material and design specifications, colors and identification marks) to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

D. **Overages Program**. From time to time, particularly during the autumn, Generators produce more Compostable Materials than that can be placed in their Compostables Cart. Contractor shall establish an overages program that allows Single-Family Generators to place additional Compostable Materials Curbside (in bags adjacent to the Compostable Carts) for Collection on its regularly scheduled Collection day. For this overages program, Contractor shall make available 35-gallon unbleached natural kraft paper bags (or similar size approved by the City Contract Manager) for purchase at the Contractor's local office, at other locations in the City (to be identified by the Contractor and approved by the City Contract Manager) and via mail by ordering from Contractor. Alternatively, Customers may provide their own kraft bags. Contractor shall Collect overages with other Compostable Materials and Transport the materials to the Approved Composting Site. Contractor shall charge Customers for the overages Collection at City-approved Rates on the Rate Schedule in Exhibit H.

E. **Home Composting**. Pursuant to the requirements of the public education requirements in Exhibit C, Contractor shall promote home Composting activities to Single-Family Customers.

F. **Collection Location including Disabled Customer Service**. For Single-Family Premises, Contractor shall Collect Carts from the Curb (or at other designated location for townhomes, condos, or attached Single-Family Premises) unless the Occupant is physically unable to place the Container Curbside and such Person has applied and been approved for a Curbside service exemption due to a disability defined by the Americans with Disabilities Act pursuant to Section 6.16. In such case, Contractor shall Collect Carts from an alternative service location (such as the side yard or back yard) at no additional fee. Customers that are physically capable of moving Carts Curbside may choose to subscribe to side yard or back yard service. In such cases, Contractor shall Collect Carts from the alternative service location and charge the Customer for the extra service in accordance with the City-approved Rate on the Rate Schedule in Exhibit H.

G. **Route Reviews**. Unless otherwise agreed to by the Parties, as described in Section 5.17.8 commencing April 1, 2022 Contractor shall conduct Route Reviews of randomly selected Containers for contaminants such that all routes are inspected annually. If contamination is found during Route Reviews, Contractor shall notify the Generator of Recycling requirements.

5.4.2 Multi-Family Compostables Service

A. **General**. Multi-Family Customers shall be provided adequate Compostable Materials Collection services in the same manner as that provided to Commercial Customers and Government Customers pursuant to Section 5.4.3, including all provisions of each subsection therein.

Contractor shall observe and comply with all regulations in effect at the Approved Composting Site and cooperate with and take direction from the operator thereof with respect to delivery of Organic Materials. Contractor shall actively work with the Approved Composting Site operator throughout the Term of this Agreement to ensure that contamination of the Organic Materials Collected under this Agreement and delivered to the Approved Composting Site remains below any limits established by Applicable Law including, without limitation, SB 1383.

B. **Kitchen Pails**. Upon Customer request and at no cost to the Customer, or with a new subscription to Residential service, Contractor shall provide Multi-Family Customers kitchen pails for use in the kitchen suitable for the collection and storage of Food Scraps. Contractor shall promote the availability of the kitchen pails through public education efforts required by Exhibit C. Contractor shall purchase a sufficient number of kitchen pails to maintain an inventory of pails so that upon a Multi-Family

Customer's request, Contractor can assemble (if needed) and deliver the pail to the Multi-Family Customer within one (1) week of request. Each kitchen pail shall be accompanied by flyer describing the Compostable Materials program requirements

The kitchen pail shall be made of rigid plastic, and have a capacity of 1.5 to 2.5 gallons, a wire or plastic handle, and a lid. Contractor must submit kitchen pail order (including material and design specifications, colors and identification marks) to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

5.4.3 Commercial and Government Customer Compostables Service

A. **General.** Commercial Customers, and Government Customers that subscribe to service from Contractor, shall subscribe to Compostable Materials Collection services and shall pay Contractor an additional fee for such service in accordance with City-approved Rates on the Rate Schedule in Exhibit H with the exception that Collection of one 96-gallon Compostables Cart once per week shall be provided at no cost as of the· Commencement Date. Contractor shall Collect Compostable Materials from Commercial Premises or Government Customers that have subscribed to Compostable Materials Collection service as frequently as scheduled by Customer up to six (6) days per week, but not less than one (1) day per week. Contractor shall provide Carts, Bins, Drop Boxes, and Compactors for Compostables storage and Collection and shall place Containers in locations determined by the Customer or Property Manager.

Commercial or Government Customer Compostable Materials Collection shall be performed at a time mutually agreed upon by Contractor and the Customer and which is consistent with allowable Collection hours specified in Section 5.14.3.

Contractor shall make best efforts to Divert as much Commercial and Government Customer Food Scraps and Other Targeted Compostables from Disposal as possible. Contractor shall allow Customers to place clear plastic bags that contain Food Scraps in Containers for Collection. Contractor shall continually look for more efficient and effective ways of implementing the Commercial and Government Customer Food Scraps Program including, but not limited to, investigating closer, less expensive.

Composting facilities and more efficient routing and pick-up procedures. Additionally, Contractor shall pursue and apply for any applicable grant or other cost saving opportunities that shall be used to reduce Customer Rates in accordance with Section 3.F of Exhibit I and Section 3.F of Exhibit J.

Contractor will work with and support the City and any consultants contracted by the City or StopWaste to conduct Commercial and Government Customer Food Scraps audits.

Any revenue other than Rate revenue that the Contractor receives specifically for the Commercial and Government Customer Food Scraps Program, including, but not limited to, revenue from StopWaste and Incentive payment programs, shall be deducted from the Contractor's total calculated costs, and the actual, reasonable and necessary costs associated therewith shall be added to the Contractor's calculated costs, to reduce Customer Rates in accordance with Section 3.F of Exhibit I and Section 3.F of Exhibit J.

Contractor shall observe and comply with all regulations in effect at the Approved Composting Site and cooperate with and take direction from the operator thereof with respect to delivery of Organic

Materials. Contractor shall actively work with the Approved Composting Site operator throughout the Term of this Agreement to ensure that contamination of the Organic Materials Collected under this Agreement and delivered to the Approved Composting Site remains below any limits established by Applicable Law, including, without limitation, SB 1383.

B. **Expanding Customer Participation and the Alameda County Waste Management Authority's Mandatory Recycling Ordinance**. To expand the participation of Commercial and Government Customers in the Food Scraps Collection program and to be consistent with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance, Contractor shall provide adequate Compostables Collection service to Commercial and Government Customers. The City and Contractor agree that, at a minimum, Targeted Food Scraps Customers shall include the Customers regulated by the Alameda County Waste Management Authority's Mandatory Recycling Ordinance. At a minimum, the Contractor shall contact each Targeted Food Scraps Customer individually, supply each such Customer with at least one ninety-six (96) gallon Compostables Cart, provide education materials, and provide training. If the Customer has historically subscribed to a higher level of service or requests a higher level of service (e.g., more than one ninety-six (96) gallon of service once per week), then the Contractor shall provide and service Container(s) in number and size to match the Customer's current or requested level of service.

Contractor shall provide written notification to each Customer explaining Contractor's obligation to provide each Targeted Food Scraps Customer with an adequate level of Compostables service and shall identify the number, size, and quantity of Compostable Containers to be delivered to the Premises and scheduled delivery date. If the Customer objects to this Compostables service prior to or after delivery of the Containers, Contractor shall meet with the Customer at the Customer's Premises and conduct an on-site assessment of the Solid Waste, Recycling, and Compostables services. The Contractor's goal shall be to provide assistance to the Customer so that the Customer complies with the Alameda County Waste Management Authority's Mandatory Recycling Ordinance. If the Customer continues to refuse service, the Contractor shall send written notification to the City Contract Manager of such refusal of service with documentation of the refusal including date of notification, date of on-site assessment, name of contact Person and contact information. Contractor agrees to cooperate with City Code Enforcement Staff and the Alameda County Waste Management Authority's Mandatory Recycling Ordinance Enforcement Staff as needed in accordance with the terms of the County's Mandatory Recycling Ordinance.

C. **Collection Service Options**. Contractor shall provide Commercial and Government Customer Compostables Customers, at the Customer's option, with a Container appropriate for the needs of the business and the available space in the enclosure for outside storage and Collection of Compostable Materials in order to ensure that the Customer has adequate Collection capacity. Contractor shall allow Commercial Customers to select a Collection service method that best suits the needs of its Premises in the same manner as that described in Section 5.3.3.C.

D. **Container Replacement**. Contractor shall replace Containers, which are specifically designated for Compostable Materials Collection that have been stolen or damaged at no cost to the Commercial or Government Customer Premises, not more than once per year. Additional replacements shall be charged to the Customer at City-approved Rates on the Rate Schedule in Exhibit H.

E. **Posters, Signage, and Other Education Materials**. Pursuant to the public education plan described in Exhibit C, Contractor shall instruct Commercial Customers and/or their Property Managers as to any

necessary preparation, separation, and placement of Compostable Materials and shall provide posters, signs, and other public education materials. Contractor shall maintain a special telephone hotline for Commercial Compostables information that will ring directly to a customer service representative that has special training and expertise in this particular program.

Commencing January 1, 2022, Contractor shall annually provide Tier One and Tier Two Edible Food Generators with information about food recovery program, Generator requirements, Food Recovery Organizations, and Edible Food source–reduction information.

F. **Route Reviews.** Unless otherwise agreed to by the Parties, as described in Section 5.17.8, commencing April 1, 2022 Contractor shall conduct Route Reviews of randomly selected Containers for contaminants such that all routes are inspected annually. If contamination is found during Route Reviews, Contractor shall notify the Generator of Recycling requirements.

G. **Notification of Improper Setout**. Contractor shall notify Customers and their Property Managers (if applicable) who fail, or whose residents or employees fail, to follow the posted instructions. In cases of extreme or repeated failure to comply with the instructions, Contractor shall notify the City Contract Manager of Customers that are repeat offenders.

H. **Reporting**. Pursuant to Sections 6.3.2 and 6.3.3, Contractor shall provide reports to the City Contract Manager documenting its efforts to promote Compostable Collection services to Commercial Customers, site visits performed, number of Customers participating, etc.

I. **Internal Compostable Bins**. Upon the Customer's request, Contractor shall offer Commercial Customers "slim jim" style Compostables storage bins for use by the Customer inside their Premises to store Compostables prior to placement of the materials in the outdoor Containers to be serviced by Contractor. Up to three (3) internal Compostable storage bins shall be provided at no cost to the Customer. Contractor shall promote the availability of the internal Compostable storage bins during the site visits with the Owner or Property Manager, and through other Commercial public education efforts required by Exhibit C. Contractor shall purchase a sufficient number of Compostable storage bins to maintain an inventory of bins so that upon a Customer's request, Contractor can deliver the Compostables storage bin(s) to the Commercial Premises within two (2) weeks of request. Each Compostables storage bin shall be accompanied by a flyer describing the Compostables program requirements.

The Compostable storage bins shall have approximately 23 gallons of capacity and be constructed of durable plastic with a minimum recycled content of 30 percent. Contractor must submit the Compostables storage bin order (including material and design specifications, colors, and identification marks) to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

J. **Edible Food Recovery Program.** Contractor shall, upon request by the City Contract Manager, participate in a regional food recovery working group in cooperation with jurisdictions, Food Recovery Organizations, and haulers within the Tri-Valley (i.e., the cities of Livermore, Pleasanton, and Dublin) and/or Alameda County. Contractor shall support the City and working group through participation in coordination meetings and dissemination of information about food recovery opportunities to Customers.

5.4.4 Christmas Tree Pickup

A. **Single-Family Customers.** Contractor shall offer to each Single-Family Customer Curbside Collection of Christmas trees during the first and second weeks of the year beginning on the Monday following New Year's Day. In the event New Year's Day is a Monday, Christmas tree Collection shall commence on Tuesday following New Year's Day and continue for two (2) weeks. Christmas trees shall be Collected on the Customer's regular Collection day during the designated week. Customer notification requirements are specified in the public education plan, Exhibit C.

B. **Multi-Family Customers**

1. Multi-Family properties will receive a free Collection of Christmas trees during the first and second weeks of the year beginning on the Monday following New Year's Day as scheduled by Contractor and the Property Manager or resident. In the event New Year's Day is a Monday, Christmas tree Collection shall commence on Tuesday following New Year's Day and continue for five (5) Business Days.

2. Contractor will coordinate with the Property Manager and the Property Manager will inform their residents when the Christmas tree pick up will occur.

3. Contractor will create outreach documents to assist the Property Managers with program requirements consistent with Section 5.17 of the Agreement. The Contractor shall provide signage for the drop off location that assists Person in readily identifying the site as the Christmas tree drop off locations and signage with instructions for placing the trees and the types of items that are prohibited (e.g., flocked trees, trees with decorations, etc.).

C. **Cooperation with Boy Scouts of America.** Contractor shall work cooperatively with the Boy Scouts of America organization or other organizations identified by the City Contract Manager to Collect and Process Christmas trees dropped off at a location selected by these organizations in the City.

D. **Diversion Requirement.** Christmas trees shall be Recycled, Composted or used as mulch or a slope stabilization material, in a manner to count as Diversion in accordance with the Act with the exception of trees that are flocked, contain tinsel, or other decorations, which shall be Collected and Disposed by Contractor.

5.5 City Facilities and Events Collection

5.5.1 City Facilities, Park District, City-Sponsored Events, and Temporary Homeless Encampments

Contractor shall provide Solid Waste, Recyclable Materials, and Compostable Materials Collection, Processing and Disposal services for City Facilities, Livermore Area Recreation and Park District locations, City Sponsored Events, and Temporary Homeless Encampments as described in Exhibits A and B. Contractor shall provide and maintain Collection Containers with the exception of public litter and public Recycling cans, which shall be provided and maintained by the City. Material Collected from the public litter and public Recycling cans listed in Exhibit A shall be sorted after Collection to Divert Recyclable and Compostable Materials, except for materials Collected from Temporary Homeless Encampments. Contractor may integrate Collection of City facilities with other Collection services provided that Contractor estimates Tonnage Collected from City facilities separately from other

Customers. Contractor will separately track materials Collected from Temporary Homeless Encampments and report tons Collected as part of the Monthly Report requirements described in Section 6.3.2.

At the direction of the City Contract Manager, Contractor shall place Containers for the purposes of Collecting Solid Waste and Bulky Items generated from Temporary Homeless Encampments around the City. Contractor will place Containers is a location that is accessible to Collection vehicles and residents of Temporary Homeless Encampments. Containers will be placed for a minimum of 24 hours at the Temporary Homeless Encampments Collection locations, but may be left for a period not to exceed seven (7) days at the discretion of the City Contract Manager. All Solid Waste and Bulky Items Collected by Contractor will be transported to the Approved Disposal Site, with the exception of Excluded Waste or Hazardous Waste.

Contractor shall work cooperatively with the City Contract Manager to annually survey City Facilities to determine appropriateness of service and shall adjust Container size, frequency of service and type of service if appropriate. In addition, Contractor shall assist the City Contract Manager in developing a strategy for increasing Recycling activities and Recycling participation levels of visitors and Commercial Customers in the City's downtown area.

The services provided to Temporary Homeless Encampments may be billed to the City at the current Government Rates listed in Exhibit H, not-to-exceed $9,000 in Rate Period 11 (FY 20-21), and the cost of providing any additional City approved services to Homeless Encampments greater than this amount in any Rate Period, shall be an allowable expense that shall be recovered through Contractor's Compensation. The City Contract Manager will determine whether the cost of services will either be billed to the City or treated as an allowable expense that may be recovered through Contractor's Compensation. The other services required by this Section shall be provided at no charge to the City, but the cost of providing them shall be an allowable expense that may be recovered through Contractor's Compensation.

5.5.2 Large Events and Venues

Contractor shall offer Solid Waste, Recyclable Materials, and Compostable Materials Collection services for all events (e.g., fairs, festivals, etc.) and venues in the City. In addition, Contractor shall offer Food Scraps Collection to the events and venues and provide the service to Customers at City-approved Rates on the Rate Schedule in Exhibit H.

Contractor shall provide the Solid Waste and Recyclable Collection services to all events (listed in Exhibit B) each calendar year for no additional compensation. Contractor shall provide Collection to additional special events at City-approved Rates on the Rate Schedule in Exhibit H.

Large venues requiring regularly scheduled Collection services shall be serviced as Commercial Customers and offered the full range of Commercial Collection services described in this Agreement at City-approved Rates on the Rate Schedule in Exhibit H.

For Large Events and venues with periodic Collection needs, Contractor shall provide Solid Waste, Recyclable Materials, and Compostable Materials as requested by the event or venue organizer. Services provided by Contractor shall include delivery of Collection Containers prior to the Commencement of the event and removal of Collection Containers at the end of the event. Contractor shall provide staff during events to: (i) maintain and empty Collection Containers, (ii) provide outreach, (iii) coordinate with event organizers and other event participants and volunteers, and (iv) collect data for reporting purposes.

Contractor shall develop a Large Event and venue recycling protocol and guidelines within six months of Commencement.

Contractor shall make available Carts, Bins and Drop Boxes and cardboard event boxes. The number and size of Containers shall be sufficient to allow convenient Collection of Solid Waste, Compostables, and Recyclable Materials for event participants. If the event coordinator determines that additional Containers are necessary, Contractor shall promptly deliver the requested number of additional Containers. Carts provided shall be equipped with special lids with drop in slots that minimize contamination of Recyclable and Compostable Materials. Contractor shall arrange the Container delivery and pick-up schedule with the event organizer.

All Solid Waste, Recyclable Materials, and Compostable Materials Collected from events and venues shall be delivered to the Approved Facilities as appropriate.

Contractor shall work cooperatively with events and venues that are classified as Large Events and Large Venues by AB 2176 to assist such events and venues in complying with requirements of AB 2176. As of the Effective Date of this Agreement, the City estimates that one event, the Livermore Downtown Street Fest, may qualify as a Large Event and one or two venues may qualify as Large Venues. Contractor shall assist Large Events and Venues organizers in meeting AB 2176 requirements by offering Recyclables Collection and Compostables Collection services at no cost to the Customer.

5.6 Provision of Service to Schools

If a public or private school (other than schools that are part of the Livermore Valley Joint Unified School District as described in Section 6.21) requests Solid Waste, Recyclable Materials, or Compostable Collection services, Contractor shall provide such services in accordance with the Collection requirements pursuant to Sections 5.2.6, 5.3.3, and 5.4.3. Contractor shall charge the school at Rates that do not exceed the City-approved Rates for Commercial Customers on the Rate Schedule in Exhibit H.

5.7 Construction and Demolition Debris Collection

Contractor shall offer and provide Construction and Demolition Debris (C&D) Collection services to any Customer requesting such service. C&D Collection service shall be a temporary service, provided only at sites where construction, alteration, remodeling, repair, or demolition operations are being performed. Contractor shall Collect C&D from Customers that have requested C&D Collection service as frequently as scheduled by Customer up to six (6) days per week, but not less than one (1) day per week. Contractor shall provide Drop Boxes for C&D Collection and shall place Drop Boxes in locations determined by the Customer or construction site manager. Contractor shall require that all Customers receiving C&D Collection service under this Agreement are provided a Container for non-C&D Solid Waste.

Contractor shall work with the Customer to provide Collection services that result in a minimum of seventy-five percent (75%) of the Collected C&D being Diverted to comply with C&D Diversion requirements established by Applicable Law. C&D Diversion may occur with the use of Source Separated Containers for Recyclable Materials and/or Compostable Materials or through sorting at the Approved C&D Facility. Contractor Billings to C&D Customers shall include two components: a "per-pull" charge to Transport the Drop Box to an Approved Facility, and a charge for the cost of Disposal or Processing

calculated on a per-Ton basis for actual Tons delivered to the Approved Facility. Such Billing shall be at the City-approved Rates for such service.

Contractor shall Transport all C&D Collected under this Agreement to the Approved C&D Processing Site for Processing. Contractor shall pay all tipping fees and other costs associated with Transporting, Processing, and/or Disposal of C&D.

Contractor shall observe and comply with all regulations in effect at the Approved C&D Processing Site and cooperate with and take direction from the operator thereof with respect to delivery of C&D.

5.8 Abandoned Solid Waste Collection

5.8.1 General

Contractor shall Collect Solid Waste and Bulky Items abandoned by Generators in the City. Contractor shall dispatch a truck to Collect abandoned materials at locations in the City identified by Contractor or at locations identified by the City Contract Manager. In instances when the Contractor has received a verbal or written request from the City Contract Manager to Collect abandoned waste at a specific location, Contractor shall Collect abandoned waste from such location within forty-eight (48) hours of receiving the verbal or written request unless special circumstances warrant a longer period, in which case Contractor shall notify the City Contract Manager of such circumstances and the need for additional time to Collect materials within twenty-four (24) hours of the City Contract Manager's verbal or written notice to Collect abandoned waste. Contractor shall be responsible for Collection, Transportation, and Disposal of such material and City shall pay for actual, documented Disposal Costs. Contractor shall record the date, time, location, and description of material Collected including estimated volume of such material; location where such material was Disposed; and cost of Disposal. Copies of receipts from the Approved Disposal Site for Disposal of abandoned Solid Waste shall be made available by Contractor upon request by the City Contract Manager. Tonnage of material Collected shall be separately recorded and reported to the City Contract Manager on a quarterly basis in accordance with reporting requirements stated in Section 6.3.3.

5.8.2 Shopping Carts

Unless otherwise prohibited by law, the Contractor's obligations under this Section shall include the Collection and Recycling or Disposal of all unmarked shopping carts from City limits. Such requirement shall specifically exclude removal of shopping carts that (i) have a sign or other form of marking permanently affixed to it if that identifies the Owner of the cart or the retailer, or lists a valid telephone number or address for returning the shopping carts to the Owner or retailer of such shopping cart; or (ii) are otherwise covered by Section 22435.7 of the California Business and Professional Code or Section 8.18 of the City's Municipal Code.

5.9 Community Garage Sale Event

Contractor shall work with the City Contract Manager to plan an annual community garage sale event to encourage residents to sell their unused or unwanted items for reuse by others. Contractor shall advertise and promote the community garage sale event in the local newspaper as well as develop and make

available garage sale "kits" that shall be distributed along with advertisement(s) in the local newspaper. Contractor shall also post information on its website in the form of a banner with a link connecting to the City's site, and will coach customer service representatives in the correct response to frequently asked questions. The date of the community garage sale event and all advertisements or public announcements related to such event shall be approved by the City Contract Manager. Contractor shall be responsible to provide a minimum of seven (7) days advance notification of the date of the community garage sale to Re-Use Vendors in the City so they may be prepared for an influx of donations of unsold or unwanted items immediately following the community garage sale event. Contractor shall not be required to Collect or Dispose of any unsold or unwanted items for the community garage sale event. During the week following the community garage sale event, Contractor shall remove and Recycle garage sale signs posted by Residents in public right-of-ways (e.g., on sign posts, in roadway medians, etc.).

In accordance with Section 6.3.2.l, Contractor shall provide a report to the City Contract Manager following the garage sale event summarizing their outreach efforts, number of garage sale kits distributed, and estimated number of garage sales held (including location of households, if possible).

5.10 E-Waste and U-Waste Collection

5.10.1 On-Call E-Waste Collection

In addition to Collection of E-Waste during on-call clean-up services, Contractor shall offer Single-Family, Multi-Family, and Commercial Customers on-call E-Waste Collection upon Customer request at City-approved Rates on the Rate Schedule in Exhibit H.

5.10.2 Single-Family Cell Phone and Household Battery Collection

Contractor shall provide weekly Collection of cell phones and household batteries from Single-Family Customers on the same day as Solid Waste, Recyclables, and Compostable Materials are Collected from the Customers. The Collection shall be performed Curbside or at designated location for townhomes, condominiums, or attached Single-Family Premises and disabled and paying back yard/side yard Customers.

Contractor shall instruct Customers to place cell phones and household batteries in plastic disposable resealable zipper bags on top of the Recycling Cart. When the driver of a Recycling Collection vehicle sees a cell phone/battery set-out, the driver will dismount the vehicle at that stop and retrieve the item(s), placing them in a dedicated container in a rack mounted on the truck body. Drivers will further utilize the opportunity this creates to perform a visual check of the Recycling Cart contents. Should contamination be observed, the driver will complete a Corrective Action Notice. If contamination is minor, the driver will Collect the materials and the notice will be left as a courtesy to help educate the resident. If contamination is unacceptably high, the notice will be used to communicate the reasons for non-Collection and steps to take to properly prepare the set-out. Contractor shall arrange for Recycling of cell phones and batteries.

5.11 Hazardous Waste

If Contractor determines that material placed in any Container for Collection is Hazardous Waste, Designated Waste, or other material that may not legally be Disposed of at a Disposal Site or

handled at a Processing Site or presents a hazard to Contractor's employees, the Contractor shall have the right to refuse to accept such material. However, Contractor shall accept: Used Motor Oil and Filters placed by Generator for Collection as a Recyclable Material; E-Waste accepted from an on-call E-Waste Collection or through an On-Call Single-Family Clean-Up Service. The Generator will be contacted by the Contractor and requested to arrange proper Disposal. If the Generator cannot be reached immediately, the Contractor shall, prior to leaving the Premises, leave a tag at least 2 inches by 6 inches which lists the phone number for the Alameda County Household Hazardous Waste program, indicating the reason for refusing to Collect the material. If the material could possibly result in imminent danger to people or property, the Contractor shall notify the Livermore/Pleasanton Fire Department using the 911 emergency number as soon as possible.

The Contractor shall notify the City Contract Manager within 24 hours of the Contractor's discovery of any Hazardous Waste left at any Premises.

If Hazardous Waste is delivered to an Approved Facility by Contractor before its presence is detected and the Generator cannot be identified or fails to remove the material after being requested to do so, the Contractor shall arrange for its proper Disposal. The Contractor shall make a good faith effort to recover the cost of Disposal from the Generator, and the cost of this effort, as well as the cost of Disposal shall be chargeable to the Generator. The Contractor shall be entitled to include the costs incurred under this Section as an operating expense for purposes of compensation under Article 8 and shall include all sums recovered by it from Generators as "Other Income."

5.12 Transportation of Collected Materials

Contractor shall Transport all Solid Waste, Recyclable Materials, and Compostable Materials Collected under this Agreement to the Approved Facilities. Contractor shall maintain accurate records of the quantities of Solid Waste, Recyclable Materials and Compostable Materials Transported to the Approved Facilities and will cooperate with City Contract Manager in any audits or investigations of such quantities.

Contractor has established and shall maintain for the term of the Agreement, a Transfer operation where Recyclable Materials and Compostable Materials are unloaded from Collection vehicles and loaded into large-capacity vehicles. After loading the materials into large-capacity vehicles, Contractor shall Transport materials to the Approved Recyclables Processing Site and Approved Composting Site. Contractor shall be responsible for all site acquisition or leasing costs, site permitting and development costs, construction costs, and other costs related to the development and operation of the Transfer operations as further described in Section 5.21. If the Contractor is unable to use said facility then the Contractor shall be responsible for making other Transportation arrangements. In such event, Contractor shall not be compensated for any additional costs. If the Contractor plans to change its Transfer method, Contractor shall obtain written approval from the City prior to making the change.

Any and all Transfer, Processing, and other material handling activities performed in the City shall occur in an enclosed facility and areas used for parking, vehicle access, and operations shall be paved. A site in

the City used for material handling activities of any kind will be subject to the City's strict development permit review process.

5.13 Disposal and Processing of Collected Materials

5.13.1 Solid Waste Disposal

Contractor shall Transport to and Dispose of all Solid Waste Collected under this Agreement at the Approved Disposal Site, which is selected and approved by City. Unless and until City otherwise approves, the Approved Disposal Site shall be the Vasco Road Landfill in unincorporated Alameda County, California. All costs associated with Transporting and Disposing Solid Waste shall be paid by Contractor and may be recovered through Contractor's Compensation in accordance with Article 8.

If the Contractor expects, during the Term of this Agreement, to be prevented from delivering Solid Waste to the Approved Disposal Site, it shall notify the City Contract Manager immediately. Contractor shall then identify alternative Disposal Sites and evaluate each. Such evaluation shall include the Disposal fee, Transportation cost, permit status, any known permit enforcement proceedings and any other criteria used by the Contractor in recommending alternative Disposal Sites. Contractor shall then present its recommendation and evaluation of alternatives described above to City Contract Manager. City shall either approve the Contractor's recommended Disposal Site or identify an alternative Disposal Site. Contractor will thereafter Dispose of Solid Waste at the alternative Disposal Site approved by the City.

Contractor shall cooperate with the operator of the Approved Disposal Site and comply with the operator's requirements such as how and where to unload Collection vehicles, respecting operations and construction of new facilities, cooperating with the operator's Hazardous Waste Exclusion Program, following scale house weighing and recording keeping processes, and other guidelines established for facility users. Contractor shall plan its Collection routes to be compatible with the Approved Disposal Site's operating hours, which shall be, at a minimum, Monday through Friday from 6:00 a.m. to 5:00 p.m. and Saturday from 6:00 a.m. to 4:30 p.m.

5.13.2 Recyclables Processing

A. **General.** Contractor agrees to Transport and deliver all Source Separated Recyclable Materials it Collects in the City to the Approved Recyclables Processing Site. Contractor shall pay all costs associated with Transfer (if applicable), Transporting, Processing, Composting and marketing Recyclable Materials. Residue from the Recyclable Materials shall be Disposed of by Contractor or the Processing Site Subcontractor at a Disposal Site selected by Contractor or the Processing Site Subcontractor. Any and all Transfer, Processing, and other material handling activities performed in the City shall occur in an enclosed facility and areas used for parking, vehicle access, and operations shall be paved. A site in the City used for material handling activities of any kind will be subject to the City's strict development permit review process.

B. **Processing Arrangements**. Contractor shall secure sufficient capacity to Process Recyclable Materials Collected under this Agreement and cause the Approved Recyclables Processing Site to Process and market the Recyclable Materials. Contractor shall provide the City Contract Manager, upon request, with:

1. Documentation demonstrating the availability of such capacity; and,

2. Name, address and Owner/operator of any Transfer Station used to deliver materials to such site.

Contractor shall guarantee a Residue level of twenty percent (20%) or less, where the Residue level shall be calculated as 100 multiplied by the monthly Tonnage of Processing Residue requiring Disposal divided by the total monthly Tonnage of Recyclable Materials Collected (e.g., the incoming Tons received by the Approved Recyclables Processing Site). Should the Contractor find that the Residue level exceeds this amount, it shall not constitute a breach or default by Contractor but Contractor shall notify City Contract Manager, and Contractor and City Contract Manager shall meet and confer regarding the appropriate measures to obtain compliance in the future.

Contractor shall keep all existing permits and approvals necessary for use of the Recyclable Materials Processing Site(s) in full regulatory compliance or confirm that the Owner or operator of such facility does so. Contractor shall, upon request, provide copies of permits and/or notices of violation of permits to the City Contract Manager.

Contractor may change its selection of the Approved Recyclables Processing Site following City's written approval, but Contractor shall not be compensated for any increased Transportation and Processing costs. Contractor will bear any increased Transportation and Processing costs associated with a Contractor-initiated change in the Approved Recyclables Processing Site. In such case, Contractor shall guarantee the same net Processing Cost specified in Exhibit I1 or shall increase the net Processing Costs (if the amount is a net revenue) associated with the use of Processing site(s) different from the Approved Recyclables Processing Site. If Contractor elects to use a Recyclables Processing Site(s) that is different than the Approved Recyclables Processing Site, it shall request written approval from the City Contract Manager sixty (60) calendar days prior to use of the site and obtain the City's written approval no later than ten (10) calendar days prior to use of the site.

Below is information about the Approved Recyclables Processing Site selected by the Contractor:

Facility Name: Aladdin Materials Recovery Facility
Owner: Alameda County Industries, LLC
Operator: Alameda County Industries, LLC
Address: 610 Aladdin Avenue, San Leandro, California 94577
Contact Person and telephone number: Operations Manager, 510/357-7282

Method of allocating Recyclable Materials Diverted by materials type and Processing Residue to Contractor and the City: The allocation method, for purposes of reporting to the State of California, shall be the method described in AB 901, and shall be certified by an authorized personnel or officer of that Approved Recyclable Processing Site Owner or operator. The allocation method, for purposes of determining Recycling Residue to the City shall be as described herein, and shall be certified by an authorized personnel or officer of that Approved Recyclables Processing Site Owner or operator.

Contractor shall Collect Recyclable Materials generated in the City in Collection Vehicles separately from other Recyclable Materials generated outside the City, except as provided in Sections 6.20 and 6.21, and shall weigh each vehicle so that the Tonnage of Recyclable Materials can be documented on a per-load basis with supporting documentation (such as a certified weight ticket or tag). Periodically, the Contractor shall review its marketing records to calculate the volume of Recyclable Materials received at the Approved Recyclable Materials Processing Site and marketed to determine the percentage of various Recyclable Materials (e.g., glass, newspaper, cardboard, PET, HDPE,

aluminum, etc.) and the City's Residue level. The percentages determined from the review of marketing records shall be used to allocate the total Tonnage Collected in the City into various categories of Recyclable Materials and Residue. Contractor shall report Tonnage and Residue level in accordance with monthly and quarterly reporting requirements in Sections 6.3.2.B and 6.3.3.B.

If Contractor is unable to use the Approved Recyclables Processing Site due to an emergency or sudden unforeseen closure of the Approved Recyclables Processing Site, Contractor may use an alternative Processing Site provided that the Contractor provides verbal and written notice to the City Contract Manager and receives written approval from the City Contract Manager at least twenty-four (24) hours prior to the use of an alternative Processing Site. The Contractor's written notice shall include a description of the reasons the Approved Recyclables Processing Site is not feasible and the period of time Contractor proposes to use the alternative Processing Site. Contractor shall not be compensated for any increased Transportation and Processing costs and shall guarantee the net Processing Cost specified in Exhibit G or shall increase the net Processing Costs (if net revenues) associated with the use of Processing site(s) different from the Approved Recyclables Processing Site, with the exception that if the ability to use the Approved Recyclables Processing Site occurs due to one or more conditions defined in Section 8.4.A as an eligible item for special rate review such as a Change in Law, flood, earthquake, other acts of nature, war, civil insurrection, riots, acts of any government agency (including judicial action), or other similar catastrophic events that are beyond the control of and not the fault of the Contractor. In such case, the special rate review process may be initiated to assess the need to use an alternative Processing Site and/or cost impacts. If the alternative Processing Site is located in the City, the material handling and Processing operations shall occur in an enclosed facility and areas used for parking, vehicle access, and operations shall be paved.

C. Transport. The Contractor is responsible for Transporting Collected Recyclable Materials to the Approved Recyclables Processing Site. Contractor plans to Transfer materials (at the Contractor's Livermore yard) from Collection vehicles into large-capacity Transfer vehicles and then haul the materials to the Approved Recyclables Processing Site. The Contractor plans to back-haul the materials in Transfer vehicles that will also haul Solid Waste generated in San Leandro from the Approved Recyclables Processing Site's related Transfer operations to the Vasco Road Landfill. If the Contractor plans to change its Transport method, Contractor shall obtain written approval from the City prior to making the change; pay all costs; and shall not be reimbursed for any additional costs. The City shall approve the Transport method, and the duration the Transport method is expected to remain in use.

D. Marketing. The Contractor shall be responsible for marketing Recyclable Materials that Contractor Collects in the City, including materials Collected during On-Call Single-Family Clean-Up Services, On-Call Multi-Family Clean-Up Service, and on-call Bulky Item/E-Waste Collection. Contractor shall be compensated by the end users/marketplace for such Recyclable Materials at no less than fair market value.

Contractor shall obtain from the Approved Recyclable Materials Processing Facility operator a marketing plan demonstrating that Recyclable Materials will not be Disposed. The plan, which shall be approved by City Contract Manager or his/her designee, shall be in place on or before the Commencement Date of this Agreement. The marketing plan shall fully describe the Contractor's marketing methods and approach, targeted primary and contingent markets, pricing policy and assumed salvage value for each Collected type of Recyclable Material products, and contingency plans when market conditions are severe.

Upon request, Contractor shall provide proof to the City Contract Manager that all Recyclable Materials Contractor Collects in the City are marketed for Recycling or reuse in such a manner that materials shall be considered as Diverted in accordance with the State regulations established by the Act. All Residual material from the Processing activities that is not marketed for use shall be accounted for as Disposal Tonnage at a permitted Disposal Site. No Recyclable Materials shall be transported to a domestic or foreign location if Solid Waste Disposal of such material is its intended use.

Annually, the Contractor shall update its marketing plan and submit it to the City Contract Manager for approval pursuant to Section 6.4.9. Contractor shall provide City Contract Manager with a list of broker/buyers it has used during the preceding twelve (12) months, if requested by City Contract Manager. If Contractor becomes aware that a broker or buyer has illegally handled or Disposed of material generated by the City or elsewhere, Contractor shall immediately inform the City Contract Manager and terminate its contract or working relationship with such party.

E. Reporting. Contractor shall provide reports on Recyclables Processing as required by Sections 6.3.2, 6.3.3, and 6.4.

F. Residue Disposal. Residue from the Processing of Source Separated Recyclable Materials Collected under this Agreement at the Approved Recyclables Processing Site, which cannot be marketed, shall be Disposed of by Contractor, or the Approved Recyclables Processing Site. Residue delivered for Disposal shall not include any Excluded Waste.

G. Marketability of Recovered Materials. Contractor acknowledges that City places great importance on Contractor's ability to recover resources, including but not limited to Recyclable Materials from the Solid Waste stream through the programs and services performed under this Agreement. City acknowledges that doing so requires Contractor to engage in marketing such recovered resources on the open market, which involves complex global commodities that Contractor has little influence over, and to store such recovered resources prior to marketing in accordance with its facility permits and to assure public health and safety. Under most market conditions, including periods of severely depressed and even negative value, Contractor shall market such resources to ensure that they are recycled into the productive economy.

In the event that Contractor encounters market challenges including, but not limited to, significant changes in pricing, market availability, or quality standards for Recyclable Materials marketed under this Agreement, Contractor shall notify City Contract Manager in writing within five (5) Business Days of the nature of the market challenge and the Contractor's plans for addressing the challenge. Contractor shall provide City Contract Manager with updates on the market challenges at least every twenty (20) Business Days thereafter until Contractor determines that the concern has been resolved.

In the event that the market challenge results in a lack of market demand for Recyclable Materials marketed under this Agreement, Contractor may request relief from the City as set forth below. A lack of market demand shall mean that Contractor cannot reasonably find a market for the productive use of the subject material at any value, positive or negative. Within one (1) Business Day of Contractor's first knowledge of the lack of markets, Contractor shall notify the City Contract Manager via telephone and email with a written notice to follow, such notice to include Contractor's best estimate of the time when its remaining capacity to store such materials under the terms of its facility permits (the "Storage Capacity") will expire. Contractor and City Contract Manager shall meet and confer at the

earliest mutually convenient opportunity to discuss the market conditions. In such case Contractor shall have the burden of proving its good faith efforts to identify markets for the subject material and shall present to City Contract Manager any information available to Contractor about the status of primary and alternative markets for the material, pricing histories, and any other information which may be helpful to the City in making a finding about the Contractor's need for relief. Contractor shall also provide the City Contract Manager with written notice when the Storage Capacity for the materials in question has declined to thirty percent (30%) of normal Storage Capacity, setting forth the estimated number of days when no Storage Capacity will remain. The City Contract Manager shall make a reasonable finding that a market demand either does or does not exist, based on the information presented and any other information available, within twenty (20) days after the Parties meet and confer or, if sooner, before the date when no Storage Capacity remains. If the City reasonably determines that a market demand does exist, Contractor shall be required to continue to market all materials as required under this Agreement. If the City reasonably determines that a market demand does not exist, City may simultaneously identify a productive, non-Disposal outlet for the subject material. If the City is able to so identify such an outlet and such outlet does not exceed the pricing limitation described in this section, Contractor shall deliver the subject material to that outlet. If the City is unable to so identify an outlet, City shall authorize Contractor to temporarily Dispose of the subject material. In such case, Contractor and City Contract Manager shall review the status of the markets at a frequency established by the City Contract Manager until such time as the market demand returns or City reasonably determines that the review process may be discontinued. Additionally, in the event that the City reasonably determines that a market demand does not exist, the City shall have the opportunity to take physical possession of some or all of the subject material from Contractor's facility, in order to market or otherwise Dispose of such materials through other channels or processes.

In the event that the market challenge results in a significant change in pricing for any materials Processed under this Agreement, Contractor may request relief from the City as set forth below. A significant change in pricing shall mean a reduction in market value such that the market cost, on a per ton basis, of sending the subject material to a non-Disposal market, including Transportation costs, exceeds two hundred percent (200%) of the then-current Disposal tipping fee under this Agreement. Processing costs which are described in and subject to the adjustment provisions of Section 2 and 3 of Exhibit I1 shall be excluded from this calculation (except for Transportation costs as set forth in the preceding sentence). For example, if the Processing cost was $135 per ton and Disposal cost was $50 per ton, then a reduction in market cost of sending the material to a non-Disposal market would be @$100 per ton plus the incursion of the $135 per ton Processing cost to the Contractor for a total of $235. Within five (5) Business Days of Contractor's first knowledge of the significant change in pricing, Contractor shall notify the City Contract Manager via telephone and email with a written notice to follow. Contractor shall also provide the City with written notice when the Storage Capacity for the materials in question has declined to thirty percent (30%) of normal, setting forth the estimated number of days when no Storage Capacity will remain. Contractor and City Contract Manager shall meet and confer at the earliest mutually convenient opportunity to discuss the market conditions. In such case Contractor shall have the burden of proving its good faith efforts to identify higher value markets for the subject material and shall present to City Contract Manager any information available to Contractor about the status of primary and alternative markets for the material, pricing histories, and any other information which may be helpful to the City in making a finding about the Contractor's need for relief. The City shall make a reasonable finding that a significant change in pricing has or has not occurred, based on the information presented and any other information available, within twenty (20) days after the parties meet and confer or, if sooner,

before the date when no Storage Capacity remains. If the City reasonably determines that a significant change in pricing has not occurred, Contractor shall be required to continue to market all materials as required under this Agreement. If the City reasonably determines that a significant change in pricing has occurred, City shall simultaneously either: 1) authorize the Contractor to send the materials to market at the significantly reduced value and agree to compensate the Contractor for any amount, including Transportation costs, that exceeds two hundred percent (200%) of the Disposal tipping fee plus the cost of Processing; or 2) identify an alternate, productive, non-Disposal outlet for the subject material at a value, including Transportation costs, less than two hundred percent (200%) of the Disposal tipping fee plus the cost of Processing. Contractor shall follow City's direction if either of those options is elected. If the City is unable to identify an outlet and unwilling to compensate Contractor for the significant change in price, including Transportation costs, beyond two hundred (200%) of the Disposal tipping fee plus the cost of Processing, City shall authorize Contractor to temporarily Dispose of the subject material. In such case, Contractor and City Contract Manager shall review the status of the markets at a frequency established by the City Contract Manager until such time as the market demand returns or City reasonably determines that the review process may be discontinued.

Notwithstanding any other provision of this Section, Contractor shall not Dispose of any material prior to receiving written City authorization to do so and, as necessary and appropriate under the circumstances, Contractor may also be required by the City to secure authorization from StopWaste and/or CalRecycle and/or other relevant regulatory entities.

In the event that City authorizes Disposal of materials under this Agreement related to the provisions of this section, Contractor may only Dispose of materials originating from the City in the same proportion as it Disposes of materials from other jurisdictions using the same facility. For example, if the City's materials represent 33% of the materials processed at the facility, Contractor may only Dispose of one ton of City materials for every two tons of other users' materials that are Disposed. This provision is intended to ensure that the City is treated equally in this regard with all other users of the facility.

5.13.3 Compostable Materials Processing

A. General. Contractor shall Transport all Compostable Materials Collected in the City to the Approved Composting Site. Contractor shall pay all costs associated with Transfer (if applicable), Transporting, Processing, Composting and marketing Compostable Materials. All Compostable Materials shall be processed for use as Compost, mulch, or soil amendment and none shall be Disposed or used as Alternative Landfill Cover. Residue from the Compostable Materials Processing and Composting activities shall be Disposed of by Contractor or the Composting Site at a Disposal Site selected by the Contractor or the Composting Site.

Any and all Transfer, Processing, Composting, and other material handling activities performed in the City shall occur in an enclosed facility and areas used for parking, vehicle access, and operations shall be paved. A site in the City used for material handling activities of any kind will be subject to the City's strict development permit review process.

B. Processing Arrangements. Contractor shall secure sufficient capacity to Process and Compost Compostable Materials Collected under this Agreement and cause the Approved Composting Site to Process, Compost, and market Compostable Materials. Promptly upon direction from City Contract Manager, Contractor shall provide City Contract Manager with documentation satisfactory to City

Contract Manager demonstrating availability of Compostable Materials Processing and Composting capacity at the Approved Composting Site and any Transfer Station used to deliver materials to such site.

Contractor shall keep all existing permits and approvals necessary for use of the Approved Composting Site in full regulatory compliance or confirm that the Owner or operator of such facility does so. Contractor shall, upon request, provide copies of permits and/or notices of violation of permits to the City Contract Manager.

Contractor may change its selection of the Approved Composting Site following City's written approval, but the Contractor's Compensation and Rates will not be adjusted, and Contractor will bear any increased Transportation and Processing costs associated with a Contractor-initiated change in the Approved Composting Site. In such case, Contractor shall guarantee the same net Composting Cost specified in Exhibit G or shall reduce the net Composting Costs associated with the use of a Composting Site(s) different from the Approved Composting Site. If Contractor elects to use a Composting Site(s) that is different than the Approved Composting Site, it shall request written approval from the City Contract Manager or his/her designee sixty (60) calendar days prior to use of the site and obtain the City's written approval no later than ten (10) calendar days prior to use of the site.

City may require Contractor to preprocess Compostable Materials in accordance with Section 4.3 City Directed Changes of this Agreement.

Below is information about the Approved Composting Site selected by the Contractor:

Facility Name: Blossom Valley North
Owner: Recology
Operator: Recology.
Address: 3909 Gaffery Road, Vernalis, California 95385
Contact Person and telephone number: Operations Manager, 209/545-4401

Method of allocating Processing and Composting Residue to Contractor and the City: The allocation method, for purposes of reporting to the State of California, shall be the method described in AB 901, and shall be certified by an authorized personnel or officer of that Approved Composting Processing Site Owner or operator. The allocation method, for purposes of determining Recycling Residue to the City shall be as described herein.

Contractor shall Collect Compostable Materials generated in the City in Collection Vehicles separately from other Compostable Materials generated outside the City, except as provided in Sections 6.20 and 6.21, and shall weigh each vehicle so that the Tonnage of Compostable Materials can be documented on a per-load basis with supporting documentation (such as a certified weight ticket or tag). Periodically, the Contractor shall review Tonnage records and marketing records to determine the City's Residue level and the average percentage of products marketed from the Compost Product (e.g., Compost, mulch, soil amendment, etc.). The percentages determined from the review of Tonnage and marketing records shall be used to allocate the total Tonnage Collected in the City into various categories of Compostable Materials and Residue. Contractor shall report Tonnage and Residue level in accordance with monthly and quarterly reporting requirements in Sections 6.3.2.C and 6.3.3.C.

If Contractor is unable to use the Approved Composting Site due to an emergency or sudden unforeseen closure of the Approved Composting Site, Contractor may use an alternative Processing Site provided that the Contractor provides verbal and written notice to the City Contract Manager and receives written approval from the City Contract Manager at least twenty-four (24) hours prior to the use of said alternative Processing Site. The Contractor's written notice shall include a description of the reasons the Approved Composting Site is not feasible and the period of time Contractor proposes to use the alternative Composting Site. Contractor shall not be compensated for any increased Transportation and Processing costs associated with the use of Composting Site(s) different from the Approved Composting Site, with the exception that if the inability to use the Approved Composting Site occurs due to one or more conditions defined in Section 8.4.A as an eligible item for special rate review such as a Change in Law, flood, earthquake, other acts of nature, war, civil insurrection, riots, acts of any government agency (including judicial action), or other similar catastrophic events that are beyond the control of and not the fault of the Contractor. In such case, the special rate review process may be initiated to assess the need to use an alternative Composting Site and/or cost impacts.

C. **Processing Standards.** The following Processing standards shall be met by the Approved Composting Site:

1. Pre-Processing activities shall include, at a minimum, the inspection for and removal of Hazardous Waste and removal of plastic bags which Commercial Customers used to store Compostables.

2. Composting shall be accomplished by the use of recognized Composting methods, which have been demonstrated to be able to consistently produce stable, mature Compost Product that is suitable for general purpose use, similar to the U.S. Composting Council's Class 1 rating.

3. Post-Composting Processing activities shall include screening to remove plastics and other contaminants from the Compost Product.

4. The Approved Composting Site Owner and/or operator shall cooperate with the City or its agent(s), including StopWaste, if the City Contract Manager wants to collect data, perform field work, and/or evaluate and monitor program results related to Compostable Materials Collected in the City by the Contractor.

5. The Compostable Materials Processing and Composting activities shall maintain an average monthly Residue level less than five percent (5%) where the Residue level shall be calculated as 100 multiplied by the monthly Tonnage of Processing or Composting Residue requiring Disposal divided by the total monthly Tonnage of Compostable Materials Collected.

D. **Transport.** The Contractor is responsible for Transporting Collected Compostable Materials to the Approved Composting Site. Contractor plans to Transfer materials (at the Contractor's Livermore yard) from Collection vehicles into large-capacity Transfer vehicles and then haul the materials to the Approved Composting Site. If the Contractor plans to change its Transport method, Contractor shall obtain written approval from the City prior to making the change; pay all costs; and shall not be reimbursed for any additional costs. The City shall approve the Transport method and the duration the Transport method is expected to be in use.

E. **Marketing.** Contractor shall market the resulting Compost Product to agricultural growers or other interested parties. Materials shall be used for Compost, mulch, or soil amendment and none shall be deposited for Disposal or used as Alternative Landfill Cover.

Contractor shall cause the Approved Composting Site to prepare and maintain a City-approved marketing plan for all Compostable Materials Collected in the City. The plan, which shall be approved by the City Contract Manager or his/her designee, shall be in place on or before the Commencement Date of this Agreement. The marketing plan shall fully describe the Contractor's marketing methods and approach, targeted primary and contingent markets, pricing policy and assumed value for each type of Compost Product, and contingency plans when market conditions are severe.

Upon request, Contractor shall provide proof to the City Contract Manager that all Compost Materials Contractor Collects in the City are marketed for use as Compost Products in such a manner that materials shall be considered as Diverted in accordance with the State regulations established by the Act. All Residual material from the Processing activities that is not marketed for use shall be accounted for as Disposal Tonnage at a permitted Disposal Site. No Compostable Materials shall be Transported to a domestic or foreign location if Solid Waste Disposal of such material is its intended use.

Annually, the Contractor shall obtain from the Approved Composting Site operator a marketing plan demonstrating that Compostable Materials will not be Disposed and submit it to the City Contract Manager. Contractor shall request that the Approved Composting Site operator provide City with a list of broker/buyers it has used during the preceding twelve (12) months, if requested by City Contract Manager. If Contractor becomes aware that a broker or buyer has illegally handled or Disposed of material generated by the City or elsewhere, Contractor shall immediately inform the City Contract Manager and terminate its contract or working relationship with such party.

F. **Product Use by City**. Contractor shall offer Compost Products to the City at a price that is limited to the cost incurred by the Contractor to purchase and Transport of such material to the City. If the City Contract Manager elects to purchase and back-haul finished Compost Products, the Contractor will collaborate with the City to organize and schedule up to two (2) neighborhood Compost "giveaways" (such as spring garden festivals) during the year.

G. **Reporting.** Contractor shall provide reports on Compostable Materials Processing as required by Sections 6.3.2, 6.3.3, and 6.4.

H. **Residue Disposal.** Residue from the Processing of Compostable Materials Collected under this Agreement at the Approved Composting Site, which cannot be marketed, shall be Disposed of by Contractor, or the Approved Composting Site. Residue delivered for Disposal shall not include any Excluded Waste.

5.13.4 Construction and Demolition Debris Processing

A. **General.** Contractor shall Transport all Construction and Demolition Debris Collected in the City to the Approved C&D Processing Site. Contractor shall pay all costs associated with Transfer (if applicable), Transporting, Processing and marketing Construction and Demolition Debris. Construction and Demolition Debris shall be processed for reuse and none shall be used as Alternative Landfill Cover. Residue from the Construction and Demolition Debris Processing activities shall be Disposed of by Contractor or the Approved C&D Processing Site at a Disposal Site selected by the Contractor or the Approved C&D Processing Site.

Any and all Transfer, Processing and other material handling activities performed in the City shall occur in an enclosed facility and areas used for parking, vehicle access, and operations shall be paved.

A site in the City used for material handling activities of any kind will be subject to the City's strict development permit review process.

B. **Processing Arrangements.** Contractor shall secure sufficient capacity to Process Construction and Demolition Debris Collected under this Agreement and to cause the Approved C&D Processing Site to Process and market Construction and Demolition Debris. Promptly upon direction from City Contract Manager, Contractor shall provide City Contract Manager with documentation satisfactory to City Contract Manager demonstrating availability of Construction and Demolition Debris Processing capacity at the Approved C&D Processing Site and any Transfer Station used to deliver materials to such site.

Contractor shall keep all existing permits and approvals necessary for use of the Approved C&D Processing Site in full regulatory compliance or confirm that the Owner or operator of such facility does so. Contractor shall, upon request, provide copies of permits and/or notices of violation of permits to the City Contract Manager.

Contractor may change its selection of the Approved C&D Processing Site following City's written approval, but the Contractor's Compensation and Rates will not be adjusted, and Contractor will bear any increased Transportation and Processing costs associated with a Contractor-initiated change in the Approved C&D Processing Site. In such case, Contractor shall guarantee the same net Processing Cost specified in Exhibit G or shall reduce the net Processing Costs associated with the use of a C&D Processing Site(s) different from the Approved C&D Processing Site. If Contractor elects to use a C&D Processing Site(s) that is different than the Approved C&D Processing Site, it shall request written approval from the City Contract Manager or his/her designee sixty (60) calendar days prior to use of the site and obtain the City's written approval no later than ten (10) calendar days prior to use of the site.

City may require Contractor to preprocess Construction and Demolition Debris in accordance with Section 4.3 City Directed Changes of this Agreement.

Below is information about the Approved C&D Processing Site selected by the Contractor:

Facility Name: Republic Services Vasco Road
Owner: Republic Services Vasco Road, LLC
Operator: Republic Services Vasco Road, LLC
Address: 4001 N. Vasco Road, Livermore, California
Contact Person and telephone number: Operations Manager, _____

Method of allocating Processing and Disposing Residue to Contractor and the City: The allocation method, for purposes of reporting to the State of California, shall be the method described in AB 901, and shall be certified by an authorized personnel or officer of that Approved C&D Processing Site Owner or operator. The allocation method, for purposes of determining Recycling Residue to the City shall be as described herein.

Contractor shall Collect Construction and Demolition Debris Materials generated in the City in Collection Vehicles separately from other Construction and Demolition Debris generated outside the City, except as provided in Sections 6.20 and 6.21, and shall weigh each vehicle so that the Tonnage of Construction and Demolition Debris can be documented on a per-load basis with supporting documentation (such as a certified weight ticket or tag). Periodically, the Contractor shall review

Tonnage records and marketing records to determine the City's Residue level and the average percentage of products marketed from the Construction and Demolition Debris. The percentages determined from the review of Tonnage and marketing records shall be used to allocate the total Tonnage Collected in the City into various categories of Construction and Demolition Debris and Residue. Contractor shall report Tonnage and Residue level in accordance with monthly and quarterly reporting requirements in Sections 6.3.2.C and 6.3.3.C.

If Contractor is unable to use the Approved C&D Processing Site due to an emergency or sudden unforeseen closure of the Approved C&D Processing Site, Contractor may use an alternative Processing Site provided that the Contractor provides verbal and written notice to the City Contract Manager and receives written approval from the City Contract Manager at least twenty-four (24) hours prior to the use of said alternative Processing Site. The Contractor's written notice shall include a description of the reasons the Approved C&D Processing Site is not feasible and the period of time Contractor proposes to use the alternative Processing Site. Contractor shall not be compensated for any increased Transportation and Processing costs associated with the use of Processing Site(s) different from the Approved C&D Processing Site, with the exception that if the inability to use the Approved C&D Processing Site occurs due to one or more conditions defined in Section 8.4.A as an eligible item for special rate review such as a Change in Law, flood, earthquake, other acts of nature, war, civil insurrection, riots, acts of any government agency (including judicial action), or other similar catastrophic events that are beyond the control of and not the fault of the Contractor. In such case, the special rate review process may be initiated to assess the need to use an alternative Composting Site and/or cost impacts.

C. **Processing Standards.** The following Processing standards shall be met by the Approved C&D Processing Site:

The Approved C&D Processing Site Owner and/or operator shall cooperate with the City or its agent(s), including StopWaste, if the City Contract Manager wants to collect data, perform field work, and/or evaluate and monitor program results related to Construction and Demolition Debris Collected in the City by the Contractor.

Contractor shall guarantee a Residue level of twenty-five percent (25%) or less, where the Residue level shall be calculated as 100 multiplied by the monthly Tonnage of Processing Residue requiring Disposal divided by the total monthly Tonnage of Construction and Demolition Debris Collected (e.g., the incoming Tons received by the Approved C&D Processing Site). Should the Contractor find that the Residue level exceeds this amount, it shall not constitute a breach or default, but Contractor shall notify City Contract Manager, and Contractor and City Contract Manager shall meet and confer regarding the appropriate measures to obtain compliance in the future.

D. **Transport.** The Contractor is responsible for Transporting Collected Construction and Demolition Debris to the Approved C&D Processing Site. Contractor plans to direct haul the materials from the point of Collection to the Approved C&D Processing Site. If the Contractor plans to change its Transport method, Contractor shall obtain written approval from the City prior to making the change; pay all costs; and shall not be reimbursed for any additional costs. The City shall approve the Transport method and the duration the Transport method is expected to be in use.

E. **Marketing Plan.** The Contractor shall be responsible for marketing Construction and Demolition Debris that Contractor Collects in the City. Contractor shall be compensated by the end users/marketplace for such Construction and Demolition Debris at no less than fair market value.

Contractor shall cause the Approved Construction and Demolition Debris Site to prepare and maintain a City Contract Manager-approved marketing plan for all Construction and Demolition Debris Collected in the City. The plan, which shall be approved by City Contract Manager or his/her designee, shall be in place on or before the Commencement Date of this Agreement. The marketing plan shall fully describe the Contractor's marketing methods and approach, targeted primary and contingent markets, pricing policy and assumed salvage value for each Collected type of Construction and Demolition Debris products, and contingency plans when market conditions are severe.

Upon request, Contractor shall provide proof to the City Contract Manager that all Construction and Demolition Debris Contractor Collects in the City are marketed for Recycling or reuse in such a manner that materials shall be considered as Diverted in accordance with the State regulations established by the Act. All Residual material from the Processing activities that is not marketed for use shall be accounted for as Disposal Tonnage at a permitted Disposal Site. No Construction and Demolition Debris shall be transported to a domestic or foreign location if Solid Waste Disposal of such material is its intended use.

Annually, the Contractor shall update its marketing plan and submit it to the City Contract Manager for approval pursuant to Section 6.4.9. Contractor shall provide City Contract Manager with a list of broker/buyers it has used during the preceding twelve (12) months, if requested by City Contract Manager. If Contractor becomes aware that a broker or buyer has illegally handled or Disposed of material generated by the City or elsewhere, Contractor shall immediately inform the City Contract Manager and terminate its contract or working relationship with such party.

F. **Reporting.** Contractor shall provide reports on Construction and Demolition Debris Processing as required by Sections 6.3.2, 6.3.3, and 6.4.

G. **Residue Disposal.** Residue from the Processing of Construction and Demolition Debris Collected under this Agreement at the Approved C&D Processing Site, which cannot be marketed, shall be Disposed of by Contractor, or the Approved C&D Processing Site. Residue delivered for Disposal shall not include any Excluded Waste.

5.13.5 Insurance, Indemnifications and Performance Standards

If Contractor uses a Recyclables Processing Site Subcontractor, C&D Processing Site Subcontractor, or Composting Subcontractor, or enters into any contract, agreement or understanding with a Subcontractor for services related to Recyclable Materials Processing and marketing, Construction and Demolition Debris Processing and marketing, Organic Materials Processing, Composting, and marketing, or Transfer Station services, Contractor shall provide that terms and conditions (such as insurance requirements, indemnifications, and Processing, Composting, marketing performance, and Residue guarantees) of any contract, agreement, or other understanding Contractor has with such Subcontractor can be enforced by the City as an additional insured or third party beneficiary thereof in the same manner provided in Article 9 and in a manner reasonably satisfactory to City Contract Manager. Should Contractor not be able to secure such terms and conditions, it shall notify City Contract Manager and Contractor and City Contract Manager shall agree on reasonable response.

If Contractor or an Affiliate owns or operates the Approved Recyclable Materials Processing Site, Approved C&D Processing Site or Approved Composting Site, Contractor shall include City as an additional insured on liability policies and defend and indemnify City in a manner satisfactory to the City's Risk Manager, and provide that any materials recovery and marketing performance standards or guarantees made to any other facility customers are made to City as well, including obligations such as recovered product and Compost Product quality guarantees and limits on the Residue level.

Contractor shall demonstrate compliance with the requirements of this paragraph on or before the Commencement Date of this Agreement.

5.13.6 Compliance with Applicable Law

Contractor (or its Subcontractor(s)) warrants throughout the Term that the Approved Recyclables Processing Site, Approved C&D Processing Site, and Approved Composting Site selected by Contractor are respectively authorized and permitted to accept Recyclable Materials, Construction and Demolition Debris, and Compostable Materials in accordance with Applicable Law and is in full compliance with Applicable Law. Contractor shall: (1) verify compliance for the Approved Recyclables Processing Site, Approved C&D Processing Site, and Approved Composting Site (that neither it nor its Affiliates own) by contacting the local enforcement agency and other regulatory agencies having jurisdiction over that Approved Recyclables Processing Site, C&D Processing Site, and Approved Composting Site at least quarterly; and (2) upon City Contract Manager direction, shall promptly provide City Contract Manager with copies of the Approved Recyclables Processing Site, Approved C&D Processing Site, and Approved Composting Site's permits or notice of violations to City Contract Manager.

5.13.7 Compliance with Facility Rules

Contractor (or its Subcontractor(s)) shall observe and comply with all regulations in effect at the Approved Recyclables Processing Site, Approved C&D Processing Site, and Approved Composting Site and cooperate with the operators thereof with respect to delivery of Recyclable Materials, Construction and Demolition Debris, and Compostable Materials, including directions to unload Collection vehicles in designated areas, accommodating operations and maintenance activities, and complying with Hazardous Waste exclusion programs.

5.13.8 Transportation and Processing Costs

All costs associated with Transporting to and Processing Recyclable Materials and Compostable Materials at the Approved Recyclables Processing Site, Approved C&D Processing Site, and Approved Composting Site shall be paid by Contractor.

5.13.9 Weighing and Record Requirements

Contractor shall ensure that all Solid Waste, Recyclable Materials, Construction and Demolition Debris, and Compostable Materials are weighed upon delivery to the Approved Facility(ies), and all weight and related delivery information (including date, time, material type, route and truck number) ("Delivery Data") is recorded. Contractor shall provide City Contract Manager the name of any driver of any identified delivery promptly upon request by City Contract Manager. If vehicle receiving and unloading operations are recorded on video cameras at any Approved Facility(ies), Contractor shall make, or shall use its best efforts to arrange with the facility operator if other than Contractor to make, those videos available for City Contract Manager review during the facility's operating hours, upon request of the City Contract Manager.

5.13.10 Disposal of Recyclable, Construction and Demolition Debris, and Compostable Materials Prohibited

With the exception of Processing and Composting Residue which shall not exceed five percent (5%) of the Compostable Materials and twenty percent (20%) for Recyclable Materials (based on a monthly average) and twenty-five percent (25%) for Construction and Demolition Debris (based on each construction and demolition project), Recyclable and Compostable Materials and Construction and Demolition Debris may not be Disposed of in lieu of Recycling or Composting the material, without the express written approval of the City. If for reasons beyond its reasonable control, Contractor (or its Subcontractor(s)) believes that it cannot Divert the Recyclable or Construction and Demolition Debris or Compostable Materials from Disposal, then it shall notify City Contractor Manager in accordance with Section 5.13.2.G Marketability of Recovered Materials above. Should the Contractor find that the Residue level exceeds the amounts described above, it shall not constitute a breach or default, but Contractor shall notify City Contract Manager, and Contractor and City Contract Manager shall meet and confer regarding the appropriate measures to obtain compliance in the future.

In the event the accumulation of such non-Diverted Recyclable or Compostable Material is causing, or is likely to cause, a nuisance or health hazard, in the sole discretion of the City Contract Manager, he or she may authorize, in writing, the Disposal of such material on an interim basis pending City Council's final approval (or disapproval) of such Disposal.

5.13.11 Alternative Facility Designation by City

The City reserves the right to direct Contractor to transport and deliver: (i) all Compostable Materials Collected pursuant to this Agreement to a Composting Site other than the Approved Composting Site selected by the Contractor, (ii) all Recyclable Materials Collected pursuant to this Agreement to an alternative Processing Site other than the Approved Processing Site selected by the Contractor, or (iii) all C&D Debris Collected pursuant to this Agreement to a C&D Processing Site other than the Approved C&D Processing Site selected by the Contractor. If the City exercises its right under this provision and specifies use of a Recyclables, C&D, or Composting Processing Site that is different from the Contractor-selected Approved Facility(ies), the City shall provide written notice to Contractor one (1) year before the date the Contractor shall commence use of the City-designated site. Furthermore, the Contractor's Compensation and Rates will be adjusted for increases or decreases in Transportation, Processing, and/or Composting costs, if any, in accordance with Sections 4.3 and 8.5.

5.14 Collection Standards

5.14.1 Care of Private Property

Contractor shall use due care when handling Solid Waste, Recyclable Materials and Compostable Materials Containers. Containers shall not be thrown from trucks, roughly handled, damaged or broken. Containers shall be returned to the Collection point upright, with lids properly secured. The City may levy Liquidated Damages for repeat occurrences in accordance with Section 11.6 of this Agreement.

Contractor shall ensure that its employees close all gates opened in making Collections, unless otherwise directed by the Generator, and avoid crossing landscaped areas and climbing or jumping over hedges and fences for Collection service provided to the elderly and/or disabled receiving backyard/side yard services and any Customers paying for backyard/side yard services.

City shall refer Complaints about damage to private property to Contractor. Contractor shall repair all damage to private property caused by its employees or their vehicles.

5.14.2 Litter Abatement

A. **Minimization of Spills**. Contractor shall use due care to prevent Solid Waste, Recyclable Materials, and Compostable Materials from being spilled, scattered, windblown during the Collection, Transportation, Processing, or other material handling activity. If any Solid Waste, Recyclable Materials, or Compostable Materials are spilled during Collection, Transportation, Processing, or other material handling activity, the Contractor shall promptly clean up all Unacceptable Spillage. This clean-up requirement shall apply to cleaning up drift (e.g., windblown materials) along roads near the facilities used by the Contractor resulting from Contractor's Transport, Transfer, or other material handling activities.

Contractor shall not Transfer loads from one vehicle to another on any public street, unless it is necessary to do so because of mechanical failure; hot load (combustion of material in the truck); accidental damage to a vehicle or unless approved by the City.

B. **Cleanup**. During Collection, the Contractor shall clean up Litter (whether or not Contractor has caused the Litter) and Unacceptable Spills in the immediate vicinity of any Solid Waste, Recyclable Materials or Compostable Materials storage area (including the areas where Collection Bins and Drop Boxes are and Compactors are delivered for Collection). Each Collection vehicle shall carry a broom and shovel at all times for the purpose of cleanup of Litter and Unacceptable Spills. Cat litter or similar absorbent material shall be used for liquid spill cleanups. The Contractor shall discuss instances of repeated spillage not caused by it directly with the Generator responsible and will report such instances to City. In situations where the Contractor has already attempted to do so without success, the City will attempt to rectify such situations with the Generator.

C. **Covering of Loads**. Contractor shall cover all open Drop Boxes at pick-up location prior to Transport to the Disposal Site or Processing Site.

5.14.3 Hours of Collection

If the Collection point of a Commercial Premises is one hundred (100) feet or less from Single-Family and Multi-Family structures, Contractor may only Collect Solid Waste, Recyclable Materials and Compostable Materials from the Commercial Premises between the hours of 6:00 a.m. and 6:00 p.m., except as provided for in LMC 8.19.020 (A) (14). If the Collection point of a Commercial Premises is more than one hundred (100) feet from Single-Family and Multi-Family structures, Contractor may only Collect Solid Waste, Recyclable Materials and Compostable Materials from the Commercial Premises between the hours of 4:00 a.m. and 6:00 p.m. The distance from the Collection point to the Residential structure shall be measured from the location of the Collection Container on the Commercial Premises to the adjacent Residential structure. Contractor will promptly resolve any Complaints of noise during the morning or evening hours of the day to the satisfaction of the City Contract Manager. For the purposes of this Section, schools shall be considered Commercial Premises.

5.14.4 Noise

All Collection operations shall be conducted as quietly as possible and shall conform to applicable Federal, State, County and City noise level regulations. Additional requirements are specified in Section 5.15.2.

5.14.5 Holiday Collection Schedule

During the week of a Holiday, Collection may not occur on the Holiday but shall occur on the day following the Holiday, except when the Holiday falls on a Saturday or Sunday Collection shall occur on the first Monday following the Holiday. The Contractor shall provide at least a two (2) week advance notice to all Customers regarding the Holiday week schedule changes.

5.14.6 Permanent Changes in Service Days

The regularly scheduled day for Single-Family Collection may be changed with prior written approval from the City. Once approved, Single-Family Customers shall be notified four (4) weeks prior to any schedule changes to Solid Waste, Recyclable Materials, and Compostable Materials services. Contractor shall not permit any Customer to go more than seven (7) calendar days without service during a Collection schedule change.

5.14.7 Load Inspection Program

Contractor shall develop and implement a program to detect and discover Hazardous Waste and shall not knowingly accept such material at the time of Collection. The load inspection program shall include the following steps: Collection vehicle drivers shall receive regular training (at least four (4) times annually) to identify Hazardous Wastes and methods for handling these materials once spotted. All Contractor facilities shall have waste exclusion programs in place to screen for and eliminate Hazardous Waste from the materials received. Random inspections of loads Collected and visual screening shall be periodically conducted by the Contractor at its facilities or at the Approved Facilities when materials are unloaded from the Collection vehicle. Records of load checks and copies of the employee training records shall be maintained at Contractor's facilities. When Hazardous Waste is found, it shall be returned to the Generator if possible. If the Hazardous Waste cannot be returned to the Generator, Contractor shall place Hazardous Waste in an authorized storage location and arrange for proper Disposal of such material at its own costs. (See also Sections 5.11 and 5.18.3.)

5.14.8 Overages (Excess Materials)

Contractor shall direct its employees not to Collect Solid Waste, Recyclable Materials, or Compostable Materials beyond each Customer's subscription level of service unless the business office of Contractor has granted prior authorization to make such Collection or the overages of Compostable Materials are placed in a kraft bag as described in Section 5.4.1.D and Customer is billed at the City-approved Rate on the Rate Schedule in Exhibit H.

5.14.9 Non-Collection Notices

Contractor shall instruct all Customers and Generators as to any necessary preparation of materials and the proper placement of Containers for Collection; and shall notify Customers who fail to follow these instructions by attaching a thirteen (13) inch by six (6) inch tag to the Container with a description of how Customer has violated such instructions. In the event of non-Collection as a result of such violation, Contractor shall clearly indicate on the tag the reason for non-Collection and what steps must be taken by Customer to recommence service. In cases of extreme or repeated failure to comply with the instructions, Contractor shall notify the City Contract Manager of the Customer's repeated failures, in accordance with Sections 5.3.3.F and 5.4.3.G.

5.15 Vehicles

5.15.1 General

Beginning in Rate Period Twelve (which commences on July 1, 2021), Contractor shall provide a fleet of new Collection vehicles sufficient in number and capacity to efficiently perform the work required by the Agreement in strict accordance with its terms. Should the Contractor anticipate a delay in the delivery of such new Collection vehicles, resulting from matters beyond its control, it shall notify the City Contract Manager of the conditions resulting in the delay and request approval of an extended commencement date. The Parties shall meet and confer on a reasonable extension to the July, 1 2021 commencement date. The Collection vehicles shall operate on compressed natural gas (CNG). Contractor shall have available sufficient back-up vehicles for each type of Collection vehicle used (e.g., side loader, front loader, roll-off, etc.) to respond to Complaints and emergencies. The new vehicles shall be used to exclusively provide services under this Agreement including services to the County (Section 6.20) and Livermore Valley Joint Community School District (Section 6.21) for a minimum of ten (10) years commencing in Rate Period Twelve (which commences on July 1, 2021) of this Agreement; and, Contractor shall depreciate the vehicles over a ten-year (10-year) period. Contractor shall operate no vehicles, except spares that otherwise meet the requirements of this Section 5.15, within the City over fifteen years (15-years) in age during the initial or extended Term of this Agreement.

Contractor shall service Single-Family Customers with automated side-loading Collection vehicle operated by a one-Person crew (e.g., driver only). Contractor's fleet of Collection vehicles shall include one or more vehicles capable of Collecting from "hard-to-service" Customers. Hard-to-service Customers are Customers whose Carts may not be accessible by traditional, large-capacity Collection vehicles for a variety of reasons, such as, but not limited to: newer Residential streets that are narrower than standard Residential streets; limited space available for Customers to place Carts three feet apart; mature trees (or trees that mature during the future) that limit vehicle clearances; and many large Multi-Family Premises are built at the end of cul-de-sacs with cars parked along both sides of the street forcing the Collection vehicle driver to exit the vehicle and wheel Carts to the Collection vehicle. Contractor shall anticipate that future Residential development in the City may result in more areas with narrow streets that may be difficult to serve. Additionally, future development could be denser and could increase mixed use (e.g., apartments or condominiums above or adjacent to businesses) and/or multi-story buildings (e.g., up to four (4) or five (5) stories).

In addition to hard-to-service Residential Customers, some Commercial Customers in the downtown area are difficult to service. As more development occurs in the downtown area, more Collection difficulties may arise. The Contractor shall be responsible for providing and operating the appropriate types of Collection vehicles to effectively service any and all hard-to-service Customers as of the Commencement Date and over the Term of the Agreement.

Contractor shall be solely responsible for identifying hard-to-service Customers and selecting Collection vehicle(s) or other Collection means that are capable of efficiently servicing them. Contractor plans to service "hard-to-service" Customers with rear-loading Collection vehicle(s) operated by two-Person crews (e.g., driver and helper) with the exception of Customers that can be safely served with Contractor's side-loading or front-loading Collection vehicles. Contractor may also use split-body vehicles to Collect more than one type of material concurrently.

Contractor shall Collect Solid Waste, Recyclable Materials, and Compostable Materials generated in the City in Collection Vehicles separately from each other and from other materials generated outside the City, except as provided in Sections 6.20 and 6.21. Contractor shall weigh each vehicle at the Transfer Station, Processing Site, Composting Site, or Disposal Site so that the Tonnage of materials can be documented on a per-load basis by material type with supporting documentation (such as a certified weight ticket or tag).

5.15.2 Specifications

All vehicles used by Contractor in providing Collection services shall be registered with the California Department of Motor Vehicles. All such vehicles shall have watertight bodies designed to prevent leakage, spillage or overflow. All such vehicles shall comply with U.S. Environmental Protection Agency (EPA) noise emission regulations and other applicable noise control regulations. Any vehicle that does not comply with noise level requirements stated in Section 5.14.4 shall be prohibited from performing services under this Agreement.

As required by law, Contractor shall comply with State and federal regulations including, but not limited to: (i) the California Air Resources Board Heavy Duty Engine Standards, contained in CCR Title 13, Section 2020 et seq; and, (ii) the Federal Environmental Protection Agency's Highway Diesel Fuel Sulfur regulations (Section 209(b) of the Clean Air Act, as amended, 42 U.S.C. 7543(b)). In addition, Contractor shall plan to comply with all State and federal regulations related to emissions control using engines, vehicles, and/or control technologies that meet or exceed the 2019 or later model year vehicle and engine requirements. Contractor shall comply with these requirements by using new Collection vehicles on or before the first date of Rate Period Twelve (which commences on July 1, 2021) that meet or exceed the requirements. If Contractor needs to convert, retrofit, or replace its Collection vehicles to be in full compliance with local, State and federal clean air requirements (including compliance with requirements for 2010 or later model year vehicles) in effect on the Commencement Date of the Agreement, the costs for such changes shall be the sole responsibility of the Contractor and shall not be reimbursed through a change in Contractor's Compensation or Rates. To the extent that clean air requirements become more or less stringent after the Commencement Date of the Agreement, Contractor Compensation or Rates shall be adjusted upward or downward to reflect reasonable and actual costs of modification subject to prior approval from the City.

5.15.3 Vehicle Identification

Contractor's name, local telephone number, and a unique vehicle identification number for each vehicle shall be prominently displayed on all vehicles, in letters and numbers no less than six (6) inches high. Contractor shall not place the City's logo on its vehicles. Contractor shall not use vehicles identified for use in Livermore in any other jurisdiction without prior approval from the City Contract Manager.

5.15.4 Inventory

Contractor shall furnish sufficient equipment to provide all service required under this Agreement. Contractor shall furnish the City Contract Manager a written inventory of all vehicles, including Collection vehicles, used in providing service, and shall update the inventory report annually. The inventory shall list all vehicles by manufacturer, ID number, date of acquisition, type, capacity and decibel rating.

5.15.5 Cleaning and Maintenance

A. **General.** Contractor shall maintain all of its properties, facilities, and equipment used in providing service under this Agreement in a safe, neat, clean, and operable condition at all times.

B. **Cleaning.** Vehicles used in the Collection of Solid Waste, Recyclable Materials, and Compostable Materials shall be thoroughly washed and thoroughly steam cleaned on a minimum of one (1) time per week or more frequently if necessary so as to present a clean appearance of the exterior and interior compartment of the vehicle. City Contract Manager may inspect vehicles at any time to determine compliance with sanitation requirements. Contractor shall make vehicles available to the Alameda County Health Department for inspection at any frequency it requests.

C. **Maintenance.** Contractor shall inspect each vehicle daily to ensure that all equipment is operating properly. Vehicles that are not operating properly shall be taken out of service until they are repaired and operate properly. Contractor shall perform all scheduled maintenance functions in accordance with the manufacturer's specifications and schedule. Contractor shall keep accurate records of all vehicle maintenance, recorded according to date and mileage, and shall make such records available to the City Contract Manager upon request to the extent necessary to perform the inspections described in Sections 6.8 and 6.9.

D **Painting.** All vehicles shall be painted on a regular schedule to maintain a clean, professional, new-like appearance. At any time during the Term, the City Contract Manager may require painting of any vehicle which does not present a satisfactory appearance and such vehicle shall be painted within thirty (30) calendar days of the City Contract Manager's written request. All graffiti shall be removed within forty-eight (48) hours if such graffiti includes any written or pictorial obscenities and otherwise shall be removed within five (5) Business Days.

E. **Repairs.** Contractor shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a neat, clean, safe and operable condition. If an item of repair is covered by a warranty, Contractor shall obtain warranty performance. Contractor shall maintain accurate records of repair, which shall include the date/mileage, nature of repair and the signature of a maintenance supervisor that the repair has been properly performed. Repairs shall include repair of cosmetic dents and damage to vehicles so as to maintain a neat appearance of the equipment.

F. **Storage.** Contractor shall arrange to store all vehicles and other equipment in safe and secure location(s) in accordance with City's applicable zoning regulations.

5.15.6 Operation

Vehicles shall be operated in compliance with the California Vehicle Code, and all applicable safety and local ordinances. Contractor shall not load vehicles in excess of the manufacturer's recommendations or limitations imposed by State or local weight restrictions on vehicles. The City Contract Manager shall be notified no later than seventy-two (72) hours after an inspection is performed by the California Highway Patrol under the California Motor Vehicle Code Section 34501.12 (Maintenance Facility or Terminal Inspection). All records of periodic inspections of vehicles to comply with California Motor Vehicle Code Section 34505.5 shall be available for inspection by City Contract Manager.

To the extent practical, Contractor shall use re-refined motor oil for on-going operations of its Collection vehicles.

5.15.7 GPS Equipment and Monitoring

Contractor shall equip each Collection vehicle with Global Positioning System (GPS) equipment that allows for tracking the vehicle's activities. The City requires the GPS tracking system to provide vehicle position

and history and the location of each Collection. Data updates shall be real time or updated every fifteen (15) minutes. Contractor shall provide the City Contract Manager access to GPS data through a minimum of two (2) City computers.

The backbone of the Contractor's solution to Collection performance management and Customer service systems is one developed and supported by PC Scale Tower™ (Tower). Tower employs Microsoft Certified Systems Engineers, Microsoft Certified Database Administrators, Microsoft Certified Application Developers, Microsoft Certified Professionals + Internet, Microsoft Certified Professionals, and Citrix Certified Professionals. The software is designed by waste industry professionals. A Tower demonstration CD was included with Contractor's Proposal as Exhibit 2.1. It is important to note that Tower software can be customized based on Contractor specifications and City Contract Manager preferences.

All daily operations functions at Contractor and its Affiliates are managed through Tower. Primary Tower functions include maintenance of Customer records and Billing information; route management (including generation of driver route sheets); Customer, route data, and route mapping system (using a geocoding software in conjunction with Tower), each of which are described in Contractor's Proposal (Exhibit M, Section 2M). One copy of Contractor's internal Tower resource manual was included with Contractor's Proposal under separate cover. These directives will be refined for use by Contractor for its operations in the City. The resource manual includes information on how most Customer service functions are completed in the system, such as missed Collections, Container exchanges, supervisor notification, reminders, and so forth. One excellent and unique feature that is not documented in the manual, as of the date of this printing, is the ability to attach any sort of file to a Customer's account, such a photo or letter from the Customer.

5.15.8 Compressed Natural Gas

The Collection vehicles shall operate on compressed natural gas (CNG). As of the Effective Date of this Agreement, the Contractor was awarded $789,365.87 in grant monies from the Bay Area Air Quality Management Board to cover some of the capital costs of the CNG vehicle engines used during Rate Periods 1-10.

5.16 Containers

5.16.1 General

Contractor shall provide Customers with Collection Containers as requested by the Customer to meet its desired Service Level. All Collection Containers provided shall be new Containers as of the Commencement Date. Contractor shall purchase Containers with a useful life of ten (10) years or more and shall depreciate the Containers over a ten-year (10-year) period. New Container purchases shall comply with the requirements of Section 5.16.5.

Commencing January 1, 2022, Contractor shall provide new Containers to Generators that have lids, or shall replace lids on Containers that otherwise meet the requirements of this Agreement with lids, that comply with the color and labeling requirements of SB 1383 or, when replacing Containers, by January 1, 2036.

If a Customer requests a different Container size, Contractor shall provide Customer with Container(s) in the requested size within seven (7) Business Days or pay Liquidated Damages pursuant to Section 11.6.

Contractor shall make Compactors available to Customers for purchase or lease and shall allow Customers to purchase or lease Compactors through an outside vendor.

5.16.2 Intentionally Deleted

5.16.3 Replacement of Containers

Contractor shall be responsible for replacing Containers when Contractor determines the Container is no longer suitable for service; or when the City Contract Manager or Customer requests replacement of Customer's Container that does not properly function, leaks, is damaged, or is otherwise not fit for service. Contractor shall be responsible for acquiring the replacement Containers as well as maintaining an inventory of Containers at a level that allows for the Contractor to provide Customers with different size Containers within seven (7) calendar days of request. Contractor Compensation for the cost of such replacements and inventory maintenance is described in Exhibits I Index-Based Rate Adjustment Method and J Cost-Based Rate Adjustment Method

5.16.4 City Ownership of Containers at end of Term

Upon expiration or early termination of Agreement, all Carts, Bins, Drop Boxes, and Compactors (for permanent Customers) purchased and put into service at Customers' Premises during the Term of the Agreement shall become property of the City at no cost to the City if such Containers are fully depreciated. All Carts, Bins, Drop Boxes, and Compactors (for permanent Customers) purchased and put into service at Customers' Premises during the Term of the Agreement that have not been fully depreciated shall be available to the City, at the City's option, at a cost reflecting the net book value.

At its sole discretion, the City may elect not to exercise its rights with regards to this Section and, in such case; the Containers shall remain the property of the Contractor upon the expiration date of this Agreement or date of its earlier termination of this Agreement. In such case, Contractor shall be responsible for outstanding depreciation and for removing all Containers in service from Premises within fourteen (14) Business Days of the expiration date or early termination date of this Agreement.

5.16.5 Container Standards

Contractor shall provide Containers for storage and Collection of Solid Waste, Recyclable Materials, and Compostable Materials which shall be designed and constructed to be watertight and prevent the leakage of liquids.

Contractor shall purchase Carts and kitchen pails that contain a minimum of 30% post-consumer recycled plastic content. All Carts and kitchen pails shall be 100% Recyclable.

All new Carts shall be manufactured by injection or rotational molding methods and shall meet the Cart design, color, and performance requirements provided in Exhibit E. Contractor shall obtain the City Contract Manager's written approval of Cart specifications before acquisition. Carts provided to Customers shall have a useful life of ten (10) or more years or more as evidenced by a manufacturer's warranty or other documentation acceptable to the City Contract Manager.

All Containers with a capacity of one (1) cubic yard or more shall meet applicable federal regulations for Bin safety and be covered with attached lids. All Bins, Drop Boxes, and Compactors shall be painted the Contractor's standard color and shall prominently display the name and telephone number of the Contractor.

Contractor shall ensure that all Containers comply with color-coding and labeling requirements of SB 1383 and the Alameda County Mandatory Recycling Ordinance by the implementation dates included in those laws, at no additional cost to the City or Customers.

As described in Section 5.4.1.C, and 5.4.2.B, the kitchen pail shall be made of rigid plastic, and have a capacity of 1.5 to 2.5 gallons, a wire or plastic handle, and a lid. Contractor must submit kitchen pail order (including material and design specifications, colors and identification marks) to City Contract Manager for City Contract Manager's written approval prior to submitting the order to the manufacturer.

As described in Section 5.4.3.I, the "slim jim" style Compostables storage bins for use by the Customer inside their Premises shall have approximately 23 gallons of capacity and be constructed of rigid plastic. Contractor must submit the Compostables storage bin order (including material and design specifications, colors and identification marks) to City for City's written approval prior to submitting the order to the manufacturer.

5.16.6 Container Sizes

Following is a table that summarizes the Container size specifications. In the event of conflicts between descriptions in this Section 5.16.6 and Sections 5.2, 5.3, 5.4, and 5.5, the requirements in Sections 5.2, 5.3, 5.4, and 5.5 shall govern.

Service Type	Single-Family Customers	Multi-Family Customers	Commercial Customers
Solid Waste	• 20-, 32-, 64-, or 96-gallon Carts (or similar sizes approved by the City Contract Manager) • 1 to 7 cubic yard Bins • 10 to 40 cubic yard Drop Boxes and Compactors	• 32-, 64- or 96-gallon Carts (or similar sizes approved by the City Contract Manager) • 1 to 7 cubic yard Bins • 10 to 40 cubic yard Drop Boxes and Compactors	• 32-, 64-, or 96-gallon Carts (or similar sizes approved by the City Contract Manager) • 1 to 7 cubic yard Bins • 10 to 40 cubic yard Drop Boxes and Compactors
Recyclable Materials	• 96-gallon Carts (or similar size approved by the City Contract Manager) shall be the standard service • 32- and 64-gallon Carts (or similar sizes approved by the City Contract Manager) to be provided upon request as an alternative to the standard 96-gallon Cart • Additional Cart to be provide upon Customer request at City-approved Rate	• Same as Single-Family Customers • Default 96-gallon Cart pursuant to Section 5.3.3.B • Tote bags in accordance with Section 5.3.3.H	• Same as above • Minimum 96-gallon Cart for universal Recycling service pursuant to Section 5.3.3.B • Containers for indoor use pursuant to Section 5.3.3.I

Service Type	Single-Family Customers	Multi-Family Customers	Commercial Customers
Compostable Materials	• 96-gallon Carts (or similar size approved by the City Contract Manager) shall be the standard service • 32- and 64-gallon Carts (or similar sizes approved by the City Contract Manager) to be provided upon request as an alternative to the standard 96-gallon Cart • Additional Cart to be provide upon Customer request at City-approved Rate • 1.5- to 2.5-gallon kitchen pail upon Customer request	Same as Single-Family Customers	• Same as Solid Waste Containers • Minimum 96-gallon Cart for universal Compostables service pursuant to Section 5.4.3.B • Containers for indoor use pursuant to Section 5.4.3.I
Large Events	Not applicable	Not applicable	Same as listed above for Commercial Customers

* 32-gallon Carts are Carts with 32 gallons of capacity in the Cart body and 3 gallons in the domed lid for a total capacity of 35 gallons.

5.16.7 Container Labeling

On each Container, Contractor shall label with paint, adhesive label, or white, hot-stamped lettering, the type of materials (e.g., Solid Waste, Recyclable Materials, cardboard, mixed paper, Yard Trimmings, Food Scraps and Other Targeted Compostables, mixed Construction and Demolition Debris, wood waste, metal, etc.) to be placed in the Container for Collection. The labeling shall be positioned on each Container so it is visible to the Customer at all times, and shall comply with SB 1383 and Alameda County Mandatory Recycling Ordinance requirements.

All Containers shall prominently display the Contractor's name and phone number in paint or on an adhesive label.

5.16.8 Cleaning, Painting, Maintenance

Contractor shall steam clean and repaint all Containers as needed (other than Carts) so as to present a clean appearance. Contractor shall offer steam cleaning service (or clean Container exchange) to Customers requesting such service, and shall charge Customers for such cleaning (or Container exchange) in accordance with City-approved Rates on the Rate Schedule in Exhibit H.

Contractor shall remove graffiti from Containers within forty-eight (48) hours of identification by Contractor or notice by City Contract Manager or Customer if such graffiti includes any written or pictorial obscenities and otherwise within five (5) Business Days.

All Containers shall be maintained in a functional condition. At the City Contract Manager's request, Contractor shall provide City Contract Manager with a list of Containers and the date each Container was painted and maintained.

5.16.9 Repair and Replacement

Contractor shall repair or replace all Containers which have broken wheels, hinges, or other nonfunctioning parts or cracks or holes. Contractor shall repair or replace all Containers damaged by Collection operations within a one (1) week period. If the repair or replacement cannot be completed within in a week, the Customer shall be notified by Contractor and a larger Container shall be made available until the proper Container can be replaced.

5.17 Public Education and Technical Assistance

5.17.1 General

Contractor or a Consultant shall educate Residential and Commercial Customers on the following: (i) the benefit of source reduction, reuse, Recycling, and Composting and related program opportunities; (ii) proper handling of E-Waste, U-Waste, and Hazardous Waste; (iii) specific programs offered by the Contractor; (iv) Rates for Collection services, and (v) compliance with the Mandatory Recycling Ordinance and SB 1383, as applicable. Starting February 1, 2022, and annually thereafter, the Contractor shall also provide Generators with information on properly separating materials, Organic Waste prevention, on-site recycling, community Composting, methane reduction benefits, how to recycle Organic Waste, a list of approved haulers and information related to food recovery. The public education program shall include distribution of public education materials at the commencement of the Agreement, when Collection services are changed during the Term of the Agreement, and when new Collection services are implemented during the Term of the Agreement. In addition, the public education program shall include on-going education activities throughout the Term of the Agreement. Educational media shall include, but not be limited to, newsletters, bill inserts, flyers, door hangers, notification tags, newspaper advertisements, direct contact with Customers or Owners and Occupants of Premises, and website information including how-to-videos.

Detailed requirements of the public education program as specified by the City are described in Exhibit C. The Contractor's public education and outreach plan presented in Contractor's Proposal is presented in Exhibit C1.

During the two (2) months prior to and two (2) months following the Commencement Date, the Contractor shall employ three full-time personnel to properly educate Customers about all service changes. During the Term of the Agreement, the Contractor shall employ one full-time public education manager and one full-time recycling coordinator/public education coordinator dedicated to implementing its public education program. These positions may be filled by Contractor's personnel or personnel of a subcontractor.

In the event Contractor fails to perform some or all of the requirements of the public education plan described in this Section and in Exhibits C and C1, the Contractor shall pay the City Liquidated Damages as described in Section 11.6.

5.17.2 Annual Public Education Plan

As part of the Contractor's third quarterly report (required by Section 6.3.3 of this Agreement) for each Rate Period, Contractor shall submit an annual update to Contractor's public education plan outlining its specific planned public education efforts for the coming Rate Period. The plan shall list each public education piece (e.g., newsletters, bill inserts, flyers, newspaper advertisements, etc.) to be prepared, the

purpose of the piece, the key subject(s) to be covered, and the anticipated date of issuance. In addition, the plan shall list all events the Contractor plans to attend and the public education it intends to provide at such event (e.g., exhibit at Earth Day event, presentation at Chamber of Commerce meetings, etc.). The City Contract Manager shall review and approve the plan.

5.17.3 Public Education Content and Production Requirements

Prior to preparing public education materials, Contractor shall discuss with the City Contract Manager its general approach to preparing the materials and shall determine if the City Contract Manager has any City-specific guidelines to be followed and if the City Contract Manager wants the Contractor to work with templates prepared by StopWaste or others.

The public education materials shall emphasize use of visual/graphic images as much as is practical. Furthermore, the materials shall include a clear listing of program "Dos" and "Don'ts" using visual images as much as is practical. For example, the "Dos" shall list the types of materials the Customer may place in its Recyclable Materials or Compostable Materials Containers and the "Don'ts" should list prohibited types of materials and Hazardous Waste.

All public education materials shall be printed on paper containing the highest levels of recycled content material reasonably practical with a minimum requirement of thirty percent (30%) post-consumer content based on federal standards. Contractor shall provide Customers the option of requesting paperless communications with the Contractor including electronic delivery of public education and outreach materials.

To address the multi-lingual diversity of the City, public education materials shall use visual images and English descriptions supplemented with text on the bottom of the public education document in different languages directing the non-English speaking Customers to telephone a Contractor-provided hotline for help in their native language. Commencing January 1, 2022, outreach must be in a language or languages that assure information is understood by the community and is or are required by SB 1383 in either electronic or written form. Upon City Contract Manager request, Contractor shall prepare up to four (4) public education documents annually in one or more languages and distribute the materials to Single-Family, Multi-Family, and Commercial Customers as specified by the City. Contractor shall arrange for review of the multi-lingual materials by a third party to verify the accuracy and appropriateness of the translations.

Prior to distribution of any public education materials, Contractor shall provide the City Contract Manager with a copy of the public education materials for the City Contract Manager's review and approval.

5.17.4 Signage

Contractor shall be responsible for preparing, distributing, and posting signage at Commercial and Multi-Family Premises that promote Recyclable Materials and Compostable Materials Collection services, describe the Mandatory Recycling Ordinance program requirements and requirements of SB 1383, and identify allowable and non-allowable types of materials for Collection. At a minimum, these signs shall be posted in the Container areas. Upon request of the Customer, Contractor shall provide signage and Container labeling in Spanish. Within fourteen (14) calendar days of a Customer's request, Contractor shall provide extra signage for use in areas such as laundry and mail rooms at Multi-Family Premises and in employee training areas, break rooms, kitchens, and janitorial areas at Commercial Premises.

5.17.5 SB 1383 Public Education to Non-Compliant Generators

From January 1, 2022 through December 31, 2023, Contractor shall provide educational materials to regulated entities not in compliance with SB 1383, as determined by the Compliance Review of Commercial accounts.

5.17.6 Multi-Family Technical Assistance Program

Contractor shall provide Recycling technical assistance to Multi-Family Customers to help each Customer determine how best to provide Recycling service to its tenants and comply with the requirements of the Mandatory Recycling Ordinance and SB 1383. This technical assistance shall include meetings with Property Managers at the Premises and on-site assessments of the Multi-Family Premises to identify appropriate locations for Containers and the number, type, and size of Containers that would be most suitable. Contractor shall offer the Property Manager Recycling posters and signage as required by Section 5.3.3.E. At a minimum, the Contractor's Recycling coordinator shall meet with every Property Manager twice annually to work with the Property Manager to improve Recycling participation levels in terms of the quantity and quality of Recyclables Materials Collected.

Contractor shall document each site visit using a form approved by the City Contract Manager identifying the name and address of the Premises, number of tenant units, date of the visit, name of Property Manager and contact information, current Recycling, Compostables, and Solid Waste Service Levels and calculated weekly Recycling and Compostables capacity per tenant unit, Property Manager concerns and requests, and actions items. Audit forms shall be provided to the City Contract Manager in accordance with Section 6.3.3.H.

During the two annual site visits or upon request, Contractor shall restock posters, "How To Guides," Recyclables tote bags, and any other appropriate materials (required by Section 5.3.3.E) and provide new Container signage if necessary.

Other public education requirements for Multi-Family Customers are described in Exhibits C and C1.

5.17.7 Commercial Technical Assistance

Contractor shall perform Diversion audits for Commercial Customers. At a minimum, Contractor shall perform audits for all Customers that request an audit, for all new Commercial Customers, and for twenty percent (20%) of all Commercial Customers in the City each year. The goal of each audit shall be to provide assistance to the Customer or its Property Manager in the development of source reduction, reuse, Recycling, and Compostables Diversion programs, and compliance with the Mandatory Recycling Ordinance and SB 1383. During the first Rate Period, the twenty percent (20%) of the Customers targeted by the Contractor shall be the Commercial Customers that generate the largest volumes of Solid Waste (as measured by the total weekly volume of Solid Waste serviced). After Contractor performs site visits for these large-volume Customers, Contractor shall continue to provide support to each Customer as requested and shall periodically contact the Customer to offer technical assistance and answer questions.

Contractor shall, by July 15 of each year, submit to the City Contract Manager a list of the Commercial Customers it proposes to audit during the Rate Period to comply with the twenty percent (20%) audit requirement and include justification for selection of the Commercial Customers. Commercial Customers shall be selected so that one hundred percent (100%) of the Commercial Customers are audited during a five (5) year period so that each Business is audited once every five (5) years. City Contract Manager shall review the list and provide comments to the Contractor within ten (10) Business Days of receipt. In the

event the City Contract Manager does not provide a response to the Contractor, the proposed list of Commercial Customers shall be considered acceptable to the City Contract Manager.

Audits shall include, but are not limited to, waste, Recycling, Food Scraps, Diversion, and source reduction analysis; research of markets for specialized materials generated by the Customer; and assistance in internal Collection and training efforts.

During site visits and through quarterly newsletters and other public outreach efforts, Contractor shall offer employee training sessions to Commercial Customers at the Customer's Premises to educate employees about the Recycling and Food Scraps Collection programs, the Mandatory Recycling Ordinance, SB 1383, and answer employee questions. Contractor shall provide the employee training sessions upon Customer request.

Contractor shall document each site visit using a form approved by the City Contract Manager identifying the name and address of the Premises, type of Commercial business, estimated square footage of the Premises, date of the visit, name of Property Manager and contact information, current Recycling and Solid Waste Service Levels, Property Manager concerns and requests, training (if any) provided to Customer and/or employees, and actions items. Audit forms shall be provided to the City Contract Manager in accordance with Section 6.3.3.G.

Contractor will maintain a Customer recognition program. Contractor will identify and promote other program or recognition opportunities such as potential Green Business certification, toxics reduction, green building, green purchasing, energy efficiency, water conservation, local and regional awards, and other programs if applicable and requested.

5.17.8 Compliance with SB 1383

The City and Contractor acknowledge that, as of the date of this Agreement, legislation (including, but not limited to, SB 1383) has been enacted into law but has not been fully implemented. Contractor has assumed the provisions of the October 2, 2019 Draft of SB 1383 regulations apply and that Contractor's Proposal (Exhibit M) assumes compliance with the following requirements in such regulations: education and outreach campaigns, technical assistance to Customers, Collection and Processing of materials, material characterization at facilities requirements under Title 14, reporting, compliance, (other than the testing element of the contamination monitoring activity described in the next sentence), provision of special Containers, enforcement, or other activities involved in compliance with SB 1383.

Because Contractor and City have neither agreed on the specific approach and procedures to perform the testing element of the contamination monitoring activity nor who will perform them (whether the Contractor, City or a third party), the Contractor has included in its proposed annual costs one hundred thousand dollars ($100,000.00) for purposes of complying with this requirement of SB 1383. During the first two years of this Agreement, this $100,000 shall be placed in the Rate Reserve Fund, and by mutual agreement of the parties may be used for pilot approaches to the testing element. Once the final approach and procedures to perform the testing element and the related costs are agreed on by the Parties, a line item will be included in the Rate Application form to reflect these costs.

The City and Contractor agree that, not later than within one hundred and eighty (180) days of the final rules and regulations implementing such legislation becoming effective, the City and Contractor will meet and confer to discuss how such rules and regulations may impact the services provided under this Agreement, including the contamination monitoring activity described above. Specifically with regard to

such contamination monitoring, the City may direct the Contractor to provide such services, provide such services itself, or contract with a third party for such services. Should the final amount needed to provide the contamination monitoring services be less than the costs included in Contractor's proposed costs for such purpose, then the Contractor shall utilize the remainder for education, outreach or contamination management as directed by the City Contract Manager. Prior to such meet and confer period, Contractor agrees to minimize actions (such as replacement of Collection vehicles) that may be affected by such rules and regulations.

Notwithstanding the foregoing, the City and Contractor agree that changes to this Agreement, or to the services to be provided under this Agreement and/or to the cost of providing such services, which result from final rules and regulations implementing existing legislation that are promulgated after the date of this Agreement shall be considered changes resulting from a Change in Law once such final rules and regulations are promulgated.

5.17.9 Commercial and Multi-Family Program Performance Report

To facilitate complete accountability in Contractor's efforts to increase Diversion, an independent subcontractor selected by the Contractor shall conduct an annual performance evaluation of Contractor's Diversion performance. Performance indicators will be established by the subcontractor, the City Contract Manager and Contractor, and will be measurable. On an annual basis, the subcontractor shall assess performance using the agreed-upon indicators and compare actual performance to the annual objectives set between the City Contract Manager, subcontractor, and Contractor. This assessment shall occur on an annual basis (at the same time each year) for at least the first ten years of the Agreement. Annually, the subcontractor shall conduct the performance review and provide a report to the City Contract Manager documenting actual results compared to annual objectives, explaining differences between actuals and the objectives, and providing recommendations for improvement. The report shall be submitted in accordance with annual reporting requirements in Section 6.4.

5.18 Personnel including Prevailing Wages

5.18.1 General

Contractor shall furnish such qualified drivers, mechanical, supervisory, customer service, clerical and other personnel as may be necessary to provide the services required by this Agreement in a safe and efficient manner. (See also Section 5.1.)

Contractor recognizes the importance of establishing a successful relationship between its general manager and City staff. Therefore, the Contractor will allow the City the right to approve the selection of the Contractor's general manager provided that the City's approval is not unreasonably withheld. The City shall have the right to request that the Contractor replace its general manager for any of the following reasons:

A. In the event Liquidated Damages levied for events listed in Exhibit F, with the exception of damages levied for Collection reliability and Collection quality events items 1, 2, and 12 of Exhibit F, in any three month period exceed $2,000; or,

B. In the event Liquidated Damages levied for Collection reliability and Collection quality events items 1, 2, and 12 of Exhibit F, in any three (3) month period exceed $45,000; or,

C. In the event the City determines, through a review of Billings required by Section 6.1.4, that Contractor has under billed or overcharged Single-Family Generators by a rate of three (3) percent or more of total Single-Family billed revenues or Multi-Family, Commercial and Drop Box/Compactors Generators by a rate of one and a half percent (1.5%) of total Multi-Family, Commercial and Drop Box/Compactor billed revenues, and Contractor is unable to correct such Billing errors to a rate of one and a half percent (1.5%) of total Billings of Single-Family Generators and half a percent (0.5%) of total Billings of Multi-Family Generators, and half a percent (0.5%) of total Billings of Commercial and Drop Box/Compactor Generators as demonstrated by a subsequent audit of incorrectly billed accounts conducted in the quarter immediately following the bi-annual report in which the Billing error rate was identified, or that Contractor fails to submit the bi-annual report required by Section 6.1.4 within fifteen (15) days of the due date; or,

D. In the event financial and operational records maintained by the Contractor pursuant to Sections 6.2.1 and 6.2.2 and requested by the City Contract Manager for retrieval by the Contractor are not provided to City Contract Manager within two (2) weeks of the request.

5.18.2 Driver Qualifications

All drivers shall be trained and qualified in the operation of Collection vehicles and must have in effect a valid license, of the appropriate class, issued by the California Department of Motor Vehicles. Contractor shall ensure full compliance with the California Department of Motor Vehicles "Employer Pull Notice Program" (CVC 1808.1).

5.18.3 Safety Training

Contractor shall provide suitable operational and safety training for all of its employees who utilize or operate vehicles or equipment for Collection of Solid Waste, Recyclable Materials, or Compostable Materials or who are otherwise directly involved in such Collection. Contractor shall train its employees involved in Collection to identify, and not to Collect, Hazardous Waste or Infectious Waste. Training records shall be available for review by the City Contract Manager upon request. (See also Sections 5.11 and 5.14.7.)

5.18.4 No Gratuities

Contractor shall not permit its employees to accept, demand, or solicit, directly or indirectly, any additional compensation or gratuity from members of the public for the Collection of Solid Waste, Recyclable Materials, and Compostable Materials under this Agreement.

5.18.5 Employee Conduct and Courtesy

Contractor shall use its best efforts to assure that all employees present a neat appearance and conduct themselves in a courteous manner. Contractor shall regularly train its employees in customer courtesy, shall prohibit the use of loud or profane language or music, and shall instruct Collection employees to perform the work as quietly as possible. If any employee is found not to be courteous or not to be performing services in the manner required by this Agreement, Contractor shall take all appropriate corrective measures.

5.18.6 Uniforms

All employees of the Contractor performing field service under this Agreement shall be dressed in clean uniforms with employee's name or numbered badge, which also shows Contractor's name, thereon at all times while engaged in the work; no portion of this uniform may be removed while working.

5.18.7 Provision of Field Supervision

Contractor shall designate at least two qualified employee as supervisors of field operations. Each field supervisor will devote at least seventy percent (70%) of his or her time in the field checking on Collection operations, including responding to Complaints.

5.18.8 Customer Service Representatives

At a minimum, Contractor shall employ one full-time customer service manager and three full-time customer service representatives dedicated to serving the City and its Customers. The customer service representatives shall be trained on specific City service requirements, a minimum of once per quarter in accordance with Section 6.3.3.D. The customer service manager and representatives will work in offices at the Contractor's Livermore corporation yard.

5.18.9 Employment Conditions

Contractor shall comply with the following employment conditions:

A. **Offer Employment to Existing Employees**. Contractor shall offer employment to employees working under the City's Agreement in effect through June 30, 2010 ("existing employees") who become unemployed by reason of the change in contractors. However, Contractor shall not be obligated to offer employment to more existing employees than the Contractor needs to perform the services required under the Agreement and Contractor shall not be obligated to offer employment to existing employees that are not working prior to the Commencement Date due to a leave of absence related to disability or workers' compensation claim. Additionally, Contractor shall not be obligated to displace any of its current employees or modify its current job performance requirements or employee selection standards. Additional employees, if needed, shall be obtained pursuant to procedures in effect under the collective bargaining agreement with the collection contractor that provides Collection services through June 30, 2010. This requirement, however, shall not be applicable to management or supervisory personnel.

B. **Wages and Benefits**. Wages and benefits applicable to employees performing work under the Agreement shall not be less than those prevailing in Alameda County for comparable work. Either the City or the Contractor may apply to the Director of the California Department of Industrial Relations for a determination of such prevailing wages and benefits, if the Parties do not reach agreement on the amounts involved.

C. **Subcontractor Compliance**. The Contractor may enter into agreement(s) with Subcontractors to provide services covered in the Agreement subject to the prior written consent of the City Contract Manager as stated in Section 12.6. Subcontractors shall be required to comply with the obligations stated in paragraphs (A) and (B), above.

5.19 Contingency Plan

Contractor shall submit to City Contract Manager on or before the Commencement Date, a written contingency plan demonstrating Contractor's arrangements to provide vehicles and personnel and to maintain uninterrupted service during mechanical breakdowns, and in case of natural disaster, other emergencies, or labor disputes. This contingency plan shall be specific to the needs of the City and its Customers and be updated at least once every five years.

5.20 Implementation of New Services

The Contractor acknowledges that the Contractor's implementation of the services required under this Agreement shall occur in a smooth and seamless manner such that Customers do not experience disruption in Collection services. Contractor shall be responsible for managing implementation of Collection services and other related services required under this Agreement and shall do so in accordance with the implementation plan provided in Exhibit D.

5.21 Corporation Yard, Transfer Operations, CNG Station

Contractor shall provide a site to be used for staging Collection equipment and personnel, performing equipment maintenance, housing administrative and customer service offices and staff, and Transferring Recyclable Materials and Compostable Materials. The Contractor plans to establish this operation in the City of Livermore and may own or lease the site for such purposes.

As the Contractor's Livermore site, Contractor plans to conduct Transfer operations indoors. Collection vehicles will be equipped with a walking floor behind the packing mechanism that will walk or move the materials out of the Collection vehicle body and directly into a Transfer trailer. This "direct" Transfer method reduces the clear height needed in the building for materials offloading, and does not require a full Solid Waste Facility Permit from the State.

Contractor plans included development of a compressed natural gas (CNG) fueling station at its Livermore yard to fuel its Collection vehicles. Contractor will retain the services of a subcontractor, Clean Energy, a large provider of CNG. Clean Energy will be responsible for designing, permitting, building, and operating the CNG station. The City can request that the CNG station be designed to provide additional capacity for City vehicles and/or public access. In such case, the terms of the fueling arrangements will be negotiated by the Parties.

Facilities in the City limits shall conform to development permit requirements including the City's Green Building Ordinance for Commercial uses and are required to obtain all necessary land use entitlements, which could be administrative, or require public meetings depending on the scope of work. Development regulations contain requirements for screening and/or enclosing unsightly storage and operations. The City is particularly concerned about impacts related to dust and Litter and wants any material handling activities to be performed in an enclosed facility and for areas used for parking, vehicle access, and operations to be paved. The Community Development Department will review site planning and screening alternatives proposed to meet such requirements.

5.22 Community Reuse E-Network

To promote the reuse of Bulky Items, Contractor shall create and manage an on-line community networking site exclusively for Livermore residents and non-profit organizations to facilitate identification of end users for Bulky Items in good, working condition. Users may not ask for monetary reimbursement for any item. After registering, Livermore residents may post Bulky Items they wish to give away. Users will also be required to include a photo of their item. Other Livermore residents and non-profit organizations may claim the item, and, by completing a delivery request form, Contractor will Collect the item from the donor and deliver it to the recipient, free of charge. Contractor will strategically schedule Collections and deliveries by geographical area in such a way as to minimize environmental impacts. This unique system accomplishes several things: it enables residents to find a guaranteed local end use for their item; it allows residents to discard items over the limit granted through the Customer's three (3) On-Call Single-Family Clean-Up Services; it relieves Customers of the inconvenience of moving the item themselves; and, through Contractor's work order system, it provides a means of tracking Diversion for the City.

ARTICLE 6.
OTHER RELATED SERVICES AND STANDARDS

6.1 Billing

6.1.1 General

The City shall approve Rates by City Council resolution that Contractor shall charge Customers for the types of service provided under this Agreement. Contractor shall bill all Customers and collect Billings in accordance with City-approved policies and Rates on the Rate Schedule in Exhibit H. City Contract Manager shall have the right to review and revise the Billing format to itemize certain charges.

On each bill, Contractor shall include a brief message to Customers providing service-related announcements such as messages about new services, the On-Call Single-Family Clean-Up Services, E-Waste Collection, and Bulky Item Collection, proper handling of Household Hazardous Waste and Christmas tree Collection, etc.

The Contractor shall prepare, mail and collect bills (or shall issue written receipts for cash payments) for Collection services provided by Contractor under this Agreement. Bills for Residential service shall be mailed to Customers quarterly in advance of the provision of service. Bills for Commercial service shall be mailed to Customers monthly in arrears after the provision of service. If Commercial Customers have centralized service (in which Containers are shared by more than one Commercial Premises), Contractor shall bill one Customer for centralized services or, at the request of the Commercial Customers sharing the Containers, Contractor shall treat each Commercial Premises as a separate Customer and shall bill each Customer for service costs equal to the Rate divided by the number of Commercial Premises sharing the service. Contractor shall provide Customers the option of receiving bills electronically.

Contractor shall make arrangements to allow its Customers to pay bills through the following means: check, cash, credit card, Internet payment service, or automatic withdrawal from banking account.

Contractor shall provide at least one drop-off location in the City where Customers may deposit their payments.

The Contractor will comply with applicable provisions of the Public Records Act and the City's Record Retention Policy. Generally, the Contractor shall maintain copies of said Billings and receipts, each in chronological order, for a period of three (3) years after the Billing date for inspection by City Contract Manager. The Contractor may, at its option, maintain those records in electronic form, or in any other manner acceptable to the Contract Manager, provided that the records can be preserved and retrieved for inspection and verification in a timely manner.

6.1.2 Bad Debt Collection

If there is no payment of a bill within sixty (60) calendar days from the invoice date, the Contractor shall undertake collection of the amount owed (including penalties and expenses of collection). Contractor shall make reasonable efforts to obtain payment through issuance of late payment notices, telephone requests for payment, and assistance from collection agencies (who shall make at least two attempts to collect). If a Single-Family or Multi-Family Customer does not pay its bill within sixty (60) days from the invoice date, Contractor may reduce Customer's Solid Waste Collection service to the minimum service offered under this Agreement in accordance with Sections 5.2.1 and 5.2.4 and discontinue Recyclables, Compostables Materials, On-Call Single-Family Clean-Up Services, and On-Call Multi-Family Clean-Up Services. If a Commercial Customer does not pay its bill within sixty (60) days from the invoice date, Contractor may discontinue Recyclables and Compostables Materials Collection service and reduce the Solid Waste Service Level to one 32-gallon Cart serviced once per week. If the Contractor plans to reduce a Commercial Customer's Service Level, Contractor shall provide the City Contract Manager with written notice of its intention a minimum of ten (10) Business Days prior to reduction in the Commercial Customer's Service Level reduction. On a monthly basis, Contractor shall provide a list of Customers that are sixty (60) days past due and have thus had their level of Collection services reduced in accordance with reporting requirements in Section 6.3.2.F.

Contractor shall be responsible for collection of payment from Customers with past due accounts ("bad debt") for a period of one (1) year from the invoice date, including Third Party Fees as described in Section 7.7, as required. Contractor shall make reasonable efforts to obtain payment from delinquent accounts through issuance of late payment notices, telephone requests for payments, reduction in Customer's Service Level, and, at the Contractor's option, assistance from internal Contractor collection staff or outside collection agencies. In the event Contractor's efforts for a one (1) year period to collect monies due from a Customer fail and Contractor can demonstrates to the City Contract Manager that Contractor attempted on at least four (4) documented occasions to solicit monies due from each delinquent account and reduce Customer's Service Level to encourage Customer's payment, then Contractor shall provide the City Contract Manager with the name and address of each delinquent account and amount due and assign its rights to collection to the City. The City, in its discretion, may then initiate any collection procedures authorized by law, including those special assessment procedures authorized by City of Livermore Municipal Code Section 8.08.160. Contractor shall pay for reasonable costs incurred by the City in conducting collection procedures but may recover such costs through a fee established by the City and assessed on each delinquent Customer account. Within thirty (30) calendar days of the City's receipt of payment for past due accounts, the City shall pay those sums to Contractor less any monies Contractor would be obliged to pay to City hereunder had those sums been received by Contractor in the first instance.

6.1.3 Billing Inserts

City Contract Manager may direct Contractor to insert up to ten (10) mailers per year into bills relating to service with the Billings including inserts prepared by StopWaste. The mailers must fit in standard envelopes. Contractor also agrees to insert with the Billings, mailers describing activities of the City government. City Contract Manager will provide not less than thirty (30) calendar days' notice to Contractor prior to the mailing date of any proposed mailing to permit Contractor to make appropriate arrangements for inclusion of the City's materials. City Contract Manager will provide Contractor the mailers at least fifteen (15) calendar days prior to the mailing date. The cost of printing such inserts and any additional postage shall either be paid for by the City or included in the costs upon which Rates are based.

Contract Manager may direct Contractor to provide electronic mailers to Customers that have signed up for electronic communication with Contractor, such mailers to include or provide an electronic link to all information provided in billing inserts. In such event, Contractor shall comply with such request during its next Billing cycle for the targeted Customer group or groups. Contractor shall perform this service with no additional requirement for compensation. In the event that, during the Term of this Agreement, it becomes reasonably possible to attach such electronic notices to Customer invoices, Contractor shall notify the City, and upon City request, shall replace and or supplement electronic mailers with electronic invoice attachments.

6.1.4 Review of Billings

A. **General.** Contractor shall review its Billings to Generators. The purpose of the review is to determine that the amount which the Contractor is Billing each Generator is consistent with the City-approved Rate schedule in Exhibit H for the level of service (i.e., frequency of Collection, size of Container(s), number of Containers, and location of Container(s)) provided to such Generator by Contractor.

B. **Procedures**. Contractor shall review each Cart Service account at least once per year in such a manner that all accounts on a particular route are audited on the same day. The audits shall be scheduled so that Contractor completes audits of twenty-five percent (25%) of the Cart Service routes each quarter. Contractor shall review each Bin Service account and Drop Box/Compactor Service account at least once every other year. Audits shall be scheduled in a manner that all accounts on a particular route are audited on the same day and twelve and one half percent (12.5%) of the Bin Service and Drop Box/Compactor Service routes are audited each quarter.

The review shall be performed by the Contractor's route supervisor(s) or other agent approved by the City Contract Manager. The Person conducting the review shall compare a route report for the route under review and verify, through visual inspection of each Customer's Premises on the Customer's scheduled day of Collection, the level of service actually provided to each Customer listed on the route report review and note the actual Service Level in writing on the route report. In addition, the Contractor's route supervisor or appropriate agent shall list any Customers receiving service (and the level of such service) that do not appear on the routing report. The Contractor shall reconcile the route report to the Billing report, noting all discrepancies. Any discrepancies should be marked clearly on the Billing report. Contractor shall verify if the discrepancies result from Customer's request for special services on the day of the route audit and shall provide documentation in such cases. Contractor shall issue correction notices to the Customers correcting any Billing inaccuracies within five (5) Business Days of the day the route audit was performed and shall provide such notices to City Contract Manager along with the annotated Billing report.

C. **Route Audit Schedule**. Thirty (30) calendar days prior to the Commencement Date, Contractor shall submit a two-year schedule for performing route audits, listing each route and calendar quarter that each route will be audited. If the Contractor proposes to modify the two-year schedule during the Term, the Contractor shall submit a revised route audit schedule to the City Contract Manager for approval.

D. **Reporting Requirements.** Two (2) weeks after the end of each calendar quarter, Contractor shall submit a written report to the City Contract Manager that identifies the Cart Service, Bin Service and Drop Box/Compactor Service routes audited, the number of accounts on each route, the number of Billing inaccuracies per route, the percentage of Billing inaccuracies (where Billing inaccuracies are instances when service observed by route auditor differs from service listed on the route and/or Billing reports) per route (equal to the number of Billing inaccuracies divided by the number of accounts per route), and the estimated annual revenue impact associated with the Billing inaccuracies (which shall be calculated as the difference between the Billing amount shown on the Billing report on the date of the audit and the corrected Billing amount multiplied by 12). The written report shall also include copies of the route audits (i.e., Billing reports with handwritten notes identifying actual level of service provided to each Customer and notes the Billing discrepancies), copies of the corrective notices sent to Customers, and any supporting calculations. The City reserves the right to perform this review itself or through use of an agent at its expense.

6.2 Records

6.2.1 General

Contractor shall maintain such accounting, statistical, and other records related to its performance under this Agreement as shall be necessary to develop the financial statements and other reports required by this Agreement. Also, Contractor agrees to conduct data collection, information and record keeping, and reporting activities needed to comply with and to meet the reporting and Solid Waste program management needs of Contractor and the Act and other Federal and State and local laws and regulations and the requirements of this Agreement. To the extent such requirements are set out in this and other Articles of this Agreement, they shall not be considered limiting or necessarily complete. In particular, this Article is intended to only highlight the general nature of records and reports and their minimum content and is not meant to comprehensively define what the records and reports are to be and their content. Further, with the written direction from the City Contract Manager, the records and reports to be maintained and provided by Contractor in accordance with this and other Articles of the Agreement shall be adjusted in number, format, or frequency. Records and reporting may be revised to reflect current record keeping and reporting.

Contractor shall maintain records required to conduct its operations, to support requests it may make to City Contract Manager, and to respond to requests from City Contract Manager. Adequate record security shall be maintained to preserve records from events that can be reasonably anticipated such as a fire, theft and earthquake. Electronically-maintained data/records shall be protected and a second copy of data/records shall be saved to a protected source such as an external hard-drive.

Contractor agrees to provide or make available records of any and all companies conducting operations addressed in the Agreement to City Contract Manager and its agents and/or representatives during normal business hours.

6.2.2 Maintenance of Financial and Operational Records

A. General. In order to effectuate the periodic financial review to determine Rates pursuant to Article 8, it is necessary for Contractor to maintain accurate, detailed financial and operational information in a consistent format and to make such information available to the City Contract Manager in a timely fashion.

B. Contractor's Accounting Records. Contractor shall maintain accurate and complete accounting records containing the underlying financial and operating data relating to and showing the basis for computation of all costs associated with providing services under this Agreement. The accounting records shall be prepared in accordance with Generally Accepted Accounting Principles (GAAP) consistently applied.

C. Inspection of Records. The City, its auditors and other agents, shall have the right, during regular business hours, to conduct unannounced on-site inspections of the records and accounting systems of Contractor and to make copies of any documents it deems relevant to this Agreement. In the event the Person responsible for such records and systems is not on the Premises at the time the City, its auditors or other agents visit Contractor's facilities, Contractor shall not be in breach of this Agreement and the City shall give notice requesting access to the records and Contractor shall make arrangements for City, its auditors, or other agents to conduct the on-site inspection within twenty-four (24) hours of such notice. The City's right to inspection of records under this paragraph shall continue for at least five (5) years after the expiration or earlier termination of this Agreement; however, after expiration or termination of this Agreement, the City Contract Manager shall provide Contractor with written request to inspect records and Contractor shall make records available for inspection within two (2) weeks of such request.

D. Retention of Records. Unless otherwise herein required, Contractor shall retain all records and data required to be maintained by this Agreement for at least five (5) years after the expiration or earlier termination of this Agreement.

Records and data required to be maintained that are specifically directed to be retained shall be retrieved by Contractor and made available to the City Contract Manager.

Records and data required to be maintained that are not specifically directed to be retained that are, in the sole opinion of the City, material to the financial review to determine Rates or to determine Contractor's performance under this Agreement, shall be retrieved by Contractor and made available to the City Contract Manager.

Records and data required to be maintained that are not specifically directed to be retained and that are not material to a financial review to determine Rates and/or not required for the determination of the Contractor's performance do not need to be retrieved by Contractor. In such a case, however, the City Contract Manager may make reasonable assumptions regarding what information is contained in such records and data, and such assumption(s) shall be conclusive in whatever action the City takes.

6.2.3 Collection Records

Records shall be maintained by Contractor for City relating to:

A. Customer services and Billing;

B. Weight and volume of each material type Collected separately (e.g., Solid Waste, Recyclable Materials, Compostable Materials, Food Scraps, Bulky Items, E-Waste, Used Motor Oil and Filters, etc.). Where possible, information is to be separated among Cart Service, Bin Service and Drop Box/Compactor Service and/or Customer type (e.g., Single-Family, Multi-Family, Commercial, Drop Box, and Compactor);

C. Routes;

D. Facilities, equipment and personnel used;

E. Facilities and equipment operations, maintenance and repair;

F. Disposal and Processing of Solid Waste, Recyclable Materials, Compostable Materials, Food Scraps, and any other materials separately Collected;

G. Daily record of the quantities of Solid Waste, Recyclable Materials, Compostable Materials, and Food Scraps Collected; and,

H. Records of Customers that received On-Call Single-Family Clean-Up Services and On-Call Multi-Family Clean-Up Services. Such records shall include the date of such Collection and shall demonstrate that Contractor did not provide more than three (3) clean-up Collections at no charge to any one Customer per year.

Contractor shall maintain records of all Solid Waste, Recyclable Materials and Compostable Materials Collected in the City for the period of this Agreement plus ten (10) years after its expiration or earlier termination. Records shall be in chronological and organized form and readily and easily interpreted. In the event City Contract Manager requests, Contractor shall provide all records of all Solid Waste, Recyclable Materials, and Compostable Materials requested to City Contract Manager within thirty (30) calendar days of discontinuing service.

6.2.4 Recyclable Materials and Compostable Materials Collection and Processing Service Records

Records shall be maintained for Contractor that relate to:

A. Recyclable Materials and Compostable Materials Collection participation especially as related to determining participation and set-out rates and implementing programs to increase existing participation and to expand Diversion (names, addresses, email addresses contacts made, etc.);

B. Recyclable Materials and Compostable Materials sales value;

C. Weight of material recovered by type and weight of Residue Disposed; and,

D. End use and markets for recovered materials.

6.2.5 Transfer and Disposal Records

Contractor shall maintain records of Transfer, Disposal and Processing of all Solid Waste, Recyclable Materials, and Compostable Materials Collected by Contractor for the period of this Agreement plus five (5) years after its expiration or earlier termination. Records shall be in chronological and organized form

and readily and easily interpreted. In the event City Contract Manager requests, Contractor shall provide all records of Transfer and Disposal or Processing of all Solid Waste, Recyclable Materials, and Compostable Materials Collected by Contractor in the City within thirty (30) calendar days of discontinuing service.

6.2.6 Other Program Records

Records for other programs shall be tailored to specific needs. In general, they shall include:

A. Plans, tasks, and milestones; and,

B. Accomplishments in terms of activities conducted; date of activity; Tonnages of materials Collected; quantities of products used: produced or distributed; and numbers of participants and responses.

6.2.7 CERCLA Defense Records

City views the ability to defend against Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for Transfer or Disposal, as well as where it was not taken, to be matters of concern. Contractor shall maintain, retain and preserve records which can establish where Solid Waste Collected in the City was Disposed (and therefore establish where it was not). This provision shall survive the expiration or earlier termination of this Agreement. Contractor shall maintain these records for a minimum of ten (10) years beyond expiration or earlier termination of the Agreement. Contractor shall provide these records to City Contract Manager in an organized and indexed manner rather than destroying or Disposing of them.

6.2.8 Customer Service Records

Customer service records shall be maintained by Contractor for City related to:

A. Number and nature of calls;

B. Categories (missed pickups, Complaints, damage, inquiries, etc.) of calls;

C. Training Records;

D. Individual call and resolution log (including initial call date and resolution date); and,

E. New Customer account log.

6.3 Reports

6.3.1 Report Formats and Submittal Schedule

Records shall be maintained in forms and by methods that facilitate flexible use of data contained in them to structure reports, as needed. Reports are intended to compile recorded data into useful forms of information that can be used to, among other things:

A. Determine and set Rates and evaluate the financial efficacy of operations;

B. Evaluate past and expected progress towards achieving the Contractor's Diversion goals and objectives; and,

C. Determine needs for adjustment to programs; and evaluate Customer service and Complaints.

Contractor may propose report formats that are responsive to the objectives and audiences for each report. The format of each report shall be approved by City Contract Manager, in his or her sole discretion. The City Contract Manager may, from time to time during the Term, review and request changes to Contractor's report formats and content, including without limitation to comply with City's regulatory reporting requirements, and Contractor shall not unreasonably deny such requests. The City reserves the right to require Contractor to provide additional reports or documents as City Contract Manager reasonably determines to be required for the administration of this Agreement or compliance with Applicable Law. Contractor agrees to e-mail all reports to the City Contract Manager (or submit reports on an electronic file storage device in the event e-mail communications are unsuccessful) in a format compatible with City's software/computers at no additional charge. Contractor will provide a certification statement, under penalty of perjury, by the responsible Contractor official, that the report being submitted is true and correct to the best knowledge of the responsible official after their reasonable inquiry.

Monthly reports shall be submitted within thirty (30) calendar days after the end of the reporting month. Quarterly reports shall be submitted within forty-five (45) calendar days after the end of the reporting quarter. Annual reports shall be submitted no later than April 30 for the calendar year ending December 31.

All reports shall be submitted to:

City of Livermore
solidwaste_recycling@cityoflivermore.net; and,
jaerlandson@cityoflivermore.net

6.3.2 Monthly Report Content

Monthly reports shall be presented to show the following information.

A. **Solid Waste Services**. Provide Tonnage Collected by Service Type.

B. **Recyclable Materials Services**. Provide Tonnage Collected by Service Type. Provide Tonnage marketed and Residue Disposed (which should total the Tonnage Collected). If more than one Processing Site is used, present information separately for each site.

C. **Compostable Materials Service**. Provide Tonnage Collected by Service Type. Provide Tonnage marketed and Residue Disposed (which should total the Tonnage Collected). If more than one Processing Site is used, present information separately for each site. Report the number of Commercial Food Scraps Customers for each level of service.

D. **Construction and Demolition Debris Services**. Provide Tonnage Collected by Service Type. Provide Tonnage marketed and Residue Disposed (which should total the Tonnage Collected). If more than one Processing Site is used, present information separately for each site.

E. **Customer Service.**

1. Provide number of Customer calls listed separately by Complaints and inquiries (where inquiries include requests for Recycling information, Rate information, etc.). For Complaints, list the number of calls separately by category (e.g., missed pickups, on-call clean-up services, Billing concerns, damage claims, etc.).

2. Provide number of new Multi-Family and Commercial Recyclable Materials and Organic Materials accounts for Cart, Bin and Drop Box/Compactor Services.

3. Provide number of Carts, Bins, Drop Boxes, and Compactors tagged for non-Collection and the reason for tagging (e.g., inclusion of non-Recyclable or non-Compostable Materials, improper setout, Hazardous Waste, etc.).

4. Provide the number of hits to the Contractor's website.

F. **Revenue and Customer Account Reports**. Provide a statement detailing Gross Revenue from all operations conducted or permitted pursuant to this Agreement as required by Section 7.10. This statement shall identify billed revenues and actual Gross Rate Revenues received listed separately for Single-Family, Multi-Family, Commercial, and Drop Box/Compactor Customers. Include a list of the number of Customers by Service Type and Rate category.

Submit a list of Customers that are sixty (60) days past due including the following information for each delinquent account: name, service address; contact information; number of days the account is delinquent; method(s) the Contractor has used to attempt collection of the bad debt including date of such attempt(s), and identification, if, and when the Contractor reduced the Customer's level of Collection services as a result of the account delinquency.

G. **Multi-Family Technical Assistance**. Submit a list of all complexes in the City with addresses, contact names and telephone numbers, number of units, and the Solid Waste and Recyclable Materials Service Level for each complex. Identify the complexes visited during the reporting period and the results of such visits.

H. **Commercial Technical Assistance**. Submit a list of all Commercial Customers visited during the reporting period and the results of such visits. Include addresses, contact names and telephone numbers of Persons contacted.

I. **Community Garage Sale Event.** If the garage sale event occurred during the most-recently completed month, report on the community garage sale event pursuant to Section 5.9.

J. **Tons Collected from Temporary Homeless Encampments.** Provide Tons Collected from Temporary Homeless Encampments, Date and Time of Collection, and Photos, if applicable.

6.3.3 Quarterly Report Content

Quarterly reports shall be presented to show the following information by each month's data in the reported quarter and include a quarterly average. In addition, each quarterly report shall show the past four (4) quarters average for data comparison (the first three quarters of the Agreement shall only include the available quarterly information).

A. **Solid Waste Services.**

1. Quarterly summary of monthly reports required in Section 6.3.2.A;

2. Accounts Collected by Service Type. Include number of accounts, as well as number of total cubic yards for Bin Service; and number of pulls, deliveries, and pickups for Drop Box / Compactor Service;

3. Solid Waste Tonnage Disposed;

4. Tonnage of Abandoned Solid Waste Collected during the quarter as required by Section 5.8.1.

B. **Recyclable Materials Services**.

1. Quarterly summary of monthly reports required in Section 6.3.2.B;

2. Accounts Collected by Service Type. Include number of accounts, as well as number of total cubic yards for Bin Service; and number of pulls, deliveries, and pickups for Drop Box and Compactor Service;

3. Participation percentage by Service Type (number of accounts actually serviced divided by the number of accounts scheduled for service); and,

4. Tonnage by Recyclable Material commodities and Service Type. Report on marketing activities. Report the average monthly Residue level.

C. **Compostable Materials Service**.

1. Quarterly summary of monthly reports required in Section 6.3.2.C;

2. Accounts Collected by Service Type. Include number of accounts, as well as number of total cubic yards for Bin Service; and number of pulls, deliveries, and pickups for Drop Box and Compactor Service;

3. Participation percentage by Service Type (number of accounts actually serviced divided by the number of accounts scheduled for service);

4. Tonnage Composted, separately quantifying Food Scraps;

5. Tonnage by Compostable Materials commodities and Service Type. Report on marketing activities. Report the average monthly Residue level; and,

6. Customer list identifying the name, address, Container size, and frequency of Collection for each Commercial Customer participating in the Food Scraps Collection program.

D. **Customer Service**.

1. Quarterly summary of monthly reports required in Section 6.3.2.E;

2. Customer Service overview sheet, training agenda, and other training supplements provided at the quarterly customer service meeting pursuant to Section 6.11.7; and,

3. Date and time of the customer service training session scheduled for Customer service representatives for the following quarter as the City Contract Manager may exercise its right to attend the meeting pursuant to Section 6.11.7.

E. **Clean-Up / Bulky Item / E-Waste / Christmas Tree Services**.

Provide Tonnage by service (Clean-Up, Bulky Item, E-Waste, and Christmas tree Collection Services) for all sectors. Include the following information:

1. Disposal Tonnage;
2. Diversion Tonnage, listed by vendor or Processing Site;
3. Number of stops serviced by a third party Re-Use Vendor;
4. List of Re-Use Vendors collecting reusable items; and,
5. Number of individual on-call clean-up services provided, on-call Bulky Item services provided and E-Waste Collections services provided during each quarter.

F. **Education Quarterly Activities.**

Include the following:

1. List of all public education efforts including but not limited to: mailers, newsletters, bill inserts, announcements on bills, etc. For each item listed, identify the date and method of distribution, the Customers or parties that received the materials, and the total number distributed and provide a copy of the material distributed; and,
2. Dates, times, and group names of meetings attended.

G. **Commercial Recycling and Food Scraps Report.**

1. Summarize the technical assistance provided to Customers by identifying the number of site visits conducted each month in the most-recently completed quarter, and submitting copies of the Commercial Recycling and Food Scraps auditing forms (Recycling Opportunity Assessment forms) as required in Section 5.17.7.
2. Dates, times, addresses, and names of Commercial Customers that received technical assistance/audits.
3. Report the percentage of Commercial Customers that have Recycling service and Food Scraps service (e.g., 82% of the Commercial Customers have Recycling service and 50% have Food Scraps service).
4. Report the percentage of total Commercial service volume that is Recyclables volume and Compostables volume (e.g., the percentage of Commercial service volume that is Recycling volume equals the number of cubic yards of Commercial Recycling service per week divided by the sum of the weekly Commercial Solid Waste, Recyclables, and Compostables cubic yards service per week).

H. **Multi-Family Recycling and Food Scraps Report.**

1. Summarize the technical assistance provided to Customers by identifying the number of site visits conducted each month in the most-recently completed quarter, and submitting copies of the Multi-Family Recycling and Food Scraps auditing forms (Recycling Opportunity Assessment forms) as required in Section 5.17.6.
2. Dates, times, addresses, and names of Multi-Family Customers that received technical assistance/audits.
3. Report the percentage of Multi-Family complexes that have Recycling service and that have Compostables service.

4. Report the average volume of Recyclables Collected per tenant unit per week (e.g., the number of cubic yards of Multi-Family Recycling service per week divided by the total number of Multi-Family units in the City).

I. **Pilot and New Programs.** For each pilot and/or new program, provide activity related and narrative reports on goals, milestones, and accomplishments. Describe problems encountered, actions taken and any recommendations to facilitate progress. Describe vehicles, personnel, and equipment utilized for each program.

J. **Summary Assessment.** Provide a summary assessment of the overall Solid Waste, Recyclable Materials, and Compostable Materials program from Contractor's perspective relative to the financial and physical status of the program. The physical status assessment shall reflect how well the program is operating in terms of efficiency, economy, and effectiveness in meeting all the goals and objectives of this Agreement, particularly the Contractor's Diversion goals. Provide recommendations and plans to improve. Highlight significant accomplishments and problems.

K. **Revenue and Customer Account Report**. On a semi-annual basis, the quarterly reports shall include a revenue report that summarizes monthly revenue reports and Customer account information required under Section 6.3.2.F and compares the revenues with contract and compensation and Gross Rate Revenue expectations. The semi-annual reports shall be due on or before February 28 and August 30.

L. **Customer Accounts.** Provide a detailed report of all Customers served in the City, indicating the Service Level by material type of each. Such report shall include a summary of the number of Customers at each Service Level. Include a list of Customers with invoices that are sixty (60) days past due including the following information for each delinquent account: name, service address, contact information, number of days the account is delinquent, method(s) the Contactor has used to attempt collection of the bad debt including date of such attempt(s), and identification, if, and when the Contractor reduced the Customer's level of Collection services as a result of the account delinquency.

M. **Vehicle Inventory.** Provide a report of all vehicles used for services under this Agreement, identifying vehicle type (e.g. rear-load, automated side-load, roll-off, flat-bed, pick-up, etc.), make, model, and year.

N. **SB 1383.** After the promulgation of the SB 1383 regulations and before the conclusion of calendar year 2020, the Parties shall meet and confer in order to develop reporting procedures to ensure data is provided in a manner consistent with the requirements of SB 1383. Once agreed upon between the Parties, such reports shall be included in the reports submitted by Contractor.

O. **Education Plan for Coming Rate Period**. The quarterly report that reports on third quarter results shall include a plan for public education activities for the coming Rate Period in accordance with Section 5.17.2.

6.4 Annual Reports

6.4.1 Annual Report Requirements

The annual report shall be in the form of the quarterly reports and shall provide the same type of information as required pursuant to Section 6.3.3 of this Agreement, summarized for the preceding four quarters. In addition, Contractor's and Related Party Entities' annual financial reports/statements shall be included. The annual report shall also include a complete inventory of equipment used to provide all services, and a list of Contractor's officers and members of its board of directors.

6.4.2 Financial Information

Within one hundred twenty (120) calendar days after the close of Contractor's fiscal year, Contractor shall deliver to the City Contract Manager an electronic copy of the audited consolidated financial statements and profit and loss statements of Contractor for the preceding fiscal year. Financial statements shall include a supplemental combining schedule showing Contractor's results of operations, including the specific revenues and expenses in connection with the operations provided for in this Agreement from others included in such financial statements. The financial statements and footnotes shall be prepared in accordance with Generally Accepted Accounting Principles (GAAP) consistently applied and fairly reflecting the results of operation and Contractor's financial condition. Annual financial statements shall be audited, in accordance with Generally Accepted Auditing Standards (GAAS) by a Certified Public Accountant (CPA) licensed (in good standing) to practice public accounting in the State of California as determined by the State of California Department of Consumer Affairs Board of Accountancy, and that the CPA opinion on Contractor's annual financial statements shall be unqualified, and shall contain the CPA's conclusions regarding the Contractor's accounting policies and procedures, internal controls, and operating policies. The CPA shall perform an evaluation and, if necessary, shall cite recommendations for improvement.

6.4.3 Related Party Entities

As part of the annual reporting requirement, Contractor shall provide the City with a copy of each Related Party Entity's (whose cost of services are not pre-determined in this Agreement on a unit price basis or by a governmental contractor) audited annual financial statements and management letter for that fiscal year, or within ninety (90) calendar days of each Related Party Entity's fiscal year-end, if timing does not coincide with the annual report date. Financial statements shall be prepared in accordance with GAAP and audited, in accordance with GAAS, by a CPA licensed in the State, and that the CPA's opinion on each Related Party Entity's annual financial statements shall be unqualified, and that the CPA make available to the City (or the City's designated representative) such CPA's working papers related to the audit.

Contractor agrees that all financial transactions with all Related Party Entities shall be approved in advance in writing and disclosed annually (coinciding with Contractor's annual audited financial statements referred to in Section 6.4.2) to the City in a separate disclosure letter to the City. This letter shall include, but not be limited to, the following information:

A. A general description of the nature of each Related Party Entity transaction, or type of transaction (if many similar transactions exist) shall be provided, as applicable. Such description shall include for each (or similar) transaction, amounts, specific Related Party Entity, basis of amount (how amount was determined), description of the allocation methodology used to allocate any common costs, and profit amount. Amounts shall be reconciled to the Related Party Entity disclosures made in Contractor's annual audited financial statements referred to in this Section.

B. At the City Contract Manager's request, Contractor shall provide the City Contract Manager with copies of working papers or other documentation deemed relevant by the Contractor relating to information shown in the annual disclosure letter. The annual disclosure letter shall be provided to the City within one hundred twenty (120) calendar days after the end of the Contractor's fiscal year.

6.4.4 Operational Information

In addition to requirements stated elsewhere in this Agreement, the annual report shall include the following information:

A. **Routes by Service Type**

1. Number of routes per day;
2. Types of vehicles;
3. Crew size per route;
4. Number of full time equivalent (FTE) routes;
5. Number of accounts per route;
6. Total hours route per Service Type per year; and,
7. Average cost per route.

B. **Personnel**

1. Organizational chart;
2. Job classifications and number of employees (e.g. administrative, customer service representatives, drivers, supervisors, educational staff);
3. Wages by job classification;
4. Number of full time equivalents (FTE) positions for each job classification; and,
5. Number of hours per job classification per year.

C. **Productivity Statistics**

1. Number of accounts per Service Type;
2. Average number of setouts per Service Type; and,
3. Tons per route per day.

D. **Maintenance -** Average cost per Service Type.

E. **Operational Changes**

1. Number of routes;
2. Staffing;
3. Supervision; and,
4. Collection services.

6.4.5 Historical Data (to be completed if Rates are to be determined using a cost-based adjustment pursuant to Section 8.2)

Provide the following annual historical data for each Service Type:

A. Customer levels and subscription levels;

B. Solid Waste Tonnage;

C. Diversion Tonnage;

D. Gross Revenue; and,

E. Material revenues for Recyclable Materials by program type.

6.4.6 Variance Analysis (to be completed if Rates are to be determined using a cost-based adjustment pursuant to Section 8.2)

Provide the following variance analysis for each Service Type. For any variances greater than five percent (5%) annually, Contractor shall provide sufficient rationale to support variance.

A. Variance analysis comparing current Rate Period to each of the prior Rate Periods of Agreement; and,

B. Variance analysis comparing current Rate Period to each of the future projected Rate Periods.

6.4.7 Allocations (to be completed if Rates are to be determined using a cost-based adjustment pursuant to Section 8.2)

A. Provide a concise general explanation of the various allocation methodologies used for each Rate application line item;

B. Provide specific examples of each type of allocation used showing how an entry is reported in the general ledger (GL) and ties to the Rate application; and,

C. Provide a statement indicating whether there have been any changes in allocation methods used since the last Rate application. If any allocation methods have changed clearly identify those changes.

6.4.8 Projections (to be completed if Rates are to be determined using a cost-based adjustment pursuant to Section 8.2)

A. Provide support for the basis for projected Gross Revenue and line item expenses, clearly indicate the supporting calculations and assumptions; and,

B. Provide support for the most recent twelve (12) months of Tonnage data for period ending October; clearly indicate the supporting calculations and assumptions.

6.4.9 Marketing Plan

Contractor shall include an updated Recyclable Materials and Compostable Materials marketing plan in its annual report for City Contract Manager approval as required by Sections 5.13.2.D and 5.13.3.E.

6.4.10 Commercial and Multi-Family Program Performance Report

As part of its annual reporting requirements, Contractor shall include a Commercial and Multi-Family program performance report as required by Section 5.17.9.

6.4.11 Income-Based Program Subscription Report

Contractor will track and report the number of households participating in the Income-Based Program as described by Section 8.8. Contractor will include subscription information related to Service Level (before and after application of the Program), and any revenue adjustments resulting from new subscriptions to the Income-Based Program.

6.5 Annual Report Required by the Act

Contractor shall assist the City in preparing the Annual Report required by the Act as specified in Title 14, California Code of Regulations, Section 18794. Contractor shall submit supporting documentation and calculations, for review by the City Contract Manager no later than forty-five (45) calendar days prior to the State's annual reporting deadline. The City Contract Manager shall review the information submitted and may direct Contractor to investigate any opportunities to correct possible inaccuracies in the Tonnage reflected in the Department of Resources Recycling and Recovery's (CalRecycle) Disposal Reporting System, and request other changes as appropriate. The City Contract Manager shall be responsible for submitting the revised Annual Report to the State in accordance with the State's annual reporting deadline. In the event the Contractor does not submit the requested information in accordance with the timeline described in this Section, the Contractor shall pay the City Liquidated Damages as described in Section 11.6.

6.6 Record Keeping and Reporting Required by SB 1383

Contractor shall assist the City in preparing an initial compliance report and annual reports relative to compliance with SB 1383.

6.7 Meet and Confer with City

If the City Contract Manager requests, the Contractor shall meet with the City Contract Manager to describe the progress of each active Diversion program and discuss other service issues. Contractor shall document the results of the programs on a monthly basis, including at a minimum the Tonnage Diverted by material type, the end use or processor of the Diverted materials and the cost per Ton for Transporting and Processing each type of material and other such information requested by the Contractor and/or City Contract Manager necessary to evaluate the performance of each program.

At each meeting, the City Contract Manager and Contractor shall have the opportunity to revise the program based on mutually agreed upon terms in accordance with provisions of Section 8.5. The City shall have the right to terminate a program if, in its sole discretion, the Contractor is not cost effectively achieving the program's goals and objectives. Prior to such termination, the City Contract Manager shall meet and confer with the Contractor for a period of up to ninety (90) calendar days to resolve the City's

concerns ("meet and confer period"). Thereafter, the City may utilize a third party to perform these services if the City reasonably believes the third party can improve on Contractor's performance and/or cost. Notwithstanding these changes, Contractor shall continue the program during the "meet and confer period" and, thereafter, until the third party takes over the program.

6.8 City Contract Manager

The City has designated the City Contract Manager to be responsible for the monitoring and administration of this Agreement. Contractor shall meet and confer with the City Contract Manager to resolve differences of interpretation and implement and execute the requirements of this Agreement in an efficient and effective manner that is consistent with the stated objectives of this Agreement.

From time to time, the City Contract Manager may designate other agents at the City to work with Contractor on specific matters. In such cases, those individuals shall be considered designees of the City Contract Manager for those matters to which they have been engaged. Such designees shall be afforded all of the rights and access granted thereto. In the event of a dispute between the City Contract Manager's designee and Contractor, the City Contract Manager's determination shall be conclusive.

In the event of dispute between the City Contract Manager and the Contractor regarding the interpretation of, or the performance of services under, this Agreement, the City Contract Manager's determination shall be conclusive except where each such determination results in a material impact to the Contractor's revenue and/or cost of operations. In the event of a dispute between the City Contract Manager and the Contractor that results in such material impact to the Contractor, Contractor may appeal the determination of the City Contract Manager to the City Council, whose determination shall be conclusive. For the purposes of this definition, "material impact" is an amount equal to or greater than Seventy Thousand Dollars ($70,000) per disputed matter per year. For example, if three matters are disputed and matter one (1) has a value of $35,000 per year, matter two (2) has a value of $75,000 per year, and matter three (3) has a value of $65,000 per year; only the City Manager's determination regarding matter two (2) may be appealed by the Contractor to the City Council.

6.9 Right to Inspect Records

The City Contractor Manager, or their designee, shall have the right to inspect or review SEC 10Q filings, payroll tax reports, specific documents or records required pursuant to this Agreement, or any other similar records or reports of the Contractor that it shall deem, at its sole discretion, necessary to evaluate annual reports, Rate adjustment applications provided for in this Agreement, and the Contractor's performance provided for in this Agreement.

6.10 Inspection by City

The City Contract Manager or their designee shall have the right to observe and review Contractor operations and Approved Facilities and enter the Premises for the purposes of such observation and review, during reasonable hours with reasonable notice. In no event shall Contractor prevent access to such Approved Facility Premises for a period of more than three (3) days after receiving such a request.

6.11 Customer Service Program

6.11.1 Office Location

Contractor shall maintain a business office in the City, or such other location as the City approves, for purposes of carrying out its obligations under this Agreement, such approval not being unreasonably withheld. If the office is located outside of the City, Contractor must ensure that telephone calls to its office from locations within the City are toll free calls or are billed to Customers as "local calls" by all telephone companies.

6.11.2 Office Hours

Contractor's office shall be open to the public from 7 a.m. to 5 p.m. Monday through Friday. The office may be closed on Saturdays, Sundays, and Holidays (as defined in Article 1) plus Martin Luther King Day and Presidents' Day.

6.11.3 Availability of Representatives

The office shall be staffed with a sufficient number of Persons capable of accepting payments from Customers, answering service questions, changing Customer Service Levels, and resolving other Customer service issues in a timely manner and in accordance with the performance measure described in Exhibit F. At a minimum, Contractor shall employ one full-time customer service manager and three full-time customer service representatives dedicated to serving the City and its Customers. A representative of the Contractor shall be available from 7 a.m. to 5 p.m. Monday through Friday to communicate with the public in Person and by telephone.

A voice mail service or program shall be available for Persons to leave a message during non-business hours. Contractor shall return calls received during non-business hours no later than 5:00 p.m. of the following Business Day. If Contractor fails to meet the requirements described in this Section, the Contractor shall pay the City Liquidated Damages in accordance with Section 11.6.

Contractor shall provide City Contract Manager with the names and telephone numbers of contact Persons available during office hours and of emergency contact Persons who will be available during hours when the office is closed.

Customer service personnel shall maintain a log documenting each Complaint or inquiry received and listing for each entry the following: date, time, Customer name and address, description of Complaint or inquiry, and resolution of the Complaints. Copies of this log shall be made available upon City Contract Manager request.

6.11.4 Telephone

Contractor shall maintain a telephone system in operation at its office from 7 a.m. to 5 p.m. and shall have staff available to answer calls. Contractor shall install telephone equipment sufficient to handle the volume of calls typically experienced on the busiest days and such telephone equipment shall be capable of recording a variety of call statistics (e.g., average hold time, average talk time, dropped calls, etc.). Contractor's phone system shall be TDD compatible for the hearing impaired. Customer service representatives shall be available to speak to non-English speaking Customers (Spanish and Mandarin at a minimum.) If Persons are unable with reasonable effort to reach Contractor's office by phone, or are subject to waiting time "on hold" of more than two (2) minutes prior to reaching a customer service

representative, City Contract Manager may require that Contractor install additional telephone lines or hire additional customer service representatives. Liquidated damages may be levied for repetitive Complaints regarding waiting time longer than two (2) minutes in accordance with Section 11.6.

Contractor shall maintain a special telephone hotline for Commercial Compostables Customers that will ring directly to a customer service representative that has special training and expertise in this particular program.

6.11.5 Website

Contractor shall develop and maintain a publicly-accessible website describing services provided in the City. The site shall include: (1) a description of all Collection services and details related to their implementation, (2) answers to frequently asked questions; (3) Rates for Single-Family, Multi-Family, Commercial, and Drop Box/Compactor Service; (4) Recyclable Materials and Compostable Materials Customer set-out specifications; (5) Collection service schedule and map: (6) Holidays that impact Collection service schedule and related set-out instructions, (7) ability to view and pay bills on line; (8) ability to schedule On-Call Single-Family Clean-Up Services and On-Call Multi-Family Clean-Up Services, Bulky Item and E-Waste Collections, and extra/overage Collections; (9) ability to request Service Level/type changes, Drop Box/Compactor Service, and service terminations; (10) ability to request paperless public education and outreach communications, bills, and other materials via electronic delivery; (11) the ability to opt- out of electronic information from the Contractor and/or the City; and (12) other related topics. The website shall also allow a Customer to e-mail a question, compliment, or Complaint to the Contractor and Contractor shall provide a response to e-mail inquiries or Complaints within twenty-four (24) hours of receipt. Contractor shall arrange for the City's website to include an e-mail link to Contractor and a link to the Contractor's website. Contractor's website shall track web visits. Additional website requirements are specified in Exhibits C and C1.

6.11.6 Customer Satisfaction Survey

The City Contract Manager may conduct a Customer satisfaction survey every year.

6.11.7 Training

Customer service representatives shall receive training during each quarter of the calendar year on City-specific Collection programs and service requirements. During the training, a City-specific Collection service and Rate information sheet, training agenda, and associated documentation shall be provided to and discussed with employees. Information sheet, training agenda, and associated documentation shall be forwarded by Contractor to the City Contract Manager each quarter after the training in accordance with quarterly reporting requirements of Section 6.3.3.D. The City Contract Manager may review the training materials and request changes.

The Contractor shall notify the City Contract Manager of the date and time of the scheduled Customer service training sessions (pursuant to quarterly reporting requirements of Section 6.3.3.D) and the City Contract Manager may, at its option, attend the meetings.

Contractor shall also train its customer service representatives regarding the Commercial Food Scrap Program, and will conduct periodic, but at Contractor's discretion not more than once per quarter, telephone survey programs to determine Customer knowledge and satisfaction with the Program. Contractor shall provide the City Contract Manager with a report of any such surveys.

Contractor will use customer service and outreach efforts and materials to minimize contaminants (e.g., glass and plastics).

6.11.8 Access to Customer Service and Billing Systems

Contractor shall provide access and any necessary training to one (1) or more City employee(s) (as designated by the City Contract Manager) regarding the use of Contractor information systems. Contractor shall designate one (1) member of Contractor staff to work directly with such City employee. Contractor shall provide such City employee with read-only access to Customer service, call center, and operations information systems in order to validate Contractor performance standards, and recommend changes to Customer Service Levels to resolve service issues or otherwise address Customer needs. In the event that recommended Service Level changes are made, the designated City staff will work with Contractor's route manager to make such changes. Contractor shall also provide access to Customer contact information (including email addresses) for purposes of City-provided public education and outreach activities. In addition, Contractor shall ensure that the City Contract Manager and any other City staff, as requested by the City, have read-only access to all service order, Billing, and Customer service records in Contractor's internal information systems. Such read-only access is intended to provide the City the ability to review notes related to Customer service and/or Billing issues.

6.12 Service Complaints

Contractor shall receive verbal Complaints through its Customer service center and shall have e-mail capabilities (accessible through the Contractor's website) to enable Persons to communicate Complaints to Contractor via e-mail. Contractor shall be responsible for the prompt and courteous attention to, and prompt and reasonable resolution of, all Complaints. Contractor shall record in a separate log all Complaints, noting the name and address of complainant, date and time of Complaint, nature of Complaint, and nature and date of resolution. This Complaint log shall be retained by the Contractor for the Term and shall be made available for review upon City Contract Manager request. In addition, Contractor shall compile a summary statistical table of the Complaint log, satisfactory to the City Contract Manager, and submit the table to City Contract Manager each quarter.

Contractor shall respond to all Complaints from Generators or Customers by phone or email within twenty-four (24) hours, weekends and Holidays excluded, by informing the Customer of the action Contractor will take to remedy the Complaint or respond to the service request. In particular, if a Complaint involves a failure to Collect Solid Waste, Recyclable Materials, or Compostable Materials from a Premises (missed pick-up), required by this Agreement, Contractor shall Collect the material in question within twenty-four (24) hours of receipt of the Complaint, provided it has been delivered for Collection in accordance with the Livermore Municipal Code, Title 8, Chapter 8.08, Solid Waste Management. If Contractor fails to meet the requirements described in this Section, the Contractor shall pay the City Liquidated Damages in accordance with Section 11.6.

Commencing January 1, 2022, Contractor shall notify City of Complaints regarding non-compliance with SB 1383, received within 90 days of receiving Complaint.

6.13 Title to Solid Waste

Once Solid Waste, Recyclable Materials, Construction and Demolition Debris, and/or Compostable Materials are placed in Containers and properly placed at the Collection location, ownership and the right to possession shall transfer directly from the Generator to Contractor by operation of this Agreement. Subject to Contractor's objective to meet the Act and Measure D Diversion goals, City goals, and City's right to direct Contractor to Process and/or Dispose of Solid Waste at a particular licensed Site or to Dispose of Solid Waste at a permitted Disposal Site, Contractor is hereby granted the right to retain, Recycle, Process, Dispose of, and otherwise use such Solid Waste, Recyclable Materials or Compostable Materials or any part thereof, in any lawful fashion or for any lawful purpose desired by Contractor. Subject to the provisions of this Agreement, Contractor shall have the right to retain any benefit resulting from its right to retain, Recycle, Process, Dispose of, or reuse the Solid Waste, Recyclable Materials, Construction and Demolition Debris, or Compostable Materials which it Collects. Solid Waste, Recyclable Materials, Construction and Demolition Debris, or Compostable Materials or any part thereof, which is deposited at a Disposal Site, Transfer Station, Composting Site or Processing Site shall become the property of the Owner or operator of the facility, once deposited there by Contractor.

On a short-term basis not to exceed more than five (5) calendar days per year, City may obtain ownership or possession of Solid Waste, Construction and Demolition Debris, Recyclable Materials, or Compostable Materials placed for Collection upon written notice of its intent to do so, however, nothing in this Agreement shall be construed as giving rise to any inference that City has such ownership or possession unless such written notice has been given to Contractor.

6.14 Non-Discrimination

Contractor shall not discriminate in the provision of service or the employment of Persons engaged in performance of this Agreement on account of race, color, religion, sex, age, marital status, sexual orientation, physical handicap or medical condition in violation of any applicable federal or State law.

6.15 Report of Accumulation of Solid Waste; Unauthorized Dumping

Contractor shall direct its drivers to note: (1) the addresses of any Premises at which they observe that Solid Waste, Recyclable Materials or Compostable Materials is accumulating and is not being delivered for Collection; and (2) the address, or other location description, at which Solid Waste, Recyclable Materials or Compostable Materials has been dumped in an apparently unauthorized manner. Contractor shall deliver the address or description to City Contract Manager within five (5) working days of such observation.

6.16 Administration of Service Exemption Programs

Contractor shall allow for Persons that have a disability as defined by the Americans with Disabilities Act (which means Public Law 101-336, 104 Stat. 327, 42 U.S.C. 12101-12213 and 27 U.S.C. 225 and 611, and all Federal rules and regulations relating thereto) that are Occupants of Single-Family Premises and Multi-

Family Premises to receive Collection services at a location other than Curbside at no extra charge to the Customer. Contractor shall review all applications (which shall include statements from physicians) made by Customers to determine conformance with this exemption provision and shall grant exemptions if applicable. With regard to all requirements of this Section, the Contractor shall make reasonable accommodations with regard to provision of and servicing of Containers (e.g., Container size and type, placement of Containers for Collection, etc.) at no additional cost to the Customer.

6.17 Performance Review and Audits

6.17.1 Performance Review

In addition to any and all reports the Contractor must provide, or the City may request, in this Agreement, the City shall have the right to conduct two (2) reviews of Contractor's performance during the Term to verify that Contractor has fulfilled its obligations under the Agreement, in addition to the Commercial and Multi-Family Program Performance Report described in Section 5.17.9. City Contract Manager may conduct such performance reviews at any point during the Term. Upon notice from City that a performance review will be conducted, Contractor shall provide all information requested by City Contract Manager and cooperate with the review. Performance review may focus on, but is not necessarily limited to: call center performance, total Complaints, missed pick-ups Complaints, noise Complaints, contract compliance, Diversion results, Customer participation levels in Diversion programs, vehicle maintenance, compliance with the implementation plan, and public education and outreach efforts. The City Contract Manager will supervise the evaluation and may provide a formal report to City Council. At City Contract Manager's request, Contractor shall make a presentation to City Council reporting the Contractor's perspective on the results. Contractor shall be responsible for reimbursing the City for the cost of each such review, in an amount up to sixty thousand dollars ($60,000) per review for each performance review in 2020 dollars. The sixty thousand dollar ($60,000) amount of the performance review reimbursement shall be adjusted in accordance with the adjustment method described in Section 3 of Exhibit I or Section 3 of Exhibit J.

6.17.2 Payment and Billings Audit

The City shall have the right to conduct three (3) audits of Contractor's Billings and payment of monies due to the City during the Term to verify that Contractor has accurately billed Customers, and has calculated and transmitted all fees and payments as required by this Agreement. Upon notice from City that a payment and Billings audit will be conducted, Contractor shall provide all information requested by the City and cooperate with the audit. Contractor shall be responsible for reimbursing the City for the cost of each such audit, in an amount up to thirty-five thousand dollars ($35,000) per audit in 2020 dollars, adjusted annually in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J.

6.18 Provision of Emergency Services

Contractor shall provide emergency services at the City's request in the event of major accidents, disruptions, or natural calamities in a manner consistent with the services and procedures identified in its contingency plan required in accordance with Section 5.19. Contractor agrees to take direction from the City Contract Manager related to services performed by any disaster debris hauler and disaster debris

monitor contracted by the City. Emergency services may include, but are not limited to, assistance handling salvaged materials, Processing, Composting, or Recycling materials, or Disposing of Solid Waste following a major accident, disruption, or natural calamity. Contractor shall be capable of providing emergency services within twenty-four (24) hours of notification by the City or as soon thereafter as is reasonably practical in light of the circumstances. Emergency services, which exceed the Contractor's obligations, shall be compensated in accordance with Section 8.4. If Contractor cannot provide the requested emergency services, the City shall have the right to take possession of the Contractor's equipment for the purposes of providing emergency services in accordance with Article 10.

6.19 Assistance to City with Code and Plan Reviews

Contractor shall provide staff and time to assist the City in evaluating and revising its Municipal Code and Planning and Zoning Code requirements related to Collection of Solid Waste, Recyclable Materials, and Compostable Materials; space allocation and enclosure requirements for Containers, etc. In addition, Contractor shall provide staff with the expertise to review building plans for new Residential and Commercial development projects during the City's permit review process to verify the reasonableness of the space allocation and enclosure design for Solid Waste, Recyclable Materials, and Compostable Materials Containers and the accessibility of such areas. For these plan reviews, the Contractor may be requested to visit the site and submit written recommendations for improvements to the design. Plan reviews shall be completed within two (2) weeks of the City's request for such review. The City anticipates approximately five (5) to ten (10) reviews may be requested annually.

6.20 Unincorporated Alameda County Services

Contractor is authorized to Collect Solid Waste, Recyclable Materials, and Compostable Materials from Residential and Commercial Premises within unincorporated portions of Alameda County in accordance with the terms described in the Memorandum of Understanding Between the City of Livermore, Alameda County and Livermore Sanitation, Inc. Regarding Solid Waste and Recycling Services dated November 26, 2012 attached hereto as Exhibit P. Any subsequent amendments to the Memorandum of Understanding Between the City of Livermore, Alameda County and Livermore Sanitation, Inc. Regarding Solid Waste and Recycling Services dated November 26, 2012 agreed to by the parties in writing shall be reflected in a revised Exhibit P and shall be binding upon the parties.

6.21 Services to the Livermore Valley Joint Unified School District

This Section establishes parameters for the Contractor's Collection of Solid Waste, Recyclable Materials, and Compostable Materials from the Livermore Valley Joint Unified School District, and identifies the methodology used to fully compensate the City for the use of assets paid for by Livermore rate payers.

Contractor is authorized to provide Collection Service to the Livermore Valley Joint Unified School District during the term of this Agreement provided the Contractor adheres to the terms of this Section and the terms identified in the Solid Waste and Recycling Services Agreement between the Livermore Valley Joint Unified School District and Livermore Sanitation, Inc. dated August 1, 2013, and any subsequent amendments or extensions, attached hereto as Exhibit Q.

On an annual basis, Contractor will apply a credit to the Total Calculated Costs for the coming Rate Period as part of the required rate application described in Section 8.3 and in Schedule D to Exhibits I and J. Contractor also agrees to provide cost allocation estimates and any other information deemed necessary by the City Contract Manager.

The Contractor is permitted to commingle Solid Waste Materials Collected under this Agreement with Solid Waste Materials Collected from the Livermore Valley Joint Unified School District. Likewise, the Contractor is permitted to commingle Recyclable Materials Collected under this Agreement with Recyclable Materials Collected from the Livermore Valley Joint Unified School District and the Contractor is permitted to commingle Compostable Materials Collected under this Agreement with Compostable Materials Collected from the Livermore Valley Joint Unified School District.

Contractor agrees to estimate the amount of Solid Waste, Recyclable, and Organic Materials Collected from the Livermore Valley Joint Unified School District and report the estimated Tonnage to the City Contract Manager at least once per year.

The Contractor is exempt from the payment of the Agreement Fee and other City fees specified in Article 7 on revenues received from schools that are part of the Livermore Valley Joint Unified School District.

ARTICLE 7.
AGREEMENT FEE AND OTHER CITY FEES

7.1 Agreement Fee

In consideration of the exclusive rights provided Contractor herein, Contractor shall pay to City eleven percent (11%) of its Gross Rate Revenues. On a monthly basis, the Agreement Fee amount shall equal eleven percent (11%) of the Gross Rate Revenues collected by Contractor during the previous month for services provided under this Agreement. The Agreement Fee shall be paid monthly to the City in accordance with procedures and terms and conditions described in Section 7.10. This fee may be adjusted by City Council resolution.

7.2 Franchise Monitoring and Enforcement Fee

The Contractor shall pay the City a Franchise Monitoring and Enforcement Fee, which the City shall use to offset expenses related to contract management, compliance, and monitoring, and to enforce the franchise with respect to any violations by third parties, including initiating and/or assisting in prosecuting enforcement actions. The City shall retain the sole right to set priorities for its contract monitoring and enforcement among City personnel. This fee shall be a pass-through cost. The amount of the Franchise Monitoring and Enforcement Fee shall be $228,931 in Rate Period Ten. The amount of the Franchise Monitoring and Enforcement Fee for subsequent Rate Periods shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J, or shall be the amount specified by the City.

Except as expressly provided below, during the Term of this Agreement and any extension of it, Contractor shall remit one-twelfth (1/12) of the total annual Franchise Monitoring and Enforcement Fee to the City each month in accordance with procedures and terms and conditions described in Section 7.10.

7.3 Street Sweeping Services Fee

The City considers street sweeping a necessary component of Solid Waste management, necessary for the public health, safety, and welfare, to prevent Litter from entering the City's storm drainage facilities, as well as for aesthetic purposes. Pursuant to Chapter 8.08, Article IX of the Solid Waste Management Section of the Livermore Municipal Code, the City is authorized to establish a fee for street sweeping purposes. For Rate Period Ten, Contractor shall pay a Street Sweeping Services Fee to the City each month equal to $53,333, which totals $640,000 annually. The amount of the Street Sweeping Services Fee for subsequent Rate Periods shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J, or shall be the amount specified by the City. Contractor shall send the collected fee to the City on a monthly basis in accordance with procedures and terms and conditions described in Section 7.10.

7.4 Rate Review and Performance Review Fee

The City considers the Rate review and performance review process to be extremely complex requiring a contract with a consultant in order to provide the best review possible of the Contractor Rate adjustment application resulting in adjustment of Rates consistent with the terms of this Agreement. Two types of Rate reviews will be conducted (an indexed-based adjustment and a cost-based adjustment as described in Article 8), depending on the Rate Period. The City Contract Manager may conduct performance reviews and plans to request assistance from a consultant to assess the Contractor's performance including, but not limited to, the Contractor's performance with regard to Customer service, Complaints, contract compliance, Diversion results, Customer participation levels in Diversion programs, and public education and outreach efforts.

For Rate Period Ten the Rate Review and Performance Review Fee shall be $0. The amount of the Rate Review and Performance Review Fee for subsequent Rate Periods shall be specified by the City Contract Manager and upon City direction the fee shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J. If the City Contract Manager specifies a Rate Review and Performance Review Fee, Contractor shall send the collected fee to the City on a monthly basis in accordance with procedures and terms and conditions described in Section 7.10.

7.5 Vehicle Impact Fee

Contractor has paid the City a Vehicle Impact Fee for Rate Periods 1 through 9. For Rate Period 10, Contractor shall pay a Vehicle Impact Fee to the City each month equal to $88,743, which equals $1,064,924 annually. This fee is to reimburse the City for street maintenance costs incurred because of Collection Vehicles traveling on City streets.

The Vehicle Impact Fee shall be adjusted annually using the annual percentage change in the Consumer Price Index (All Urban Consumers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described for Vehicle-Related Costs in Section 3.A.2 of the Exhibit I or Section 3.A.3.b of Exhibit J, or shall be the amount specified by the City. Contractor shall send the collected fee to the City on a monthly basis in accordance with procedures and terms and conditions described in Section 7.10.

7.6 Neighborhood Preservation Fee

The Neighborhood Preservation section of the City's Community Development Department assists to enforce the City's Municipal Code as it applies to property maintenance, property nuisances and other issues in Residential and Commercial zoning districts. The Neighborhood Preservation staff works closely with all City departments in order to resolve health, safety, and public nuisance problems that may adversely affect the quality of life for citizens of the City.

Contractor has paid the City a Neighborhood Preservation Fee for Rate Periods 1 through 9. For Rate Period Ten, Contractor shall pay a Neighborhood Preservation Fee to the City each month equal to $14,838, which totals $178,058 annually. The amount of the Rate Neighborhood Preservation Fee for subsequent Rate Periods shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J, or shall be the amount specified by the City Contract Manger. Contractor shall send the collected fee to the City on a monthly basis in accordance with procedures and terms and conditions described in Section 7.10.

7.7 Third Party Fees

Should another governmental agency require the collection of a fee or fees from Customers, Contractor shall add such fee to its Customer Billing without modification or mark up, collect the fee, and Transfer the resulting funds to the other governmental agency or, at the option of the City, to the City for payment to the other governmental agency. Such Third Party Fees are not a Change in Law and are not included in the calculation of the maximum 9% rate increase in Section 8.2.C. Should Contractor incur actual demonstrable additional costs in administering these fees, Contractor may submit a request to be compensated to the City Contract Manager who in their sole discretion may grant such request. To the extent that such fees become a component of bad debt, then they shall be governed by the Bad Debt Collection Process described in Section 6.1.2 of this Agreement.

7.8 SB 1383 Fee

The Contractor shall pay an SB 1383 Fee to City each month. The amount of the SB 1383 Fee shall be eight thousand three hundred and thirty four dollars ($8,334) per month beginning in Rate Period 11 (July 1, 2020). City shall use the SB 1383 Fee to offset expenses including staffing costs related to City programs, pilot studies, education and outreach campaigns, technical assistance to Customers, reporting, compliance, provision of special Containers, enforcement, or other activities involved in compliance with SB 1383. The City Contract Manager shall retain the sole right to set priorities for the use of its SB 1383 Fee. The amount of the SB 1383 Fee for subsequent Rate Periods shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J, or shall be the amount specified by the City Contract Manager.

7.9 Other Fees

The City shall reserve the right to set other fees as it deems necessary, subject to City Council approval. The amount of the Fee shall be adjusted annually using the annual percentage change in the Consumer Price Index (Urban Wage Earners and Clerical Workers) for the San Francisco-Oakland-Hayward, CA geographic area, or for such area as may be subsequently designated by the U.S. Bureau of Labor Statistics in accordance with the adjustment method described in Section 3 of the Exhibit I or Section 3 of Exhibit J, or shall be the amount specified by the City Contract Manager. Contractor shall send the collected fee to the City on a monthly basis, or as specified by the City Contract Manager, in accordance with procedures and terms and conditions described in Section 7.10.

7.10 Procedures for Monthly Submittal of Fees

On or before the twentieth (20th) day of each month during the Term of this Agreement, Contractor shall remit to City the fees due in accordance with this Section. If the fees are not paid on or before the twentieth (20th) day of any month, Contractor shall pay in addition to the amount owed to City a late payment penalty in an amount equal to two percent (2%) of the amount owing for that month. Contractor shall pay an additional two percent (2%) owing on any unpaid balance for each following thirty (30) calendar day period the fee remains unpaid. Late payment penalty amounts shall not be reimbursed to Contractor. The late payment penalty amounts are not intended as interest on debt, but rather are intended as a predetermined penalty for failure to meet an obligation under this Agreement.

Each monthly remittance to City shall be accompanied by a statement detailing Gross Rate Revenues for the period covered from all operations conducted or permitted pursuant to this Agreement. This monthly statement shall identify billed revenues and actual Gross Rate Revenues received listed separately for Single-Family, Multi-Family, Commercial, and Drop Box/Compactor Customers. In addition, Contractor shall maintain copies of all Billing and collection records for five (5) years, following the expiration or earlier termination of this Agreement, for inspection and verification by City Contract Manager at any reasonable time upon request.

Contractor is obligated to pay all City fees (identified on the Commencement Date in this Article 7 and any new City fees established in accordance with Section 7.9) to the City in accordance with procedures described in Section 7.10. Such payments shall be due to City regardless of the actual Contractor Compensation and regardless of the amount of the actual Gross Rate Revenues received by the Contractor.

7.11 Adjustment to Fees

City may adjust the amount of the fees at any time. Such adjustment shall warrant an adjustment in the City-approved Rates to reflect the changes in the amount of the fees. In the event Contractor is requested to pay increased City fees before the Rates are adjusted, Contractor would receive retroactive compensation for payment of any increased fees before the corresponding Rate increase takes effect.

ARTICLE 8.
CONTRACTOR'S COMPENSATION

8.1 Overview

The Contractor's Compensation for performance of all its obligations under this Agreement shall be Gross Revenue. Contractor's Compensation provided for in this Article shall be the full, entire and complete compensation due to Contractor pursuant to this Agreement for all labor, equipment, materials and supplies, Processing and Disposal fees, fees due to City, taxes, insurance, bonds, overhead, operations, profit and all other things necessary to perform all the services required by this Agreement in the manner and at the times prescribed.

If Contractor's actual costs, including fees due to City, are more than Gross Revenue, Contractor shall not be compensated for the difference in actual costs and actual Gross Revenue (excepting the provisions included in Section 8.4). If Contractor's actual costs are less than the actual Gross Revenue, Contractor shall retain the difference provided that Contractor has paid City fees pursuant to Article 7.

Under this Agreement, Contractor shall have the right and obligation to charge and collect from Customers, Rates in Exhibit H that are approved by the City for provision of services to Customers.

The Rates for Rate Period Eleven are based on the Contractor's Proposal for the Extension Period (Exhibit G1). Contractor's proposed costs and operating assumptions for Rate Period Eleven are presented in Exhibit G.1. Rates for Rate Period Thirteen and subsequent Rate Periods shall be adjusted annually in accordance with Section 8.2 using an index-based adjustment method that involves adjustments using various cost indices and adjustments to Disposal and Processing costs to reflect actual Tonnage. Rate Period Sixteen shall be adjusted in accordance with Section 8.2 using a cost-based adjustment methodology that involves a review of Contractor's actual costs and projection of costs for the coming Rate Period. The cost-based adjustment process is intended to provide the City and the Contractor with the opportunity to adjust Rates to more accurately reflect actual costs of operations if the cost indices are not tracking with actual changes in costs. In the event that the Agreement is extended beyond Rate Period

Twenty One, either Party may request that Rates for Rate Period Twenty Two be adjusted using the cost-based methodology.

8.2 Rate Review Process

A. **General.** The City shall be responsible for approving Rates as described in this Article. If at any time during the Term of the Agreement, the Contractor determines the need for a Rate that does not appear on the City-approved Rate schedule in Exhibit H, Contractor shall immediately notify the City and request establishment of such Rate. For example, if a Customer requires Collection of a fifteen (15) cubic yard Compactor five (5) times per week and the City-approved Rate schedule does not include this level of service, the Contractor must request that the City approve a Rate for this level of service.

B. **Rates for Rate Period Eleven and Twelve.** Rates for Rate Periods Eleven and Twelve were determined by Contractor and City Contract Manager and were approved by City Council resolution at the time of the execution of this Agreement and are reflected in Exhibit H. The Rates for Rate Period Eleven are effective January 1, 2021 through June 30, 2021. The Rates for Rate Period Twelve are effective July 1, 2021 through June 30, 2022. Rates for Rate Periods Eleven and Twelve shall not be adjusted to reflect either increases or decreases in costs from those anticipated by Contractor; provided, however, that if any adjustments for Rate Period Eleven or Rate Period Twelve are warranted under Section 8.4 or 8.5, such adjustments will be made retroactively in Rate Period Thirteen. Rates for Rate Periods 13 and beyond shall be determined in accordance with Section 8.3 and, to the extent applicable, Sections 8.4 and 8.5.

As an inducement to enter this Agreement, Contractor offered City to have no rate adjustment from Rate Period Ten to Rate Periods Eleven and Twelve. Rather than have no increase and then a disproportionately high increase to rates in Rate Period Thirteen, the City and Contractor agreed to a rate increase in Rate Periods Eleven and Twelve with the difference between the approved increase and the no increase alternative offered by Contractor contributed to a rate reserve fund retained by the Contractor (the "rate reserve"), until such funds were earned by the Contractor through a lesser increase to rates calculated in accordance with this Agreement or through the Contractor's incurring costs for services and programs not contemplated in this Agreement and not otherwise provided for in this Agreement.

In order to determine the difference between the approved increase and the no increase alternative offered by Contractor, at the time rates are determined, Contractor will provide a projection, with supporting information, of Gross Rate Revenues (with and without the approved rate increase). For example, if the Gross Rate Revenues in Rate Period 11 without a rate increase were projected to be $28,000,000, and the approved rate increase were 2.0%, then the projected Gross Rate Revenues would be $28,560,000 and the anticipated deposit to the rate reserve would be $560,000 which equals 1.96% ($560,000/28,560,000).

At the end of Rate Periods 11 and 12, Contractor shall provide a report of Actual Gross Rate Revenues. For example, if at the end of Rate Period 11 the Gross Rate Revenues were $28,750,000, then the Gross Rate Revenue would be multiplied by the 1.96% resulting in $563,500 being contributed to the rate reserve. Alternatively, should the Rate Period 11 Gross Rate Revenues be $28,250,000, then this amount would be multiplied by the 1.96% resulting in $553,700 being contributed to the rate reserve.

Starting in Rate Period 13 at the City's discretion, the Contractor may be compensated from the rate reserve for any rate adjustment less than that calculated in accordance with the annual adjustment process or under Sections 8.4 or 8.5. For example, if the rate reserve is used to offset a rate increase in Rate Period 13 the rate adjustment process resulted in a revenue requirement of $29,000,000 corresponding to a rate increase of 3.5% ($1,015,000), and the approved rate increase were 2.0% (corresponding to $580,000), then the difference of $435,000 1.50% ($435,000/$29,000,000) would be contributed from the rate reserve. If at the end of Rate Period 13 the Gross Rate Revenues were $29,500,000, it would be multiplied by the 1.50% resulting in $442,500 being earned by the Contractor and subtracted from the rate reserve. Alternatively, should the Rate Period 13 Gross Rate Revenues be $28,540,000, then this amount would be multiplied by the 1.5% resulting in $428,100 being subtracted from the rate reserve. The Parties agree that the rate reserve funds will be used by the end of the initial term of the Agreement, before the end of Rate Period 20 on June 30, 2030.

C. **Annual Adjustment Process.** The Rates shall be adjusted annually, with City Council approval, commencing July 1, 2022 through the remaining Term of this Agreement including any extension periods. The adjustments to Rates shall be determined using one of two methodologies: (1) an index-based adjustment, or (2) cost-based adjustment. The index-based adjustment, which is described in Exhibit I, involves use of various cost adjustment factors (such as the percentage change in the consumer price index and percentage change in the Approved Disposal Site tipping fee) to calculate adjusted Rates. The cost-based adjustment, which is described in Exhibit J, involves a detailed review of the Contractor's actual costs of service and determination of adjusted Rates to reflect Contractor's projected costs. The Rate Period 16 overall increase is capped at no more than 3%; if the increase warranted is greater than 3% in Rate Period 16, the adjustment will be spread over the remaining Term of this Agreement ending on June 30, 2030 at the end of Rate Period 20. In all other years, the cost-based adjustment shall not exceed a nine percent (9%) increase in Rates. The following table specifies when the two Rate adjustment methods shall be used.

Rate Period	Commencement Date of Rate Period	Adjustment Method Used to Determine Rates for the Rate Period	Rate Adjustment Application Submittal Date
1	July 1, 2010	Not Applicable;	Not Applicable
2	July 1, 2011	Index-Based	January 1, 2011
3	July 1, 2012	Index-Based	January 1, 2012
4	**July 1, 2013**	**Index-Based unless the City requests Cost-Based**	**For Cost-Based: Notice by September 1, 2012; Application by** December 1, 2012**; For Index-Based: Application by January 1, 2013**
5	July 1, 2014	Index-Based	January 1, 2014
6	July 1, 2015	Index-Based	January 1, 2015
7	July 1, 2016	Index-Based	January 1, 2016

Rate Period	Commencement Date of Rate Period	Adjustment Method Used to Determine Rates for the Rate Period	Rate Adjustment Application Submittal Date
8	**July 1, 2017**	**Index-Based unless one Party requests Cost-Based**	**For Cost-Based: Notice by September 1, 2016; Application by December 1, 2016; For Index-Based: Application by January 1, 2017**
9	July 1, 2018	Index-Based	January 1, 2018
10	July 1, 2019	Index-Based	January 1, 2019
11	July 1, 2020	Not Applicable; Rates specified in Exhibit H to be effective January 1, 2021	N/A
12	July 1, 2021	Not Applicable; Rates specified in Exhibit H to be effective July 1, 2021	N/A
13	July 1, 2022	Index-Based	January 1, 2022
14	July 1, 2023	Index-Based	January 1, 2023
15	July 1, 2024	Index-Based	January 1, 2024
16	July 1, 2025	Cost-Based	January 1, 2025
17	July 1, 2026	Index-Based	December 1, 2025
18	July 1, 2027	Index-Based	January 1, 2027
19	July 1, 2028	Index-Based	January 1, 2028
20	July 1, 2029	Cost-Based	January 1, 2029
21*	July 1, 2030	Index-Based	January 1, 2030
22*	July 1, 2031	**Index-Based unless one Party requests Cost-Based**	**For Cost-Based: Notice by September 1, 2030; Application by December 1, 2030; For Index-Based: Application by January 1, 2031**
23*	July 1, 2032	Index-Based	January 1, 2032
24*	July 1, 2033	Index-Based	January 1, 2033
25*	July 1, 2034	Index-Based	January 1, 2034

*Applicable only if the Term is extended pursuant to Section 3.4.

D. **Rate Structure.** The Contractor shall have the sole and exclusive right to change the relationship of individual Rates in comparison with other Rates as the Contractor deems appropriate. Any such changes would occur in conjunction with the annual Rate adjustment process described in Section

8.2.C or in conjunction with a Rate adjustment resulting from a Special Rate Review in accordance with Section 8.4.

8.3 Rate Application Process

A. **Application Date and Content**

1. **Index-Based Rate Adjustment Methodology.** On January 1, prior to the commencement of the Rate Period for which Rates are to be determined using the index-based Rate adjustment method (coming Rate Period), Contractor shall submit its application via email to the addresses listed in Section 6.3 to the City Contract Manager requesting the Rate adjustment for the coming Rate Period. Contractor shall request and receive a written response confirming receipt of its application by the City Contract Manager in order that its submission has been submitted in a timely manner. For example, on January 1, 2022, the Contractor shall submit an electronic copy of its application for the Rate Adjustment to be effective for Rate Period Thirteen and shall receive a response from City Contract Manager confirming receipt. The application shall present the calculations of the annual percentage change in various cost indices, total calculated annual costs for the Rate Period, the Rate Adjustment Factor, annual revenues and per-Ton revenues from the sale of Recyclables Materials, annual average Residue level at the Approved Recyclables Processing Site, and all supporting documentation for the calculations including a copy of the Collective Bargaining Agreement(s) currently in effect and reports on revenues from the sale of Recyclable Materials.

   The application shall also present the Rates for the then-current Rate Period (e.g., Rate Period Thirteen) and the proposed Rates for the coming Rate Period (e.g., Rate Period Fourteen).

2. **Cost-Based Rate Adjustment Methodology**. On December 1, prior to the commencement of the Rate Period for which Rates are to be determined using the cost-based Rate adjustment method, Contractor shall submit of its application via email to the addresses listed in Section 6.3 to the City Contract Manager requesting the Rate adjustment for the coming Rate Period. For example, on December 1, 2024, the Contractor shall submit its application for the Rate Adjustment to be effective for Rate Period Sixteen.

The application shall present the Contractor's actual total annual cost of operations, revenues from the sale of Recyclable Materials, average annual Residue level of the Approved Recyclables Processing Site, profit, pass-through costs, City fees, the actual total annual costs for the most-recently completed Rate Period and forecast of the same cost items for the coming Rate Period in accordance with the procedures described in Exhibit J. Contractor shall assemble, provide, and submit such information that is necessary to support the actual costs presented and the calculation of the assumptions made by Contractor with regard to forecasting the total annual cost of operations, profit, pass-through costs, City fees, and the total annual costs for the coming Rate Period. Such documentation shall include, but not be limited to: calculations of the annual percentage change in various cost indices, annual revenues and per-Ton revenues from the sale of Recyclables Materials, monthly Residue Tonnage reports for the Approved Recyclables Processing Site, and a copy of the Collective Bargaining Agreement(s) currently in effect. The actual costs shall be based on the financial statements for the Contractor's previous fiscal year, which shall be submitted in accordance with requirements of Section 6.4.2. In addition, the application shall present the Contractor's calculation of the Rate Adjustment factor, present each Rate for the then-current Rate Period, and each proposed

Rate for the coming Rate Period. Lastly, the application shall include operational data listed in Section 6.4.4.

If the City Contract Manager requests additional information beyond that provided by the Contractor in its application, the Contractor shall provide all information requested by the City Contract Manager during its review of the application, including, but not limited to, all information from Related-Party Entities requested by the City Contract Manager regarding any transactions between Contractor and any Related-Party Entity pertaining to Contractor's performance under this Agreement.

B. **City Review of Application.** The Contractor's Rate application shall be reviewed by the City Contract Manager. The City Council shall approve Rates to reflect the adjustments made in accordance with Exhibits I or J depending on the method used to adjust the Rates that are being approved. The City Council shall act in good faith to approve such Rate adjustments by July 1 of the Rate Period. The adjusted Rates shall not take effect until the City Council has approved such Rates.

C. **Failure to Adjust Rates by July 1.** If the Contractor submits its Rate application on or before the Rate application date identified in Sections 8.3.A or 8.3.B, and the City does not approve adjusted Rates to be effective on or before July 1 of a Rate Period, a surcharge shall be included on the Rates that shall be effective for the remainder of the Rate Period to recover Gross Rate Revenues lost by the Contractor, if any. To determine the amount of lost revenues, if any, the City Contract Manager and Contractor shall meet and confer to determine the effect the delay in adopting Rates has on the Contractor's Gross Rate Revenue. The assessment of the revenue impact shall consider the Contractor's Billing cycle (e.g., impact to Customers billed in advance and to Customers billed in arrears), the ability of Contractor to delay issuance of bills, the payment cycle of Customers, and other variables.

If the Contractor does not submit the application on or before the Rate application date identified in Sections 8.3.A or 8.3.B, adjusted Rates may not be approved by July 1. In such case, all Rates shall be adjusted as soon as practical following approval by the City Council. If the Contractor does not submit the application by the Rate application date identified in Sections 8.3.A or 8.3.B, no retroactive adjustment will be made to allow the Contractor to recover Gross Rate Revenues that it would have collected, had the Rate adjustment been implemented in accordance with the prescribed schedule.

With regard to review of records of Related Party Entities, City Contract Manager review shall be related to transactions between Contractor and any Related-Party Entity pertaining to Contractor's performance under this Agreement.

8.4 Special Rate Review

A. **Eligible Items.** The Contractor is entitled to apply to the City for consideration of a special Rate review, or the City may initiate such a review, should one or more of the following events occur and should such occurrence(s) have a material effect totaling two percent (2%) or more annually on the total calculated annual costs for the then-current Rate Period. If one or more of the following events occur and should such occurrence(s) have a material effect less than two percent (2%) annually of the total calculated annual costs for the then-current Rate Period, such cost impact shall be considered at the time the annual Rate adjustment process is performed in accordance with Section 8.2, and Contractor may be compensated retroactively for such cost subject to City approval.

1. Documented significant changes in the cost to provide services required in this Agreement as a result of an agreed-upon, City-directed change in scope, as provided for under Section 4.3.

2. Provision of emergency services pursuant to Section 6.18.

3. Flood, earthquake, other acts of nature, war, civil insurrection, riots, acts of any government agency (including judicial action), or other similar catastrophic events that are beyond the control of and not the fault of the Contractor.

4. Change in Law, including, but not limited to, Changes in Law that result in regulatory, governmental, or other surcharge fees, after the Effective Date that: (1) were not reasonably known to the Contractor before the Effective Date, and (2) the Contractor substantiates. This shall include costs associated with SB 1383 under Section 5.17.8 above.

5. Per-Ton Disposal cost increases at the Approved Disposal Site above those reflected in the Disposal cost determined during the annual Rate adjustment process performed in accordance with Section 8.2.

6. Change in the value of Recyclable commodities.

B. **Ineligible Items.** A special Rate review may not be initiated for the following items and Contractor shall not be compensated for such items over the Term of the Agreement unless the City and Contractor agree to an adjustment during a cost-based adjustment process when determining Rates for Rate Periods Four and Eight.

1. Increases in the cost of Discarded Materials Collection, Transportation, Processing, or Disposal costs in excess of the increases provided through the annual adjustment mechanism described in Exhibits I and J unless cost increases are related to eligible items listed in Section 8.4.A above.

2. Increases in the cost of Discarded Materials Collection, Transportation, Processing, or Disposal costs that may be impacted by change in Approved Facilities operating conditions, unless such change is initiated by or at the direction of the City.

3. Decreases in Revenues from the sale of Recyclable Materials or Compostable Materials except as provided in Exhibits I and J.

4. Growth or decline in the number of Customers or their subscription levels; however, the Contractor shall be entitled to bill all Customers at the City-approved Rates and retain all Gross Rate Revenues (net fees due to City) collected from its Customers for Collection services provided under this Agreement.

5. Changes in the number of accounts related to Container sizes or frequency of Collection; however, the Contractor shall be entitled to bill all Customers at the City-approved Rates and retain all Gross Rate Revenues (net fees due to City) collected from Contractor's Customers for Collection services provided under this Agreement.

6. Change in the Tonnage or composition of Solid Waste, Recyclable Materials, or Compostable Materials with the exception that changes in Tonnage shall be reflected in calculated Disposal and Processing Costs in accordance with procedures in Exhibits I and J.

C. **Review of Costs.** If the Contractor or the City requests a special Rate review, the City Contract Manager shall have the right to review any or all financial and operating records of Contractor and Related-Party Entities.

D. **Submittal of Request.** If the Contractor is requesting a special Rate review, the Contractor must submit its request for a special review of Rates, and cost and operational data, in a form and manner specified by the City Contract Manager, at least six (6) months before the proposed effective date of any Rate adjustment. The City Contract Manager may waive the six-month submittal requirement if the reason for the special Rate review is a Change in Law that will become effective in less than a six (6) month period.

If City is requesting a special Rate review, the City Contract Manager shall notify the Contractor at least seven (7) months before the proposed effective date of any Rate adjustment. Upon such notification, Contractor shall, within thirty (30) calendar days, submit reasonable cost and operational data as requested by the City Contract Manager, in a form and manner specified by the City Contract Manager.

A request for special Rate review shall include a proposal on whether the Rate adjustment resulting from the special Rate review shall be an adjustment in addition to or in lieu of the annual Rate adjustment to be performed in accordance with Section 8.2.C above.

E. **Burden of Justification.** Contractor shall bear the burden of justifying to the City by substantial evidence any entitlement to current, as well as increased, Rates under this Section 8.4. If the City determines that the Contractor has not met its burden, the Contractor may request a meeting with City Contract Manager to produce additional evidence. Upon such request, the City Contract Manager shall permit said additional hearing. In the event the City denies Contractor's request, Contractor shall have the right to present its claim in a court of competent jurisdiction.

F. **Grant of Request.** Based on evidence the Contractor submits, the City Council may grant some, all, or none of the requested increase and approve adjusted Rates.

G. **Compensation.** If Contractor requests the special Rate review, Contractor shall bear all reasonable costs of both Parties for participating in such review up to a maximum of forty thousand dollars ($40,000) per Party and such costs shall not be reimbursed through Rates charged Customers. If a special Rate review occurs in response to a City-directed change in scope (pursuant to Section 8.4.A.1), or City-initiated changes in the amount of the Agreement Fee or other fees (pursuant to Article 7), the City shall be considered the Party requesting the special Rate review costs of the review may be reimbursed through the Rates.

8.5 Rates for Changes in Scope

In the event either the City or Contractor requests a change in scope in accordance with Section 4.3 of this Agreement, the Contractor shall furnish the City with projected operational and cost data for the change in scope to support any adjustment to Rates. For the purposes of analyzing cost impacts of changes in scope, the Contractor's profit shall be calculated using an operating ratio of 0.90 of actual reasonable and necessary costs net of Disposal expenses and City fees specified in Article 7. The City reserves the right to require that the Contractor supply any additional cost data or other information it may reasonably need to ascertain the appropriate Rate adjustment, if any, for the change in scope. The City shall review this operational and cost data, and the City Council shall approve Rates for the change in scope, if warranted.

The granting of any change in scope shall be contingent upon City's written approval and establishment of new Rates. The City shall approve Rate adjustments, in good faith, coincident with any adjustment made pursuant to this Section so that the change in scope and the corresponding Rates become effective on the same date.

8.6 Notice of Rate Adjustments

In adjusting Rates, the Contractor shall comply with the procedural requirements of Proposition 218, as may be requested by the City. Contractor will provide effected Customers with advance written notice of approved Rate changes, in the form of a bill insert, postcard, or other written notice approved by the City at least thirty (30) calendar days before the effective date of such changes unless the City provides written approval to waive this requirement.

8.7 Rates for Drop Box and Compactor Compostable Materials Services

In furtherance of the City's established Diversion goal of seventy-five percent (75%), and to promote compliance with the Alameda County Waste Management Authority Ordinance (2008-01) banning plant debris in unincorporated Alameda County landfills, the Contractor will set the Compostables Processing per ton rate charged to Drop Box and Compactor Customers equal to the Solid Waste Disposal rate charged to Drop Box and Compactor Customers as identified in Exhibit H.

In the event that Contractor's Gross Rate Revenue is decreased as a result of equalizing the per ton rate for Compostables Processing and Solid Waste Disposal, Contractor's Total Calculated Costs will be adjusted to fully compensate Contractor. This adjustment will be incorporated into the rate adjustment for the upcoming rate period. Contractor will be required to submit documentation, acceptable to the City, supporting the decrease in revenue, provided the total annual adjustment will not exceed $45,000.

8.8 Income-Based Program

At the Contractor's discretion, an Income-Based Program may be made available to qualifying households that participate in Pacific Gas and Electric Company's California Alternate Rates for Energy (CARE) program. It is the Contractor's responsibility to verify a household's participation in the CARE program at least every two (2) years.

This Program may be structured so that any size Residential Solid Waste Cart (except a 96-gallon Solid Waste Cart) could be chosen by the qualifying Single-Family Residential household, and offered for a price set equivalent to the least expensive, 20-gallon Container price.

Any cost increases or revenue reductions incurred as a result of implementing this Program are the responsibility of the Contractor, and will not be considered as part of the Annual Adjustment Process described in Section 8 and Exhibit I and J. Contractor will track participating households before and after subscription data, and any revenue adjustments resulting from subscriptions to the Program. Contractor

will provide this information to the City Contract Manager as part of the Annual Reports submission described in Section 6.4.

ARTICLE 9.
INDEMNITY, INSURANCE, BOND

9.1 Hazardous Substance Indemnification

Contractor shall indemnify, defend with counsel acceptable to the City (provided that such acceptance by City shall not be unreasonably withheld), protect and hold harmless the City, its officers, employees, volunteers, and agents (collectively, indemnitees) from and against all claims, damages (including but not limited to special, consequential, natural resources and punitive damages), injuries, costs, (including without limit any and all response, remediation and removal costs), losses, demands, debts, liens, liabilities, causes of action, suits, legal or administrative proceedings, interest, fines, charges, penalties, and expenses (including without limit attorneys' expert witness fees and costs incurred in connection with defending against any of the foregoing or in enforcing this indemnity), (collectively, "Damages") of any kind whatsoever paid, incurred or suffered by, or asserted against, indemnitees arising from or attributable to the acts or omissions of Contractor whether or not negligent or otherwise culpable, in connection with or related to the performance of this Agreement, including without limit damages arising from or attributable to any operations, repair, cleanup or detoxification, or other plan (regardless of whether undertaken due to governmental action) concerning any Hazardous Substance or Hazardous Waste, Collected under this Agreement. Notwithstanding the foregoing, however, Contractor shall not be required to indemnify the City for the costs for any claims arising from the Disposal of Solid Waste at the Approved Disposal Site, including, but not limited to, claims arising under the Comprehensive Environmental Response, Comprehensive and Liability Act (CERCLA) unless such Approved Disposal Site is at a facility owned and operated by Contractor or such claim is a direct result of Contractor's negligent actions. This indemnity afforded indemnitees, shall only be limited to exclude coverage for intentional wrongful acts and negligence of indemnitees, and as provided below. In the event Disposal occurs at a Disposal Site owned by the Contractor, Contractor shall be required to indemnify the City for the costs for any claims arising from the Disposal of Solid Waste at the Disposal Site, including, but not limited to, claims arising under the Comprehensive Environmental Response, Comprehensive and Liability Act (CERCLA). The forgoing indemnity, as it relates to the Collection of Solid Waste and/or the Disposal of Solid Waste at Contractor's Disposal Site, is intended to operate as an Agreement pursuant to §107(e) of the Comprehensive Environmental Response, Compensation and Liability Act, CERCLA, 42 USC. §9607(e) and California Health and Safety Code §25364, to defend, protect, hold harmless, and indemnify City from liability.

This provision is in addition to all other provisions in this Agreement and is intended to survive the expiration or earlier termination of this Agreement. Nothing in this paragraph shall prevent City from seeking indemnification or contribution from Persons or entities other than indemnitees, for any liabilities incurred by City, or the indemnitees.

9.2 AB 939 Indemnification

In addition to all other relief provided Contractor and City under this Agreement, and except as provided under Public Resources Code Section 40059.1, Contractor agrees to defend, indemnify, and hold harmless, the City, its officers, employees, volunteers, and agents from and against all fines and/or penalties imposed by the Department of Resources Recycling and Recovery (CalRecycle) for operations during the Term of this Agreement in the event the source reduction and Recycling goals or any other requirement of the Act are not met by the Contractor with respect to the waste stream Collected by Contractor under this Agreement and such failure is due to the failure of Contractor to meet its obligations under this Agreement.

9.3 Propositions 218 and 26

Should there be a Change in Law or a new judicial interpretation of Applicable Law, including, but not limited to, Article XIII A, C and D of the California Constitution (Commonly Propositions 26 and 218), which impacts the City's ability to approve Rates for the Collection services provided under this Agreement, Contractor agrees to meet and confer with City Attorney to discuss the impact of such Change in Law on either Party's ability to perform under this Agreement.

The City shall not be in default of this Agreement, if it is determined by a court of competent jurisdiction, that it lacks the authority to approve Rates and/or increase Rates for charges related to providing service, pursuant to this Agreement. Should a court of competent jurisdiction determine that the City lacks authority to set and/ approve Rates for charges related to Agreement Fee, other City fees, governmental fees and charges then Contractor shall reduce the Rates it charges Customers a corresponding amount, providing said fees, Rates and/or charges disallowed by the court are not related to the cost of providing service hereunder and had been incorporated in the Rates charged by Contractor to its Customers.

Nothing herein is intended to imply that California Constitution, Articles XIIIA, XIIIC or XIIID, apply to the setting of Rates for the services provided under this Agreement; rather this Section is provided merely to allocate risk of loss as between the Parties.

The Proposition 26 and 218 indemnifications shall not extend to indemnification related to City fees described in Article 7 of the Agreement or any City fees established in accordance with Section 7.9.

9.4 Measure D Indemnification

Contractor shall indemnify, defend and hold harmless City, its officers, employees, agents and volunteers, from and against any revenues withheld by the Alameda County Source Reduction and Recycling Board in the event the source reduction and Recycling goals or any other requirement of the Measure are not met by the Contractor with respect to the Recycling/source reduction programs under this Agreement and such failure is due to the failure of Contractor to meet its obligations under this Agreement unless Contractor can demonstrate to the satisfaction of the City that such failure is beyond Contractor's ability to control or effect, or due to Contractor delays in providing information that prevents Contractor or City from submitting reports required by Measure D in a timely manner.

9.5 Insurance

9.5.1 Minimum Scope of Insurance

Coverage shall be at least as broad as:

A. Insurance Services Office form number GL 0002 covering Comprehensive General Liability and Insurance Services Office form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001).

B. Insurance Services Office form number CA 0001 covering Automobile Liability, code 1 "any auto" and endorsement CA 0025.

C. Workers' Compensation insurance as required by the Labor Code of the State of California and Employers Liability insurance.

D. Employee Blanket Fidelity Bond.

9.5.2 Minimum Limits of Insurance

Contractor shall maintain limits no less than:

A. Comprehensive General Liability: $10,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.

B. Automobile Liability: $10,000,000 combined single limit per accident for bodily injury and property damage.

C. Workers' Compensation and Employers Liability: Workers' compensation limits as required by the Labor Code of the State of California and Employers Liability limits of $1,000,000 per accident.

D. Employee Blanket Fidelity Bond in the amount of $500,000 per employee, covering dishonesty, forgery, alteration, theft, disappearance, destruction (inside or outside).

E. Environmental Impairment Liability: Ten Million Dollars ($10,000,000) covering liability arising from the release of pollution at the Approved Disposal Facility. The Environmental Impairment Liability policy shall contain the same endorsements as required for Comprehensive General Liability.

9.5.3 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City Attorney, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials and employees; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

9.5.4 Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

A. **General Liability and Automobile Liability Coverages**

1. The City, its officials, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees or volunteers. The automobile liability is endorsed to contain MCA-90 coverage.

2. The Contractor's insurance coverage shall be primary insurance as respects the City, its officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officials, employees or volunteers shall be in excess of the Contractor's insurance and shall not contribute with it.

3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees or volunteers.

4. Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

B. **Workers' Compensation and Employers Liability Coverage**. The insurer shall agree to waive all rights of subrogation against the City, its officers, employees and volunteers for losses arising from work performed by the Contractor for the City.

C. **All Coverages**. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to the City's Risk Manager with a copy to both the City Contract Manager and the City Attorney.

9.5.5 Acceptability of Insurers

The insurance policies required by this Section shall be issued by an insurance company or companies authorized to do business in the State of California and with a rating in the most recent edition of Best's Insurance Reports of size category VII or larger and a rating classification of A or better.

9.5.6 Verification of Coverage

Contractor shall furnish Contractor's insurance agent a copy of these specifications, and direct the agent to provide the City's Risk Manager with a copy to both the City Contract Manager and City Attorney with certificates of insurance and with original endorsements affecting coverage required by this clause. Issuance of documentation indicates the Contractor's insurance complies with these provisions. The certificates and endorsements for each insurance policy are to be signed by a Person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the City Attorney before work commences. The City Attorney reserves the right to require complete, certified copies of all required insurance policies, at any time.

9.5.7 Required Endorsements

A. The Workers' Compensation policy shall contain an endorsement in substantially the following form:

"Thirty (30) calendar days' prior written notice shall be given to the City of Livermore in the event of cancellation, reduction in coverage, or non-renewal of this policy. Such notice shall be sent to:

Risk Manager

City of Livermore
Administration Building
1052 South Livermore Avenue
Livermore, CA 94550

B. The Commercial General Liability Business and Automobile Liability policies shall contain endorsements in substantially the following form:

1. "Thirty (30) calendar days' prior written notice shall be given to the City of Livermore in the event of cancellation, reduction in coverage, or non-renewal of this policy. Such notice shall be sent to:

Risk Manager
City of Livermore
Administration Building
1052 South Livermore Avenue
Livermore, CA 94550"

2. "The City of Livermore, its officers, employees, and agents are additional insureds on this policy." The City requires form CG2010 1185.

3. "This policy shall be considered primary insurance as respects any other valid and collectible insurance maintained by the City of Livermore, including any self-insured retention or program of self-insurance, and any other such insurance shall be considered excess insurance only."

4. "Inclusion of the City of Livermore as an insured shall not affect the City's rights as respects any claim, demand, suit or judgment brought or recovered against the Contractor. This policy shall protect Contractor and the City in the same manner as though a separate policy had been issued to each, but this shall not operate to increase the Contractor's liability as set forth in the policy beyond the amount shown or to which the Contractor would have been liable if only one party had been named as an insured."

9.5.8 Delivery of Proof of Coverage

Simultaneously with the execution of this Agreement, Contractor shall furnish the City's Risk Manager, with a copy to both the City Contract Manager and the City Attorney, certificates of each policy of insurance required hereunder, in form and substance satisfactory to City. Such certificates shall show the type and amount of coverage, effective dates and dates of expiration of policies and shall have all required endorsements. If the City's Risk Manager requests copies of each policy, together with all endorsements, shall also be promptly delivered to City's Risk Manager, with a copy to both the City Contract Manager and the City Attorney.

Renewal certificates will be furnished periodically to the City's Risk Manager with a copy to both the City Contract Manager and the City Attorney to demonstrate maintenance of the required coverages throughout the Term. Renewal certificates will be provided by using the following website: https://www.pinsadvantage.com/ or such other system that the City may use during the term of this Agreement.

9.5.9 Other Insurance Requirements

A. In the event any services are delegated to a Subcontractor, the Contractor shall require such Subcontractor to provide statutory workers' compensation insurance and employer's liability insurance for all of the Subcontractor's employees engaged in the work in accordance with Sections 9.5.2.C and 9.5.4.B. The liability insurance required by Section 9.5.2.A shall cover all Subcontractors or the Subcontractor must furnish evidence of insurance provided by it meeting all of the requirements of this Section 9.5.

B. The Contractor shall comply with all requirements of the insurers issuing policies. The carrying of insurance shall not relieve Contractor from any obligation under this Agreement. If any claim exceeding the amount of any deductibles or self-insured reserves is made by any third Person against the Contractor or any Subcontractor on account of any occurrence related to this Agreement, the Contractor shall promptly report the facts in writing to the insurance carrier and to the City's Risk Manager, with a copy to both the City Contract Manager and the City Attorney.

C. If Contractor fails to procure and maintain any insurance required by this Agreement, the City may take out and maintain, at the Contractor's expense, such insurance as it may deem proper and deduct the cost thereof from any monies due to the Contractor.

D. The Commercial General and Automobile Liability insurance required by Sections 9.5.2 and 9.5.4.A shall be written on an "occurrence", rather than a "claims made" basis, if such coverage is obtainable. If it is not obtainable, Contractor must arrange for a thirty-six (36) month "tail coverage" to protect the City from claims filed after the expiration or termination of this Agreement relating to incidents which occurred prior to such expiration or termination.

9.6 Performance Bond

Within five (5) Business Days of the City's notification to Contractor that the City has executed this Agreement, Contractor shall file with the City a bond, payable to the City, securing the Contractor's performance of its obligations under this Agreement and such bond shall be renewed annually if necessary so that the performance bond is maintained at all times during the Term. The principal sum of the bond shall be Three Million Dollars ($3,000,000) and shall be adjusted every three (3) years, commencing with Rate Period Three, to equal three (3) months of the annual Gross Revenue. The bond shall be executed as surety by a corporation authorized to issue surety bonds in the State of California that has a rating of A or better in the most recent edition of Best's Key Rating Guide, and that has a record of service and financial condition satisfactory to the City. The bond shall be in the form attached as Exhibit L.

ARTICLE 10.
CITY'S RIGHT TO PERFORM SERVICE

10.1 General

In the event that the Contractor, for any reason whatsoever, fails, refuses or is unable to Collect, Transport or Dispose of any or all Solid Waste and/or Collect, Transport and Process Recyclable Materials or Compostable Materials which it is required by this Agreement to Collect and Transport, at the time and in the manner provided in this Agreement, for a period of more than forty-eight (48) hours, and if, as a result thereof, Solid Waste, Recyclable Materials and/or Compostable Materials should accumulate in the City to such an extent, in such a manner, or for such a time that the City Contract Manager should find that such accumulation endangers or menaces the public health, safety or welfare, then the City shall have the right, but not the obligation, upon twenty-four (24) hour prior written notice to Contractor during the period of such emergency as determined by City Contract Manager, (1) to perform, or cause to be performed, such services itself with its own or other personnel without liability to Contractor; and/or (2) to take possession of any or all of Contractor's equipment and other property used or useful in the Collection, Transporting, Processing and Disposing of Solid Waste, Recyclable Materials or Compostable Materials, and to use such property to Collect, Transport, Process, and Dispose of any Solid Waste, Recyclable Materials, or Compostable Materials generated within the City which Contractor would otherwise be obligated to Collect, Transport, Process, and Dispose of pursuant to this Agreement.

Notice of the Contractor's failure, refusal, or neglect to Collect, Transport, Process, and Dispose of Solid Waste, Recyclable Materials, or Compostable Materials may be given verbally by telephone to the Contractor at its principal office and shall be effective immediately. Written confirmation of such verbal notification shall be sent to Contractor within twenty-four (24) hours of the verbal notification.

Contractor further agrees that in such event:

A. It will fully cooperate with City to affect the transfer of possession of property to the City for City's use.

B. It will, if City Contract Manager so requests, keep in good repair and condition all property that the City has taken possession, provide all motor vehicles with fuel, oil and other service, and provide such other services as may be necessary to maintain said property in operational condition.

C. Subject to provisions of any labor agreements then in effect, City may immediately engage all or any personnel necessary or useful for the Collecting, Transporting, Processing, and Disposing of Solid Waste, Recyclable Materials, or Compostable Materials including, if City so desires, employees previously or then employed by Contractor, Contractor further agrees, if City so requests, to furnish City the services of any or all management or office personnel employed by Contractor whose services are necessary or useful for Solid Waste, Recyclable Materials, or Compostable Materials Collection, Transportation, Processing, and Disposal operations and for the Billing and collection of fees for these services.

The City agrees that it assumes complete responsibility for the proper and normal use of such equipment and facilities while in its possession.

If the interruption or discontinuance in service is caused by any of the reasons listed in Section 11.7, the City shall pay to Contractor the reasonable rental value of the equipment and facilities, possession of which is taken by the City, for the period of the City's possession, if any, which extends beyond the period of time for which Contractor has rendered bills in advance of service, for the class of service involved.

Except as otherwise expressly provided in the previous paragraph, the City's exercise of its rights under this Article: (1) does not constitute a taking of private property for which compensation must be paid; (2) will not create any liability on the part of City to Contractor; and (3) does not exempt Contractor from the indemnity provisions of Article 9, which are meant to extend to circumstances arising under this Section, provided that Contractor is not required to indemnify City against claims and damages arising from the sole negligence of City officers, employees and agents in the operation of Collection vehicles during the time the City has taken possession of such vehicles.

10.2 Duration of City's Possession

City has no obligation to maintain possession of Contractor's property and/or continue its use in Collecting, Transporting, Processing, and Disposing Solid Waste, Recyclable Materials, or Compostable Materials for any period of time and may, at any time, in its sole discretion, relinquish possession to the Contractor.

The City's right to retain temporary possession of Contractor's property, and to provide Solid Waste, Recyclable Materials, or Compostable Materials Collection services, shall continue until Contractor can demonstrate to the City's satisfaction that it is ready, willing and able to resume such services or for one hundred eighty (180) calendar days, whichever occurs first.

10.3 Condemnation

The City fully reserves the rights to acquire the Contractor's property utilized in the performance of this Agreement, by purchase or through the exercise of the right of eminent domain.

ARTICLE 11.
DEFAULT AND REMEDIES

11.1 Events of Default

All provisions of the Agreement are considered material. Each of the following shall constitute an event of default.

A. **Fraud or Deceit**. Contractor practices, or attempts to practice, any fraud or deceit upon the City.

B. **Insolvency or Bankruptcy**. Contractor becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Contractor in a bankruptcy proceeding.

C. **Failure to Maintain Coverage**. Contractor fails to provide or maintain in full force and effect the Workers' Compensation, liability, or indemnification coverage as required by this Agreement.

D. **Violations of Regulation**. Contractor violates any orders or filings of any regulatory body having authority over Contractor relative to this Agreement, provided that Contractor may contest any such orders or filings by appropriate proceedings conducted in good faith, in which case no breach or default of this Agreement shall be deemed to have occurred.

E. **Violations of Applicable Law**. Contractor violates Applicable Law relative to this Agreement.

F. **Failure to Perform Collection, Transportation, Processing, or Composting Services**. Contractor ceases to provide Collection, Transportation, Processing, or Composting services as required under this Agreement for a period of two (2) consecutive calendar days or more, for any reason within the control of Contractor.

G. **Failure to Pay or Report**. Contractor fails to make any payments to City required under this Agreement including payment of City fees or Liquidated Damages and/or refuses to provide City Contract Manager with required information, reports, and/or records in a timely manner as provided for in the Agreement.

H. **Acts or Omissions**. Any other act or omission by Contractor which violates the terms, conditions, or requirements of this Agreement, the Act, as it may be amended from time to time, or any law, statute, ordinance, order, directive, rule, or regulation issued there under and which is not corrected or remedied within the time set in the written notice of the violation or, if Contractor cannot reasonably correct or remedy the breach within the time set forth in such notice, if Contractor should fail to commence to correct or remedy such violation within the time set forth in such notice and diligently effect such correction or remedy thereafter.

I. **False, Misleading, or Inaccurate Statements**. Any representation or disclosure made to the City by Contractor in connection with or as an inducement to entering into this Agreement, or any future amendment to this Agreement, which proves to be false or misleading in any material respect as of the time such representation or disclosure is made, whether or not any such representation or disclosure appears as part of this Agreement; and, any Contractor-provided report containing a misstatement, misrepresentation, data manipulation, or an omission of fact or content explicitly defined by the Agreement, excepting non-numerical typographical and grammatical errors.

J. **Seizure or Attachment**. There is a seizure of, attachment of, or levy on, some or all of Contractor's operating equipment, including without limits its equipment, maintenance or office facilities, or any part thereof.

K. **Suspension or Termination of Service**. There is any termination or suspension of the transaction of business by Contractor related to this Agreement, including without limit, due to labor unrest including strike, work stoppage or slowdown, sick-out, picketing, or other concerted job action lasting more than two (2) calendar days.

L. **Criminal Activity**. Contractor, its officers, managers, or employees are found guilty of criminal activity of a type described in Section 12.16 below related directly or indirectly to performance of this Agreement or any other Agreement held with the City.

M. **Assignment without Approval**. Contractor transfers or assigns this Agreement without the express written approval of the City unless the assignment is permitted without City approval pursuant to Section 12.5.

N. **Failure to Provide Proposal or Implement Change in Service**. Contractor fails to provide a proposal for new services or changes to services or fails to implement a change in service as requested by the City as specified in Section 4.3.

O. **Failure to Perform Any Obligation**. Contractor fails to perform any obligation established under this Agreement.

City shall provide Contractor written notice of default within twenty-four (24) hours of the occurrence of default or within twenty-four (24) hours of the City's first knowledge of the Contractor's default, whichever occurs first.

11.2 Contractor Rights to Remedy Default

Contractor shall be given ten (10) calendar days from written notification by City to cure any default which, in the City's sole opinion, creates a potential public health and safety threat.

Contractor shall be given ten (10) calendar days from written notification by City Contract Manager to cure any default arising under subsections C, E, F, I, J and K in Section 11.1 provided, however, that the City shall not be obligated to provide Contractor with a notice and cure opportunity if the Contractor has committed the same or similar breach/default within a twenty-four (24) month period.

Contractor shall be given thirty (30) calendar days from written notification by City Contract Manager to cure any other default (which is not required to be cured within ten (10) calendar days); however, that the City shall not be obligated to provide Contractor with a notice and cure opportunity if the Contractor has committed the same or similar breach/default within a twenty-four (24) month period.

11.3 City's Remedies in the Event of Default

Upon Contractor's default, City has the following remedies in the event of Contractor default:

A. **Termination.** In the event that Contractor should default and subject to the right of the Contractor to cure, in the performance of any provisions of this contract, and the default is not cured for any default within in ten (10) calendar days if the default creates a potential public health and safety threat or arises under Section 11.1 C, E, F, I, J, or K, or otherwise thirty (30) calendar days after receipt of written notice of default from the City, then the City may, at its option, terminate this Agreement and/or hold a hearing at its next City Council meeting to determine whether this Agreement should be terminated. In the event City decides to terminate this Agreement, the City Contract Manager shall serve twenty (20) calendar days' written notice of its intention to terminate upon Contractor. In the event City exercises its right to terminate this Agreement, the City may, at its option, upon such termination, either directly undertake performance of the services or arrange with other Persons to perform the services with or without a written agreement. This right of termination is in addition to any other rights of City upon a failure of Contractor to perform its obligations under this Agreement.

Upon termination, the City shall have the right to use equipment and Facilities pursuant to Section 11.4.

Contractor shall not be entitled to any further revenues from Collection operations authorized hereunder from and after the effective date of termination.

B. **Suspension of Contractor's Obligation**. City may suspend Contractor's performance of its obligations if Contractor fails to cure default in the time frame specified in Section 11.2 until such time the Contractor can provide assurance of performance in accordance with Section 11.8. During the period of suspension, City shall have the right to use equipment and Facilities pursuant to Section 11.4.

C. **Waiver of Default**. City may waive any event of default or may waive Contractor's requirement to cure a default event if City determines that such waiver would be in the best interest of the City. City's waive of an event of default is not a waiver of future events of default that may have the same or similar conditions.

D. **Liquidated Damages**. City Contract Manager may assess Liquidated Damages for Contractor's failure to meet specific performance standards pursuant to Section 11.6 and Exhibit F.

E. **Other Available Remedies**. City's election of one or remedies described herein shall not limit the City from any and all other remedies at law and in equity including injunctive relief, etc.

11.4 Possession of Property upon Termination or Suspension

In the event of termination or suspension for default, the City shall have the right to take possession of any and all of Contractor's equipment and other property used or useful in the Collection, Transportation, Processing, and Disposal of Solid Waste, Recyclable Materials or Compostable Materials and the Billing and collection of fees for these services and to use such property. The City shall have the right to retain the possession of such property in accordance with Article 10. If the City retains possession thereof after the period of time for which Contractor has already been paid by means of bills issued in advance of providing service for the class of service involved, the Contractor shall be entitled to the reasonable rental value of such property (which shall be offset against any damages due the City for the Contractor's default).

Contractor shall furnish the City with immediate access to all of its business records related to its Customers and Billing of accounts for Collection services.

11.5 City's Remedies Cumulative; Specific Performance

The City's right to terminate the Agreement under Section 11.3 and to take possession of the Contractor's properties under Section 11.4 are not exclusive, and the City's termination of the Agreement shall not constitute an election of remedies. Instead, they shall be in addition to any and all other legal and equitable rights and remedies which the City may have.

By virtue of the nature of this Agreement, the urgency of timely, continuous and high quality service, the lead time required to effect alternative service, and the rights granted by City to the Contractor, the

remedy of damages for a breach hereof by Contractor is inadequate and City shall be entitled to injunctive relief.

11.6 Liquidated Damages

11.6.1 General

The Parties agree that as of the time of the execution of this Agreement, it is impractical, if not impossible, to reasonably ascertain the extent of damages which shall be incurred by City as a result of a breach by Contractor of its obligations under this Agreement. The factors relating to the impracticability of ascertaining damages include, but are not limited to, the fact that: (i) substantial damage results to members of the public who are denied services or denied quality or reliable service; (ii) such breaches cause inconvenience, anxiety, frustration, and deprivation of the benefits of the Agreement to individual members of the general public for whose benefit this Agreement exists, in subjective ways and in varying degrees of intensity which are incapable of measurement in precise monetary terms; (iii) that exclusive services might be available at substantially lower costs than alternative services and the monetary loss resulting from denial of services or denial of quality or reliable services is impossible to calculate in precise monetary terms; and, (iv) the termination of this Agreement for such breaches, and other remedies are, at best, a means of future correction and not remedies which make the public whole for past breaches.

11.6.2 Service Performance Standards; Liquidated Damages for Failure to Meet Standards

The Parties further acknowledge that consistent, reliable Solid Waste, Recyclable Materials, and Compostable Materials Collection service is of utmost importance to City and that City has considered and relied on Contractor's representations as to its quality of service commitment in awarding the Agreement to it. The Parties further recognize that some quantified standards of performance are necessary and appropriate to ensure consistent and reliable service and performance. The Parties further recognize that if Contractor fails to achieve the performance standards, or fails to submit required documents in a timely manner, City and its residents and businesses will suffer damages and that it is and will be impractical and extremely difficult to ascertain and determine the exact amount of damages which City will suffer. Therefore, without prejudice to City's right to treat such non-performance as an event of default under this Section 11.6.2, the Parties agree that the following Liquidated Damage amounts represent a reasonable estimate of the amount of such damages considering all of the circumstances existing on the date of this Agreement, including the relationship of the sums to the range of harm to City that reasonably could be anticipated and the anticipation that proof of actual damages would be costly or impractical.

Contractor agrees to pay (as Liquidated Damages and not as a penalty) the amounts set forth in the Schedule of Performance Adjustments, Exhibit F.

City may determine the occurrence of events giving rise to Liquidated Damages through the observation of its own employees or representative or investigation of Customer Complaints.

Liquidated Damages will only be assessed after Contractor has been given the opportunity but failed to rectify the damages as described in this Agreement. Prior to assessing Liquidated Damages, City Contract Manager shall give Contractor notice of its intention to do so. The notice will include a brief description of the incident(s)/non-performance. City Contract Manager may review (and make copies at its own expense) all information in the possession of Contractor relating to incident(s)/non-performance. City

Contract Manager may, within ten (10) calendar days after issuing the notice, request a meeting with Contractor. City Contract Manager may present evidence of non-performance in writing and through testimony of its employees and others relevant to the incident(s)/non-performance. City Contract Manager will provide Contractor with a written explanation of its determination on each incident(s)/non-performance prior to authorizing the assessment of Liquidated Damages. Within ten (10) calendar days of receipt of such notice of intention to assess Liquidated Damages, or within twenty (20) calendar days if the intended assessment totals over fifty thousand dollars ($50,000), Contractor may notify City Contract Manager of its objection to the imposition of Liquidated Damages and its desire to present potentially exculpatory information. Upon such notice, the City Contract Manager and the Contractor's representative shall each be afforded an opportunity to present information to the City Manager. The City Manager shall consider the information presented and notify Contractor in writing of their finding regarding the alleged performance deficiency. The City Manager's decision shall be final, and Contractor shall not have any further administrative remedies.

11.6.3 Amount

City Contract Manager may assess Liquidated Damages for each calendar day or event, as appropriate, that Contractor is determined to be liable in accordance with this Agreement in the amounts specified in Exhibit F. In the event the amount of Liquidated Damages for any three (3) month period exceeds the thresholds established in Section 5.18.1, the City shall have the right to request replacement of the Contractor's general manager as described in Section 5.18.1.

11.6.4 Timing of Payment

Contractor shall pay any Liquidated Damages assessed by City within ten (10) calendar days after they are assessed. If they are not paid within the ten (10) day period, City may proceed against the performance bond required by the Agreement, request replacement of Contractor's general manager, order the termination of the rights or "franchise" granted by this Agreement, or all of the above.

11.7 Excuse from Performance

The Parties shall be excused from performing their respective obligations hereunder in the event they are prevented from so performing by reason of floods, earthquakes, other "acts of nature", war, civil insurrection, riots, acts of any government (including judicial action), and other similar catastrophic events which are beyond the control of and not the fault of the Party claiming excuse from performance hereunder. Labor unrest, including but not limited to strike, work stoppage or slowdown, sick-out, picketing, or other concerted job action conducted by Contractor's employees or directed at Contractor is not an excuse from performance and Contractor shall be obligated to continue to provide service notwithstanding the occurrence of any or all of such events. In the case of labor unrest or job action directed at a third party over whom Contractor has no control, the inability of Contractor to provide Solid Waste, Recyclable Materials, or Compostable Materials Collection services due to the unwillingness or failure of the third party to provide reasonable assurance of the safety of Contractor's employees while providing Solid Waste, Recyclable Materials, or Compostable Materials Collection services or to make reasonable accommodations with respect to Container placement and point of Delivery, time of Collection or other operating circumstances to minimize any confrontation with pickets or the number of Persons necessary to make Collections shall, to that limited extent, excuse performance and provided further that the foregoing excuse shall be conditioned on Contractor's cooperation in making Collection at different times and in different locations.

The Party claiming excuse from performance shall, within two (2) calendar days after such Party has notice of such cause, give the other Party notice of the facts constituting such cause and asserting its claim to excuse under this Section.

In the event that either Party validly exercises its rights under this Section, the Parties hereby waive any claim against each other for any damages sustained thereby.

The partial or complete interruption or discontinuance of Contractor's services caused by one or more of the events described in this Article shall not constitute a default by Contractor under this Agreement. Notwithstanding the foregoing, however, (1) the existence of an excuse from performance will not affect the City's rights under Article 10; and (2) if Contractor is excused from performing its obligations hereunder for any of the causes listed in this Section for a period of thirty (30) calendar days or more, other than as the result of third party labor disputes where service cannot be provided for reasons described earlier in this Section, the City shall nevertheless have the right, in its sole discretion, to terminate this Agreement by giving ten (10) calendar days' notice, in which case the provisions of Section 11.3 shall apply.

11.8 Right to Demand Assurances of Performance

If Contractor (1) is the subject of any labor unrest including work stoppage or slowdown, sick-out, picketing or other concerted job action; (2) appears in the reasonable judgment of City to be unable to regularly pay its bills as they become due; or (3) is the subject of a civil or criminal judgment or order entered by a federal, State, regional or local agency for violation of an environmental law, and the City Contract Manager believes in good faith that Contractor's ability to perform under the Agreement has thereby been placed in substantial jeopardy, the City may, at its option and in addition to all other remedies it may have, demand from Contractor reasonable assurances of timely and proper performance of this Agreement, in such form and substance as the City Contract Manager believes in good faith is reasonably necessary in the circumstances to evidence continued ability to perform under the Agreement. If Contractor fails or refuses to provide satisfactory assurances of timely and proper performance in the form and by the date required by City, such failure or refusal shall be an event of default for purposes of Section 11.1.

ARTICLE 12.
OTHER AGREEMENTS OF THE PARTIES

12.1 Relationship of Parties

The Parties intend that Contractor shall perform the services required by this Agreement as an independent Contractor engaged by City and not as an officer or employee of the City nor as a partner of or joint venture with the City. No employee or agent of Contractor shall be or shall be deemed to be an employee or agent of the City. Except as expressly provided herein, Contractor shall have the exclusive control over the manner and means of conducting the Solid Waste, Recyclable Materials, and Compostable Materials Collection, Transportation, Processing and Disposal services performed under this Agreement, and all Persons performing such services. Contractor shall be solely responsible for the acts

and omissions of its officers, employees, Subcontractors and agents. Neither Contractor nor its officers, employees, Subcontractors and agents shall obtain any rights to retirement benefits, workers' compensation benefits, or any other benefits which accrue to City employees by virtue of their employment with the City.

12.2 Compliance with Law

In providing the services required under this Agreement, Contractor shall at all times, at its sole cost, comply with all Applicable Laws, permits and licenses of the United States, the State of California and the City and with all applicable regulations promulgated by federal, State, regional or local administrative and regulatory agencies, now in force and as they may be enacted, issued or amended during the Term.

12.3 Governing Law

This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California.

12.4 Jurisdiction

Any lawsuits between the Parties arising out of this Agreement shall be brought and concluded in the courts of Alameda County in the State of California, which shall have exclusive jurisdiction over such lawsuits.

With respect to venue, the Parties agree that this Agreement is made in and will be performed in Alameda County.

12.5 Assignment

Neither Party shall assign its rights nor delegate or otherwise transfer its obligations under this Agreement to any other Person without the prior written consent of the other Party. Any such assignment made without the consent of the other Party shall be void and the attempted assignment shall constitute a material breach of this Agreement.

For purposes of this Section, the term "assignment" shall be given the broadest possible interpretation, and shall include, but not be limited to: (i) a sale, exchange or other transfer of substantially all of Contractor's local, regional, and/or corporate assets dedicated to service under this Agreement to a third party; (ii) a sale, exchange or other transfer of outstanding common stock of Contractor to a third party provided said sale, exchange or the transfer of outstanding common stock of Contractor (defined as a change in ownership of more than ten (10) percent of the outstanding common stock from the ownership at the time the Agreement was entered); (iii) any dissolution, reorganization, consolidation, merger, re-capitalization, stock issuance or re-issuance, voting trust, pooling agreement, escrow arrangement, liquidation or other transaction which results in a Change of Control; (iv) divestiture of an Affiliate (e.g., trucking company, materials recovery facility, Transfer Station, etc.,) used by Contractor to fulfill its

obligations under this Agreement, unless Contractor provides City a contract with such Affiliate for such services on the same terms and conditions the City received prior to the divestiture, and otherwise acceptable to the City, with the new ownership of such an Affiliate; (v) any assignment by operation of law, including those resulting from mergers or acquisitions by or of Contractor, insolvency or bankruptcy, making assignment for the benefit of creditors, writ of attachment for an execution being levied against this Agreement, appointment of a receiver taking possession of Contractor's property, or transfer occurring in the event of a probate proceeding; and (v) any combination of the foregoing (whether or not in related or contemporaneous transactions) which results in a Change of Control.

Notwithstanding the foregoing, transfers of outstanding shares of Contractor's common stock to existing shareholders, family members or family trusts will not be counted in determining a Change of Control and will not constitute an assignment for purposes of this Section 12.5, unless such transfer results in a change in the existing concentration of ownership between the Arata Group (20%), the Pellegrini Group (40%), and the Scavenger Group (40%).

Contractor acknowledges that this Agreement involves rendering a vital service to City's residents and businesses, and that City has selected Contractor to perform the services specified herein based on: (i) Contractor's experience, skill, and reputation for conducting its Recyclable Materials, Organic Materials, and Solid Waste management operations in a safe, effective, and responsible fashion, at all times in keeping with Applicable Law, , regulations, and best Solid Waste and Diversion management and business practices; and, (ii) Contractor's financial resources on a local, regional, and/or corporate level to maintain the required equipment and to support its indemnity obligations to City under this Agreement. City has relied on each of these factors, among others, in choosing Contractor to perform the services to be rendered by Contractor under this Agreement.

12.5.1 Requirements of the Contractor

Contractor shall not enter into negotiations to assign its rights, or delegate, subcontract or otherwise transfer any of Contractor's obligations under this Agreement (collectively referred to as an "assignment") to any other Person for a period of three (3) years from the Commencement Date of this Agreement.

After such three (3) year period Contractor shall not assign its rights, nor delegate, subcontract or otherwise transfer any of Contractor's obligations under this Agreement to any other Person without the prior written consent of the City Council. Any such assignment made without the consent of the City Council shall be void and the attempted assignment shall constitute a material breach of this Agreement.

If Contractor requests City Council's consideration of and consent to an assignment, City Council may deny or approve such request in its sole discretion. Any request for an assignment shall be made in a manner to be prescribed by the City Contract Manager or their designee, and no request by Contractor for consent to an assignment need be considered by City unless and until Contractor has met (or with respect to matters that would only occur upon completion of the assignment if approved, made reasonable assurances that it will meet) the following requirements. The City may, in its sole discretion waive one (1) or more of these requirements.

A. Contractor shall pay City its reasonable expenses for attorney's fees and investigation costs necessary to investigate the suitability of any proposed assignee, and to review and finalize any documentation required as a condition for approving any such assignment. An advance payment of one hundred thousand dollars ($100,000) towards expenses shall be paid to City prior to City consideration of any assignment request and Contractor shall be responsible for paying all costs incurred by City in

considering a request for assignment, including those in excess of the aforesaid deposit amount, regardless of whether City consents to the assignment.

B. Contractor shall pay the City a transfer assignment right fee equal to 1% of Gross Revenues for the most recently completed fiscal year. This payment shall be upon final closing of the assignment but if paid and the assignment shall not be completed, it shall be refunded to the Contractor. If there shall be an escrow-type arrangement with an escrow agent, financial institution or other third party in connection with the assignment and the documentation thereof and payment of the purchase price to Contractor in consideration of the assignment by the assignee, then a payment of this amount by Contractor to the escrow agent or institution who is instructed to pay it over to the City upon closing of the assignment, then such payment shall be considered as compliant with this subsection.

C. Contractor shall furnish City with audited financial statements of the proposed assignee's operations for the immediately preceding three (3) operating years.

D. Contractor shall furnish City with proof satisfactory to City: (i) that the proposed assignee has at least ten (10) years of Solid Waste, Recyclable Materials, and Organic Materials management experience on a scale equal to or exceeding the scale of operations conducted by Contractor under this Agreement; (ii) that in the last five (5) years, the proposed assignee has not suffered any significant citations or other censure from any federal, State or local agency having jurisdiction over its Solid Waste, Recyclable Materials, and Organic Materials management operations due to any significant failure to comply with State, federal or local Applicable Law and that the assignee has provided City with a complete list of all citations and censures; (iii) that the proposed assignee has at all times conducted its operations in an environmentally safe and conscientious fashion; (iv) that the proposed assignee conducts its Solid Waste, Recyclable Materials, and Organic Materials management practices in accordance with sound management practices in full compliance with all federal, State and local laws regulating the handling of Solid Waste, Recyclable Materials, and Organic Materials including Hazardous Substances, and (v) that the proposed assignee's financial resources are sufficient to ensure its ability to meet all of Contractor's obligations under this Agreement in a timely and effective manner.

E. Contractor shall provide the City with any and all additional information, records, and/or documentation which, in the City Contract Manager's sole determination, would facilitate the review of the proposed assignment.

Under no circumstances shall City be obliged to consider any proposed assignment if Contractor is in default at any time during the period of consideration. If, in the City Contract Manager 's sole discretion, there is any doubt regarding the compliance of the Contractor with the Agreement, City may require an audit of the Contractor's compliance and the costs of such audit shall be paid by Contractor , in advance of the performance of said audit.

Should City consent to any assignment request, such assignment shall not take effect until all conditions relating to City's approval have been met.

12.5.2 Requirements of the Proposed Assignee

In approving an assignment, City may require that the proposed assignee agree to one or more of the following:

A. Reasonable increases in the insurance limits, or modifications in the insurance requirements contained in Section 9.5.

B. In the event of a City approved assignment of this Agreement to any corporation, limited liability company, and every similar corporate entity that is controlled by another such corporate entity through ownership of a majority of the equity interests in the assignee, then that controlling entity of the assignee shall provide a guarantee that unconditionally and absolutely guarantees the performance of the Contractor's obligations hereunder and shall be in a form reasonably acceptable to the City Attorney.

The form of guaranty shall be provided concurrently with the request for City approval of the assignment of the Agreement and no assignment to the proposed assignee shall be effective until the controlling entity executes the guaranty. This paragraph shall not be construed so as to require a guaranty from human Persons controlling an assignee or controlling entity thereof.

C. Posting of a performance bond in an amount similar to such required by other Cities for similar facilities and/or provision of financial assurance in a form other than a performance bond, such as a letter of credit or certificate of deposit.

D. Application of Liquidated Damages as set forth in Section 11.6 and Exhibit E including the provision of the initials as required in Exhibit E.

12.6 Subcontracting

Contractor shall not engage any third parties for Collection, Transportation, Processing or Disposal of Solid Waste, Recyclable Materials, or Compostable Materials without the prior written consent of the City. As of the Effective Date of this Agreement, the City has approved Contractor's use of the following third parties: (1) Grover Landscape Services, Inc. for Composting; and (2) Alameda County Industries, LLC for Recyclables Processing; (3) a subcontractor for Recycling and Composting technical assistance; and (4) Clean Energy for compressed natural gas (CNG) fueling station development and fuel services.

12.7 Binding on Successors

The provisions of this Agreement shall inure to the benefit to and be binding on the successors and permitted assigns of the Parties.

12.8 Transition to Next Contractor

Prior to expiration or earlier termination of this Agreement, Contractor will take direction from City Contract Manager and subsequent Contractor(s) to assist in an orderly transition of services from Contractor to subsequent contractor. Such cooperation will include, but not be limited to, Contractor providing route lists and detailed Customer account and Billing information. Contractor will not be obliged to sell Collection vehicles, equipment or facilities to the next Contractor; however, the City has rights to ownership of Containers pursuant to Section 5.16.4. Depending on Contractor's circumstances at the

point of transition, the Contractor at its option may enter into negotiations with the next Contractor to sell (in part or all) Collection vehicles, and other equipment or facilities.

In connection therewith, Contractor acknowledges that the provisions of Public Resources Code Sections 49520-49523 have no application to this Agreement and agrees, to the extent such sections may have application, to waive whatever rights they may afford.

12.9 Parties in Interest

Nothing in this Agreement, whether express or implied, is intended to confer any rights on any Persons other than the Parties to it and their representatives, successors and permitted assigns.

12.10 Waiver

The waiver by either Party of any breach or violation of any provisions of this Agreement shall not be deemed to be a waiver of any breach or violation of any other provision nor of any subsequent breach of violation of the same or any other provision. The subsequent acceptance by either Party of any monies which become due hereunder shall not be deemed to be a waiver of any pre-existing or concurrent breach or violation by the other Party of any provision of this Agreement.

12.11 Contractor's Investigation

The Contractor has made an independent investigation (satisfactory to it) of the conditions and circumstances surrounding the Agreement and the work to be performed by it.

12.12 Notice

All notices, demands, requests, proposals, approvals, consents and other communications which this Agreement requires, authorizes or contemplates, except as provided in Section 10.1, shall be in writing and shall either be personally delivered to a representative of the Parties at the address below or deposited in the United States mail, first class postage prepaid, addressed as follows:

If to City:

City Manager
City of Livermore
Administration Building
1052 South Livermore Avenue
Livermore, CA 94550

With copies to:

City Attorney
City of Livermore
Administration Building

1052 South Livermore Avenue
Livermore, CA 94550

and,

Public Works Manager
City of Livermore
3500 Robertson Park Road
Livermore, CA 94550

If to Contractor:

Livermore Sanitation, Inc.
7000 National Drive
Livermore, CA 94550
Attn: Louis Pellegrini, President

The address to which communications may be delivered may be changed from time to time by a notice given in accordance with this Section.

Notice shall be deemed given on the day it is personally delivered or, if mailed, three (3) calendar days from the date it is deposited in the mail.

To expedite communication, notices less than ten (10) megabytes may be sent by email with receipt confirmation provided followed in writing delivered to a representative of the Parties at the address above or deposited in the United States mail, first class postage prepaid.

12.13 Representatives of the Parties

References in this Agreement to the "City" shall mean the City of Livermore as defined in Section 1.26 in cases where no action is required. In cases were action is required related to adjustment of Contractor's Compensation, amendment, extension or termination of the Agreement, and approving Rates, "City" shall mean the City Council. In all other cases where action is required, "City" shall mean "City Contract Manager" as defined in Section 1.27 and further described in Section 6.8. The Contractor may rely upon actions taken by such delegates if they are within the scope of the authority properly delegated to them.

The Contractor shall, by the Effective Date, designate in writing a responsible officer who shall serve as the representative of the Contractor in all matters related to the Agreement and shall inform the City in writing of such designation and of any limitations upon his or her authority to bind the Contractor. The City may rely upon action taken by such designated representative as actions of the Contractor unless they are outside the scope of the authority delegated to him/her by the Contractor as communicated to City.

12.14 City Free to Negotiate with Third Parties

The City may investigate all options for the Collection, Transportation, Processing and Disposal of Solid Waste, Recyclable Materials and Compostable Materials after the expiration of the Term or earlier termination of this Agreement. Without limiting the generality of the foregoing, the City may solicit proposals from Contractor and from third parties for the provision of Collection services, Disposal services, Recycling services, Compostable Materials Collection and Composting, and any combination thereof, and may negotiate and execute agreements for such services which will take effect upon the expiration or earlier termination under Section 11.3 of this Agreement.

12.15 Statements and Supplemental Information

The Contractor's Proposal (Exhibits M and G1) and any other information submitted to the City supplementary thereto, on which the City has relied in awarding this Agreement to Contractor and entering into this Agreement, does not contain any untrue statement of a material fact nor omit to state a material fact necessary in order to make the statements made, in light of the circumstances in which they were made, not misleading.

12.16 Criminal Activity of Contractor

12.16.1 Definitions

A. **Contractor Party.** For the purposes of this Section, Contractor Party(ies) shall mean Contractor, its officers, directors, or management or fiscal employees where "management employee" means any employee with direct or indirect responsibility for direction and control over the Contractor's activities and "fiscal" employee means an employee with direct or indirect responsibility and control duties relating to financial matters.

B. **Criminal Activity.** For purpose of this Section, Criminal Activity shall mean any of the following events or circumstances:

1. **Convictions.** The entry against any Contractor Party of a criminal conviction or a permanent mandatory or prohibitory injunction from a court, municipality or regulatory agency of competent jurisdiction based on acts taken in his, her or its official capacity on behalf of Contractor with respect to:

   a. Fraud or criminal offense in connection with obtaining, attempting to obtain, procuring or performing a public or private agreement related to municipal Solid Waste services of any kind (including Collection, hauling, Transfer, Processing, Composting or Disposal), including this Agreement or any amendment thereto; or
   b. Bribery or attempting to bribe a public officer or employee of a local, State, or federal agency; or
   c. Embezzlement, extortion, racketeering, false claims, false statements, forgery, falsification or destruction of records, obstruction of justice, knowingly receiving stolen property, theft, or misprision (failure to disclose) of a felony; or

d. Unlawful Disposal of Hazardous Waste or Designated Waste the occurrence of which any of Contractor Party knew or should have known; or

e. Violation of antitrust laws, including laws relating to price-fixing, bid-rigging and sales and market allocation, and of unfair and anti-competitive trade practices laws, including with respect to inflation of Solid Waste Collection, Transportation, Processing fees, or Disposal Fees; or

f. Criminal violation of securities laws; or

g. Felonies.

2. **Pleas.** Entry of a plea of "guilty," "nolo contendere" or "no contest" by a Contracting Party based on acts taken in his, her or its official capacity on behalf of Contractor with respect to the conduct described in preceding subdivision (1) of this Section.

12.16.2 Notice

Contractor shall notify City Contract Manager in writing within five (5) calendar days of occurrence of any Criminal Activity.

12.16.3 Contractor's Cure

Upon occurrence of any Criminal Activity, Contractor shall immediately do or cause to be done all of the following:

A. Terminate from employment or remove from office any offending individual Contractor Party, unless otherwise directed or ordered by a court or regulatory agency of competent jurisdiction or authority, and unless that termination would constitute a breach of any labor agreement entered into by Contractor; and,

B. Eliminate participation by any individual offending Contractor Party in any management, supervision, or decision activity that affects or could affect, directly or indirectly, the performance of the Contractor under this Agreement.

12.16.4 Transfer and Hiring

Contractor shall not allow or cause to be allowed the hire or transfer of any individual Contractor Party from any parent or subsidiary company or business entity of Contractor who has committed Criminal Activity for a position as a Contractor representative, field supervisor, officer or director who is directly or indirectly responsible for performance of this Agreement without obtaining prior written consent of City, following full disclosure to City of the facts and circumstances surrounding such Criminal Activity.

12.16.5 City's Remedy

In the event of Criminal Activity, City, in its sole discretion, may terminate the Agreement upon thirty (30) calendar days written notice to Contractor, or may impose other sanctions (which may include financial sanctions, temporary suspensions or any other condition deemed appropriate short of termination) as it will deem proper, in the following events:

A. Contractor fails to comply with material obligation set forth in Articles 5, 6, 7, 9 or 12 of this Agreement, subject to any cure provisions stated herein, or

B. The Criminal Activity concerns or relates directly or indirectly to this Agreement.

Contractor shall be given the opportunity to present evidence in mitigation during the thirty (30) day notice period.

12.17 Material Change Notification Process

Contractor recognizes that material changes in the number and type of Customers, the amount of Gross Rate Revenue collected from Customers, Change in Law, and other factors may impact financial results and expectations of or related to the Agreement. Therefore, the Contractor recognizes that it has an obligation to provide timely notices to the City Contract Manager of such changes and agrees to exercise diligence in monitoring conditions and to notify the City Contract Manager of any such changes or potential changes as soon as Contractor is aware of such.

In addition, Contractor shall provide to City Contract Manager monthly reports tracking revenue billed and actual Gross Rate Revenue received as required by monthly reporting requirements in Section 6.3.2.F and semi-annual reports as required by Section 6.3.3.K so that any material changes to revenues may be detected as quickly as possible. Contractor and City Contract Manager shall, at an agreed to time, meet to discuss the results of such analysis. In the event that there is a material difference between actual financial results and expectations, the City Contract Manager shall be entitled to request from Contractor or Contractor on its own, may initiate a Special Rate Review pursuant to Section 8.4.

12.18 Ownership of Environmental Benefits

The City retains the right, to be exercised at its sole discretion with regard to each instance and unless expressly waived, to the ownership of any environmental benefits derived from, but not limited to, emissions or elimination of emissions of climate change or greenhouse gasses, or emissions or elimination of other emissions to air, water and/or soil as identified now or during the Term of the Agreement. This provision applies to all:

A. Material steams that are generated within the City and that are Collected, Transferred, Processed, Recycled, Composted, and/or Disposed by the Contractor under the terms of this Agreement;

B. Programs, practices and procedures of the City, or directly or indirectly of the Contractor acting under the terms of this Agreement; and/or,

C. Equipment or allocated portion of equipment used by Contractor in fulfillment of the terms of the Agreement, including vehicles and buildings and environmental improvements made to each, whether owned by jurisdiction, Contractor, or Related Party Entity, or Subcontractor.

This provision applies to, but is not limited to, any use of this value in reallocating and/or reducing emissions of climate change or greenhouse gasses.

This provision applies regardless of whether the environmental benefit is:

1. Determined through regulatory action, market activity, negotiation between two or more parties, intra-company transfer, and/or other means.

2. Monetized in terms of a currency, or is non-monetized as in a barter or trade in which value is attributed indirectly in non-monetary terms.

Contractor shall inform the City Contract Manager at least thirty (30) calendar days in advance of any lawful action that directly or indirectly might materially affect any environmental benefit. The City shall then determine whether it wishes to retain ownership of, and be compensated for, the affected benefit.

ARTICLE 13. MISCELLANEOUS AGREEMENTS

13.1 Entire Agreement

This Agreement, including the Exhibits, represents the full and entire Agreement between the Parties with respect to the matters covered herein, and shall replace and supersede all previous agreements or understandings whether written or otherwise between the Parties with respect to the matters covered herein, including, without limitation, the Prior Agreement.

13.2 Section Headings

The article headings and section headings in this Agreement are for convenience of reference only and are not intended to be used in the construction of this Agreement nor to alter or affect any of its provisions.

13.3 References to Laws

All references in this Agreement to laws shall be understood to include such laws as they may be subsequently amended or recodified, unless otherwise specifically provided.

13.4 Interpretation

This Agreement shall be interpreted and construed reasonably and neither for nor against either Party, regardless of the degree to which either Party participated in its drafting.

13.5 Amendment

This Agreement may not be modified or amended in any respect except in writing, signed by the Parties.

IN WITNESS WHEREOF, City and Contractor have executed this Agreement as of the day and year first above written.

ATTEST:

City CLERK

By _____
Deputy City Clerk Debbie Elam

Date: 4/28/20

City OF LIVERMORE ("City")

By _____
Mayor for Marc Roberts, City Manager

Date: 4/28/20

APPROVED AS TO FORM:

_____
City Attorney

Date: _____

APPROVED AS TO FORM:

By _____
Contractor Attorney

Date: _____

Livermore Sanitation, Inc.

By _____
Louis Pellegrini
President

Date: 3/5/2020

IN WITNESS WHEREOF, City and Contractor have executed this Agreement as of the day and year first above written.

ATTEST:

City CLERK

By _____
Deputy City Clerk

Date: _____

City OF LIVERMORE ("City")

By _____
Mayor

Date: _____

APPROVED AS TO FORM:

_____
City Attorney

Date: _____

APPROVED AS TO FORM:

By _____
Contractor Attorney

Date: 3/6/20

Livermore Sanitation, Inc.

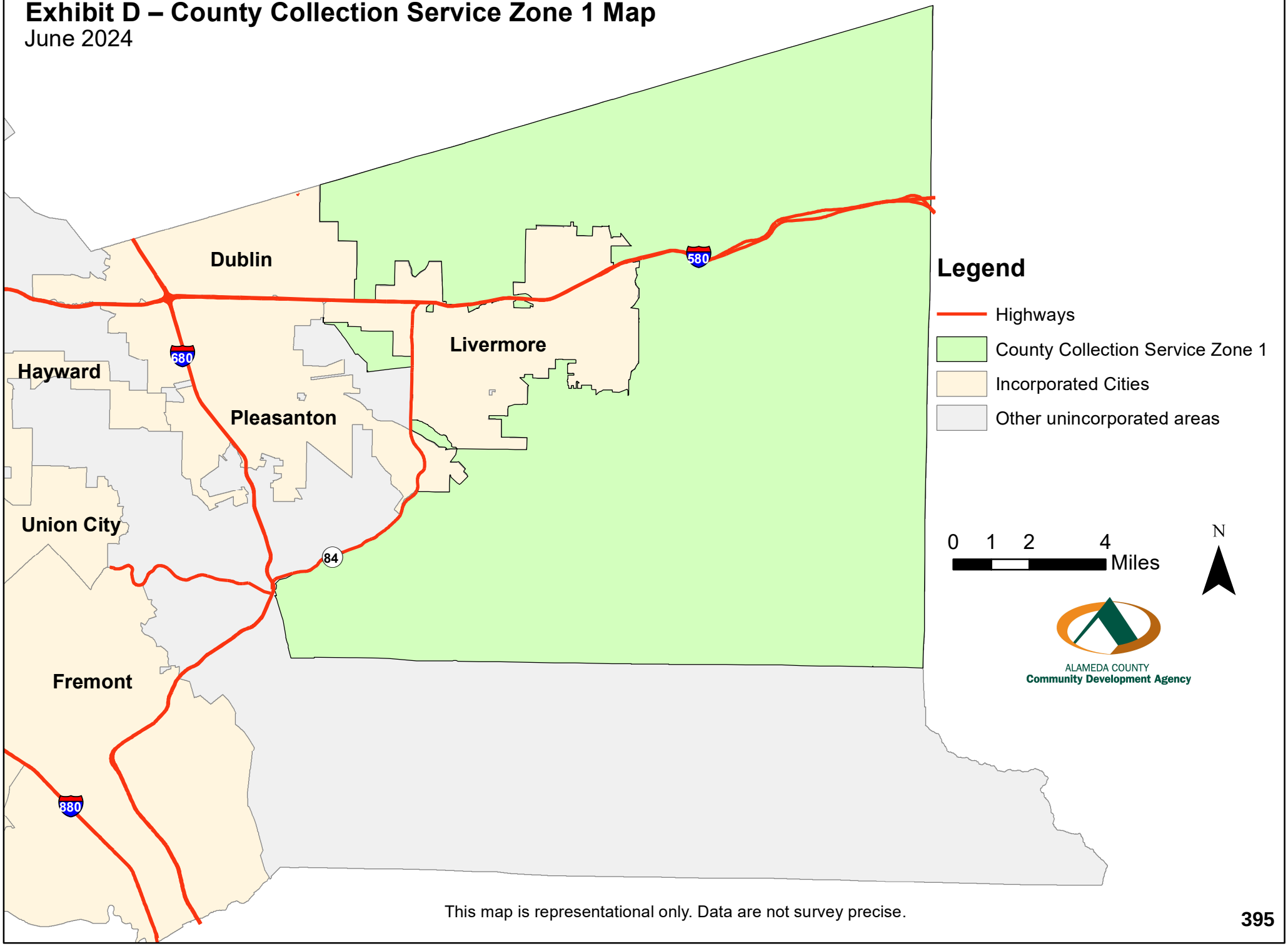
By _____
Louis Pellegrini
President

Date: _____

EXHIBIT A

Exhibit D – County Collection Service Zone 1 Map

June 2024

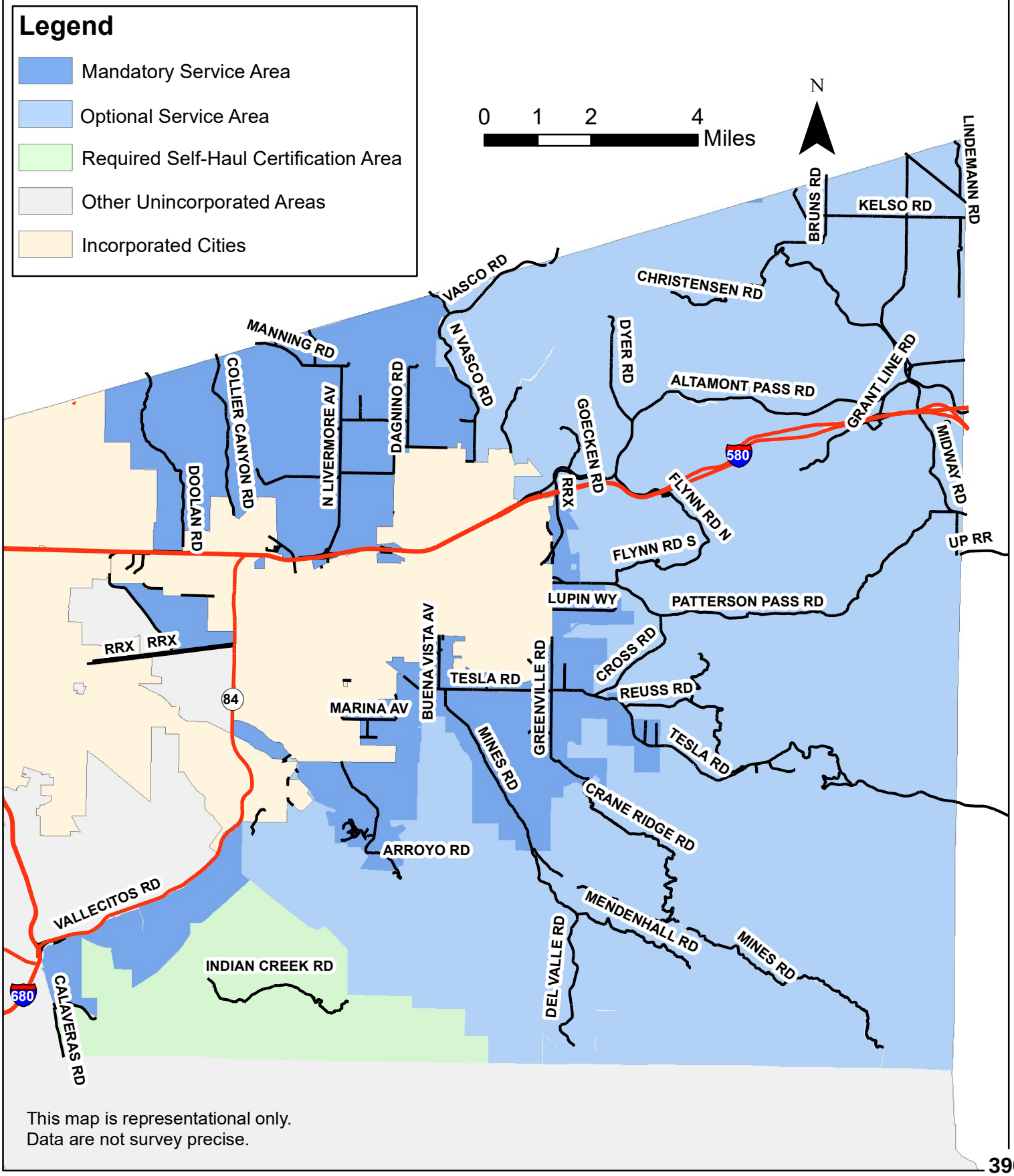


This map is representational only. Data are not survey precise.

Exhibit E – LSI Unincorporated Service Areas Map

June 2024

ALAMEDA COUNTY
Community Development Agency



This map is representational only.
Data are not survey precise.

ALAMEDA COUNTY CUSTOMER RATES FOR RATE PERIOD FIFTEEN

RATES FOR SINGLE FAMILY CART SERVICE CUSTOMERS

Basic Monthly Collection Service (including Recyclables and Compostables)

Container Size	Curbside Monthly Rate	Backyard or Sideyard Monthly Rate
20-gallon Solid Waste Cart*	$33.97	$41.81
32-gallon Solid Waste Cart*	$44.60	$63.00
64-gallon Solid Waste Cart*	$66.26	$103.73
96-gallon Solid Waste Cart*	$103.47	$162.51
	$0.00	$0.00
Additional Carts (Rate per Additional Cart per Month)	$0.00	$0.00
Extra 32-gallon Solid Waste Cart	$39.70	$58.72
Extra 64-gallon Solid Waste Cart	$72.82	$109.67
Extra 96-gallon Solid Waste Cart	$106.75	$161.78
Extra Compostable Materials Cart*	$11.24	$11.24
Extra Recyclable Materials Cart*	$11.24	$11.24

* Monthly rate also includes one 96-gallon Cart for Compostables and one 96-gallon Cart for Recyclables. Customers can request smaller cart sizes for Recyclables or Compostables; however, the monthly rate shall be the same as listed above.

Income-Based Program Monthly Collection Service (including Recyclables and Compostables)

Container Size	Curbside Monthly Rate
20-gallon Solid Waste Cart**	$33.97
32-gallon Solid Waste Cart**	$33.97
64-gallon Solid Waste Cart**	$33.97

** Must qualify and Participate in the Pacific Gas and Electric Company's California Alternate Rates for Energy (CARE) Program

** If CARE Program discontinued Income-Based Program may be discontinued

** Only customers with individual Single Family accounts are eligible

**Verification required every year to participate

Rates for Bulky Items and E-Waste On-Call Pick-Up Service

(Applicable for Single Family, Multi-Family, Commercial, and Government Customers)

Material Type	Examples	Rate Per Pickup
E-Waste	Cell Phones, CPUs, Monitors, Copiers, Fax Machines, Laptops, Mouse, Keyboards, Printers, Televisions, Radios, Stereos, Speakers, Telephones, VCRs, DVDs, and Camcorders	$29.17
Major Appliances	Air Conditioners, Refrigerators, Freezers any items containing oil, fuel or Freon	$145.87
Bulky Items	All other large items Bathtubs, furniture, bicycles used exercise equipment beds, box springs, tires etc.	$72.94

ALAMEDA COUNTY CUSTOMER RATES FOR RATE PERIOD FIFTEEN
(Effective July 1, 2024 - June 30, 2025)

Rates for Miscellaneous Service for Single Family Cart and Multi Family Cart Customers

Service	Description of Service	Rate per Occurrence
Handy Hauler Service (4 Cubic Yard Bin; Temporary Use)	Per placement and removal of 4 cubic yard bin provided for occasional use	$187.39
	Rate for rental of 4 cubic yard bin in excess of 7 days	$36.75
	Per pull and return of 4 cubic yard bin (pull and return involves the collection of solid waste at the premises and leaving the empty handy hauler on the premises)	$134.90
Cart Replacement	Charge if customer requires cart replacement in excess of one replacement per year at no cost for each instance of container replacement related to service level changes due to delinquent payment, damage or theft.	$97.95
Trip Charge	If driver must return due to Resident error, such as failure to place Cart Curbside before Collection time, overfilled Cart, incorrect Cart placement, contaminated materials	$16.97
Cart Delivery / Pick-Up	Cart delivery/pick-up (charge if Customer requests a change in Cart size more than once per year)	$16.97
Organic Overage	Company supplied Kraft bag paid for in advance	$11.68
Organic Overage	Customer supplied Kraft Bag	$7.29

EXHIBIT A

ALAMEDA COUNTY CUSTOMER RATES FOR RATE PERIOD FIFTEEN
(Effective July 1, 2024 - June 30, 2025)

RATES FOR MULTI FAMILY CART SERVICE CUSTOMERS

Solid Waste Collection Rates (Cost per month)*

	Pick-Ups per Week					
Container Size	1	2	3	4	5	6
32-gallon Cart	$44.60	$91.60	$139.46	$189.05	$240.40	$293.48
64-gallon Cart	$66.26	$136.63	$208.30	$282.56	$359.46	$438.95
96-gallon Cart	$103.48	$214.05	$326.65	$443.37	$564.19	$689.08

* Multi-Family Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Recyclables Collection Rates for More Frequent Service (Cost per Month)**

	Pick-Ups per Week					
Container Size	1	2	3	4	5	6
32-gallon Cart	$0.00	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$0.00	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$0.00	$171.24	$261.32	$354.69	$451.35	$551.27

** Multi-Family Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Compostables Collection Rates for More Frequent Service (Cost per Month)***

	Pick-Ups per Week					
Container Size	1	2	3	4	5	6
32-gallon Cart	$0.00	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$0.00	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$0.00	$171.24	$261.32	$354.69	$451.35	$551.27

*** Multi-Family Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Recyclables Collection Rates for Additional Carts (Cost per Month)**

	Pick-Ups per Week					
Container Size	1	2	3	4	5	6
32-gallon Cart	$11.24	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$11.24	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$11.24	$171.24	$261.32	$354.69	$451.35	$551.27

** Multi-Family Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

ALAMEDA COUNTY CUSTOMER RATES FOR RATE PERIOD FIFTEEN
(Effective July 1, 2024 - June 30, 2025)

Compostables Collection Rates for Additional Carts (Cost per Month)***

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$11.24	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$11.24	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$11.24	$171.24	$261.32	$354.69	$451.35	$551.27

*** Multi-Family Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Additional On-Call Pick-Up Service for Solid Waste, Recyclables or Compostables Cart (Cost per Pick-Up)

	Container Size 32 to 35-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$12.99	$27.41	$44.46
Pick-Up Other than Regularly Scheduled Day	$12.99	$27.41	$44.46

Rates for Bulky Items and E-Waste On-Call Pick-Up Service

Rates for bulky items and e-waste on-call pick-up service for Multi Family customers are provided on Page H-1 of this Exhibit.

Rates for Miscellaneous Service

Additional rates for miscellaneous service for Multi Family cart customers are provided on Page H-1 of this Exhibit.

EXHIBIT A

RATES FOR COMMERCIAL CART CUSTOMERS

Solid Waste Collection Rates (Cost per month)*

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$44.60	$91.60	$139.46	$189.05	$240.40	$293.48
64-gallon Cart	$66.26	$136.63	$208.30	$282.56	$359.46	$438.95
96-gallon Cart	$103.48	$214.05	$326.65	$443.37	$564.19	$689.08

* Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Recyclables Collection Rates for More Frequent Service (Cost per Month)**

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$0.00	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$0.00	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$0.00	$171.24	$261.32	$354.69	$451.35	$551.27

** Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Compostables Collection Rates for More Frequent Service (Cost per Month)***

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$0.00	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$0.00	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$0.00	$171.24	$261.32	$354.69	$451.35	$551.27

*** Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Recyclables Collection Rates for Additional Carts (Cost per Month)**

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$35.69	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$53.01	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$82.78	$171.24	$261.32	$354.69	$451.35	$551.27

** Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

EXHIBIT A

Compostables Collection Rates for Additional Carts (Cost per Month)***

Container Size	Pick-Ups per Week 1	2	3	4	5	6
32-gallon Cart	$35.69	$73.28	$111.57	$151.24	$192.33	$234.78
64-gallon Cart	$53.01	$109.30	$166.64	$226.05	$287.57	$351.16
96-gallon Cart	$82.78	$171.24	$261.32	$354.69	$451.35	$551.27

*** Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Additional On-Call Pick-Up Service for Solid Waste, Recyclables or Compostables Cart (Cost per Pick-Up)

	Container Size 32 to 35-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$12.99	$27.41	$44.46
Pick-Up Other than Regularly Scheduled Day	$12.99	$27.41	$44.46

Rates for Bulky Items and E-Waste On-Call Pick-Up Service

Rates for bulky items and e-waste on-call pick-up service for commercial customers are provided on Page H-1 of this Exhibit.

RATES FOR COMMERCIAL AND RESIDENTIAL BIN CUSTOMERS

Solid Waste Rates (Cost per Month per Bin)****

	Loose Materials						Compacted Materials					
	Pick-Ups per Week						Pick-Ups per Week					
Bin Size	1	2	3	4	5	6	1	2	3	4	5	6
1 cubic yard	$130.71	$266.64	$407.79	$554.19	$705.81	$880.92	$261.43	$533.29	$815.60	$1,108.38	$1,411.63	$1,761.82
2 cubic yard	$261.40	$533.28	$832.86	$1,131.84	$1,441.50	$1,798.59	$522.82	$1,066.55	$1,665.72	$2,263.70	$2,882.99	$3,597.18
3 cubic yard	$392.12	$816.84	$1,249.30	$1,733.18	$2,207.35	$2,697.87	$784.24	$1,633.71	$2,498.61	$3,466.36	$4,414.70	$5,395.74
4 cubic yard	$522.83	$1,089.14	$1,700.49	$2,310.90	$2,943.13	$3,670.67	$1,045.65	$2,178.26	$3,400.95	$4,621.81	$5,886.27	$7,341.32
5 cubic yard	$667.36	$1,389.81	$2,125.61	$2,947.64	$3,754.08	$4,680.19	$1,334.71	$2,779.62	$4,251.20	$5,895.30	$7,508.17	$9,360.40
6 cubic yard	$800.83	$1,667.78	$2,550.71	$3,537.18	$4,504.90	$5,616.23	$1,601.68	$3,335.55	$5,101.43	$7,074.37	$9,009.78	$11,232.46
7 cubic yard	$934.30	$1,945.75	$3,036.64	$4,126.71	$5,360.96	$6,680.08	$1,868.61	$3,891.48	$6,073.28	$8,253.43	$10,721.91	$13,360.16

**** Commercial Solid Waste collection rates include weekly service of 96-gallons of Organics and 96-gallons of Recyclables. Additional Organics and Recyclables carts, larger bins, and up to six days of collection are available at the established rates. A subscription to an adequate level of Solid Waste service is required. Customers may request less than 96-gallons of Organics or Recyclables collection but the monthly Solid Waste rate will not be discounted.

Recyclables Rates (Cost per Month per Bin)

	Loose Materials						Compacted Materials					
	Pick-Ups per Week						Pick-Ups per Week					
Bin Size	1	2	3	4	5	6	1	2	3	4	5	6
1 cubic yard	$104.56	$213.31	$326.24	$443.36	$564.65	$704.73	$209.14	$426.63	$652.48	$886.70	$1,129.30	$1,409.46
2 cubic yard	$209.12	$426.62	$666.29	$905.48	$1,153.20	$1,438.87	$418.26	$853.23	$1,332.58	$1,810.96	$2,306.39	$2,877.74
3 cubic yard	$313.69	$653.47	$999.44	$1,386.54	$1,765.88	$2,158.30	$627.39	$1,306.97	$1,998.89	$2,773.09	$3,531.77	$4,316.59
4 cubic yard	$418.26	$871.31	$1,360.39	$1,848.72	$2,354.51	$2,936.53	$836.52	$1,742.61	$2,720.76	$3,697.45	$4,709.01	$5,873.06
5 cubic yard	$533.89	$1,111.84	$1,700.49	$2,358.12	$3,003.27	$3,744.15	$1,067.77	$2,223.70	$3,400.96	$4,716.24	$6,006.53	$7,488.31
6 cubic yard	$640.67	$1,334.22	$2,040.57	$2,829.75	$3,603.92	$4,492.98	$1,281.34	$2,668.44	$4,081.14	$5,659.49	$7,207.82	$8,985.98

7 cubic yard	$747.45	$1,556.60	$2,429.32	$3,301.37	$4,288.76	$5,344.06	$1,494.89	$3,113.19	$4,858.62	$6,602.75	$8,577.53	$10,688.13

Compostables (Cost per Month per Bin)

	Loose Materials						Compacted Materials					
	Pick-Ups per Week						Pick-Ups per Week					
Bin Size	1	2	3	4	5	6	1	2	3	4	5	6
1 cubic yard	$104.56	$213.31	$326.24	$443.36	$564.65	$704.73	$209.14	$426.63	$652.48	$886.70	$1,129.30	$1,409.46
2 cubic yard	$209.12	$426.62	$666.29	$905.48	$1,153.20	$1,438.87	$418.26	$853.23	$1,332.58	$1,810.96	$2,306.39	$2,877.74
3 cubic yard	$313.69	$653.47	$999.44	$1,386.54	$1,765.88	$2,158.30	$627.39	$1,306.97	$1,998.89	$2,773.09	$3,531.77	$4,316.59
4 cubic yard	$418.26	$871.31	$1,360.39	$1,848.72	$2,354.51	$2,936.53	$836.52	$1,742.61	$2,720.76	$3,697.45	$4,709.01	$5,873.06
5 cubic yard	$533.89	$1,111.84	$1,700.49	$2,358.12	$3,003.27	$3,744.15	$1,067.77	$2,223.70	$3,400.96	$4,716.24	$6,006.53	$7,488.31
6 cubic yard	$640.67	$1,334.22	$2,040.57	$2,829.75	$3,603.92	$4,492.98	$1,281.34	$2,668.44	$4,081.14	$5,659.49	$7,207.82	$8,985.98

Additional On-Call Pick-Up for Solid Waste, Recyclables or Compostables Bin (Cost per Pick-Up)

	Loose Materials						Compacted Materials					
	Container Size						Container Size					
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd
Pick-Up On Regularly Scheduled Day	$33.41	$66.79	$100.22	$133.57	$200.37	$233.76	$66.81	$133.59	$200.43	$267.14	$400.73	$467.51
Pick-Up Other than Regularly Scheduled Day	$59.35	$91.21	$123.36	$155.17	$213.33	$251.01	$118.69	$182.41	$246.72	$310.33	$426.65	$502.02

Rates for Bulky Items and E-Waste On-Call Pick-Up Service

Rates for bulky items and e-waste on-call pick-up service for Commercial bin customers are provided on Page H-1of this Exhibit.

Contaminated Recyclables or Compostables Cart (Cost per Pick-Up)

	Container Size		
	32 to 35-gal	64-gal	96-gal
Pick-Up On Regularly Scheduled Day	$25.98	$54.83	$88.92
Pick-Up Other than Regularly Scheduled Day	$25.98	$54.83	$88.92

Contaminated Recyclables or Compostables Bin (Cost per Pick-Up)

	Loose Materials						Compacted Materials					
	Container Size						Container Size					
	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd	1 cu yd	2 cu yd	3 cu yd	4 cu yd	5 cu yd	6 cu yd
Pick-Up On Regularly Scheduled Day	$66.81	$133.59	$200.43	$267.14	$400.73	$467.51	$133.62	$267.18	$400.87	$534.29	$801.46	$935.04
Pick-Up Other than Regularly Scheduled Day	$118.69	$182.41	$246.72	$310.33	$426.65	$502.02	$237.38	$364.82	$493.43	$620.67	$853.31	$1,004.04

EXHIBIT A

Rates for Miscellaneous Services for Commercial and Residential Bin and Commercial Cart Customers

Service	Description of Service	Rate per Occurrence
Handy Hauler Service (4 Cubic Yard Bin; Temporary Use)	Per placement and removal of 4 cubic yard bin provided for occasional use	$187.39
	Rate for rental of 4 cubic yard bin in excess of 7 days	$36.75
	Per pull and return of 4 cubic yard bin (pull and return involves the collection of solid waste at the premises and leaving the empty handy hauler on the premises)	$134.90
Cart Replacement	Charge if customer requires cart replacement in excess of one replacement per year at no cost for each instance of container replacement related to service level changes due to delinquent payment, damage or theft.	$97.95
Trip Charge (for Bin)	If driver must return due to Customer error, such as failure to make Bin accessible before Collection time, overfilled Bin, incorrect Bin placement, contaminated materials)	$16.97
Trip Charge (for Carts)	If driver must return due to customer error, such as failure to make Cart accessible before collection time, overfilled Cart, incorrect Cart placement, contaminated materials)	$16.97
Overage Charge	Per cubic yard rate	$25.47
Standby Charge	Charge for waiting for access to Cart/Bin or for Cart/Bin to be loaded	$96.66
Lost Lock	Fee for replacing lost lock	$33.87
Steam Cleaning Bin	Charge per visit	$171.88
Steam Cleaning Cart	Charge per visit	$97.95

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.9**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution authorizing the execution of agreements with GSW Construction, Inc. and Platinum Pipeline, Inc. for on-call construction services for City water, sewer, and storm drain systems for a three-year term in an amount not-to-exceed $2,400,000.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute agreements with Platinum Pipeline, Inc. and GSW Construction, Inc. for on-call construction services for City water, sewer, and storm drain systems for a three-year term in an amount not-to-exceed $2,400,000.

SUMMARY

City staff requires contracted services to provide on-call and urgent repairs to City water, sewer, and storm drain systems that are too extensive for City staff to complete. To ensure the best chance of repair work being handled in a timely manner, staff recommends awarding an on-call contract to two vendors rather than just one.

DISCUSSION

From time to time, City staff require the services of a contractor to provide planned and urgent repairs to the City's water, sewer, and storm drain systems. City staff routinely use these services where City staff cannot be tied up for long periods of time or where staff require additional support to complete larger repair jobs.

City staff initiated a competitive bid process on April 8, 2024 to select service providers for on-call construction services. Eight sealed bids were submitted on April 29, 2024. One of the bids was disqualified for incompleteness. The ordered ranking is as follows:

1. Platinum Pipeline, Inc.
2. GSW Construction, Inc.
3. DPI, Inc.

4. GradeTech
5. West Valley Construction
6. Kerex
7. McGuire and Hester

Platinum Pipeline, Inc., and GSW Construction, Inc. were the first and second ranked best value bids. Staff recommends accepting the top two ranked bids and initiate new agreements for a three-year term beginning July 22, 2024 through June 30, 2027, with a combined not-to exceed amount of $2,400,000 over the three-year period.

FISCAL AND ADMINISTRATIVE IMPACTS

$800,000 for the first year of each agreement has been included in the FY 2024-25 operating budget, which will be split between the Wastewater Fund (620) and the Water Fund (640). The next two-year budget planning cycle will include funding for subsequent years. Staff does not anticipate any administrative impacts or impact on other City Funds due to the approval of these agreements.

COMMUNITY PILLAR

1: A Safe Community That Thrives

GOAL

11: Operate and maintain municipal water systems that provide safe, efficient delivery of potable and recycled water, collect and treat wastewater, and comply with all federal, state, and local regulations.

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement - GSW
3. Exhibit B - Agreement - Platinum Pipeline

Prepared by: Laura Mayate-DeAndreis
Management Analyst II

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE EXECUTION OF AGREEMENTS WITH GSW CONSTRUCTION, INC. AND PLATINUM PIPELINE, INC. FOR ON-CALL CONSTRUCTION SERVICES FOR WATER, SEWER, AND STORM DRAIN SYSTEMS IN A COMBINED AMOUNT NOT-TO-EXCEED $2,400,000 FOR THREE-YEAR TERMS

The City of Livermore ("City") requires services to provide on-call services for repair or replacement of potable water, recycled water, wastewater, and storm water facilities.

In April 2024, the City completed a competitive bidding process and selected Platinum Pipeline, Inc., and GSW Construction, Inc. as the best value bidders to provide on-call construction services for the City of Livermore Water Resources Division.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore, that it hereby:

1. Authorizes the City Manager to execute two General Services agreements, attached hereto as Exhibit A (Platinum Pipeline, Inc.) and Exhibit B (GSW Construction, Inc.) for three-year terms, in a combined amount not-to-exceed $2,400,000 to provide on-call services for the repair or replacement of potable water, recycled water, wastewater, and stormwater facilities.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

Exhibit A – Agreement GSW Construction, Inc.
Exhibit B – Agreement Platinum Pipeline, Inc.

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AGREEMENT FOR SERVICES

THIS AGREEMENT is made and entered into this day of , 2024, by and between the City of Livermore ("City"), a municipal corporation, and GSW Construction, Inc. ("Contractor"), a California corporation.

RECITALS

City requires on-call services for the repair and/or replacement of potable water, recycled water, wastewater, and storm water facilities.

Contractor warrants it possesses the distinct skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Contractor acknowledges City has relied upon these warranties to retain Contractor.

AGREEMENT

NOW, THEREFORE, City and Contractor hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Contractor. City hereby retains Contractor, and Contractor hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Contractor and its employees are not City officers or employees. Contractor is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Contractor shall provide services to repair and/or replace potable water. recycled water, wastewater, and stormwater facilities on an on-call basis as more particularly set forth in Exhibit "A" (collectively "the Services").

4. Contractor's Responsibilities. Contractor shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Contractor to practice its profession and to provide the Services;

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(e) Comply with all laws in effect that are related to Contractor and the Services;

(f) Coordinate the Services with Michael Wells, Public Works Supervisor or David Lennier, Water Distribution Operations Manager ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Contractor by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Contractor's invoice shall be in writing and describe the Services performed for the payment requested. Contractor shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Contractor and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Contractor shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Contractor shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Contractor and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Contractor shall correct, at its own expense, all errors in the Services. Should Contractor fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Contractor;

(l) If applicable, Contractor shall ensure that all work for compensation is taken in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Contractor shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Contractor shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Contractor's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as applicable regulations and guidelines issued pursuant to the ADA.

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5. Compensation and Payment.

(a) The total compensation payable by City to Contractor for the Services **SHALL NOT EXCEED** the sum of $2,400,000.00 ("not-to-exceed amount"). City shall compensate Contractor for the Services rendered at the hourly rates or task amounts set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates or task amounts are intended to be Contractor's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, travel expenses, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Contractor, its agents, and employees to provide the Services.

(b) City shall pay Contractor no later than 30 days after City receives a written invoice from Contractor and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 8, 2024, and terminates upon the completion of the Services or June 30, 2027, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Contractor at least 30 calendar-days written notice. Upon receipt of a termination notice, Contractor shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Contractor in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Contractor in the performance of the Services are City's property and Contractor shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Contractor for City under this Agreement are works made for hire, and Contractor shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Contractor agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Contractor to City and Contractor obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

10. Confidentiality. Contractor shall not disclose any confidential or proprietary information received from City to anyone except Contractor's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

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11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Contractor shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the services contemplated by this Agreement, or in connection with Contractor's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Contractor's obligations to hold harmless, indemnify, and defend shall not be excused because of Contractor's inability to evaluate Liability or because Contractor evaluates Liability and determines that Contractor is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Contractor must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Contractor's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Contractor's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Contractor shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Contractor shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Contractor's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Contractor for, the Services does not release Contractor from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Contractor's responsibility or liability by City for any defect or error in the Services.

15. Conflict of Interest. Contractor represents that no City employee or official has a financial interest in Contractor. Contractor shall not offer, encourage, or accept any financial interest in any part of Contractor's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private

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party, Contractor represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Contractor shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Contractors' financial interest. While it is Contractor's sole responsibility to evaluate its conflicts of interest, the Contractor nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other Contractors to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Contractor shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty percent or more in the ownership or control of Contractor constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Contractor must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Water Resources Division Manager
City of Livermore
101 W. Jack London Blvd.
Livermore, California 94551

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TO CONTRACTOR: Attention: Cody Gunning
GSW Construction, Inc.
101 Embarcadero
San Francisco, CA 94105

23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

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Signatures and Attachment List on the Next Page

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In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONTRACTOR: **Dated:**

DocuSigned by:
Jeffrey Ward
6CF289980CD74B9...

6/24/2024 | 2:51 PM PDT

By: Jeffrey Ward
Title: President

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Tara Mazzanti
B099F037137044E2...

Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

DocuSign Envelope ID: 93E2CB98-67A2-4FD3-ABE3-55D02F09C6DE

EXHIBIT A
SCOPE OF WORK

SCOPE

1. Work
   a) Contractor must provide all labor, materials, equipment and services necessary to perform and timely complete the following services in an economical and efficient manner in the best interests of City:
      i. On-call repairs and/or replacement of potable water, recycled water, wastewater, and stormwater conveyance, treatment and distribution infrastructure. The work shall also include any asphalt or concrete repairs related to the above.
      ii. The work shall include traffic control, material procurement, material handling, material disposal, and any repairs or replacement of asphalt, concrete, traffic signage, and/or traffic striping made necessary by the items above.

2. Safety
   a) Contractor shall follow all applicable safety rules and regulations.
   b) Contractor shall provide all necessary safety equipment.
   c) City staff may be present during and monitor all aspects of the work.
   d) City reserves the right to halt work at any time for noncompliance with this agreement, or unsafe work conditions or practices.
   e) Contractor shall keep worksites reasonably clear of debris and protect the safety of the public and City employees at all times. Contractor shall promptly remove all materials and spoils from each job site upon completion of the work.
   f) Contractor shall notify Underground Service Alert prior to any machine digging and comply with all applicable laws and regulations.
   g) Contractor shall protect all existing utilities and restore any existing utilities damaged.
   h) Contractor shall provide all necessary traffic control measures.
   i) Contractor shall provide all necessary sheeting, shoring, or bracing equipment for trenching and excavations.

3. Debris Management
   a) All debris or spoils generated by the work of Contractor shall be properly disposed of by Contractor.

4. Quality of Work
   a) Contractor must provide sufficient and competent administration, staff, and skilled workforce necessary to perform and timely complete the services. Before starting, Contractor must designate in writing and provide complete contact information, including phone numbers and email address, for the officer or employee in Contractor's organization who is to serve as Contractor's primary representative for this agreement, and who has authority

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to act on Contractor's behalf. A Subcontractor may not serve as Contractor's primary representative.

b) Contractor must, at all times during performance of the Work, provide a qualified, full-time superintendent with effective communication skills, acceptable to Project Manager or his/her designee, who must be physically present at the Project site while any aspect of the Work is being performed. Failure to comply may result in temporary suspension of the Work, at Contractor's sole expense and with no extension of time under the Contract until the superintendent is physically present to supervise the Work.

c) Contractor shall warranty all work for a minimum of one year after the completion of the work. Any work required to remedy problems with installation or materials shall be at the sole cost of the Contractor within this period.

d) All work completed under this agreement shall conform to the City of Livermore Standard Specifications and Standard Details unless authorized in writing by the Project Manager.

5. Response Time
   a) Contractor is expected to promptly acknowledge the City's notification of an urgent situation by phone within two hours. Contractor's response should inform the City if they will be able to mobilize a repair crew to address the urgent situation within eight hours from the time of notification

COMPENSATION

1. CITY shall compensate CONTRACTOR in the following manner:

a) Labor, equipment, and vehicles shall be compensated at the rates below.

RATE SCHEDULE	UNIT OF MEASURE	REGULAR TIME UNIT PRICE	OVERTIME UNIT PRICE
LABOR			
Project Manager	HOUR	$169.65	$169.65
Foreman/Superintendent		$143.88	$196.37
Equipment Operator		$139.14	$189.23
Carpenter		$151.09	$207.32
Cement Mason		$102.44	$135.54
Laborer		$98.71	$131.81

b) Materials, supplies and parts shall be compensated at documented at cost plus markup as referenced in the rate schedule. Contractor shall make reasonable efforts to obtain the desired materials, supplies, and parts at the lowest readily available cost. Contractor must supply receipts or invoices and weight tags

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EXHIBIT A
SCOPE OF WORK

(when appropriate) in order to be compensated for materials, supplies, and parts.

RATE SCHEDULE	UNIT OF MEASURE	REGULAR TIME UNIT PRICE	OVERTIME UNIT PRICE
EQUIPMENT			
Compaction equipment: Wacker/jumping jack/vibraplate	HOUR	$8.25	[redacted]
Skid steer loader (w/necessary attachments, Bobcat or equivalent)		$46.90	
Mini excavator (w/necessary attachments, CAT304 or equivalent)		$39.20	
Excavator (w/necessary attachments, CAT 321 or equivalent)		$88.25	
Skip Loader (w/necessary attachments, CAT 414 or equivalent)		$49.15	
Backhoe (w/necessary attachments, Case 580E or equivalent)		$58.17	
Vibratory smooth drum roller (24-inch)		$28.45	
Compressor – 150 cfm or similar		$26.14	
HydroVac truck		$427.50	
Traffic arrow board		$18.59	
Dump Truck (5 yard or comparable)		$62.95	
Service Truck (pickup truck w/utility body)		$34.65	
OTHER ITEMS			
Mobilization cost per task order	LS	$2,250.00	[redacted]
Markup for subcontractor work	%	7	
Markup for materials and parts	%	12.50	

c) Hand tools and incidental materials are deemed to be included within the rates for labor, equipment, and markup for materials above. No additional compensation shall be granted.

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EXHIBIT A
SCOPE OF WORK

d) provide invoices or receipts in order to be compensated for the work of subcontractors.

2. Hourly rates for labor and equipment must include all wages, fringe benefits, and markup/overhead. Hourly rates shall be the only rates used for cost estimate and billing.
3. Hourly rate for Equipment includes use of any and all tools and equipment not separately listed.

4. Only one mobilization charge shall be included per written project assignment order. The charge shall be determined based on the applicable Lump Sum above.

5. Equipment not on the list shall be compensated at the hourly rates contained in the applicable version of the California Department of Transportation Division of Construction “Labor Surcharge and Equipment Rental Rates.”

6. Each year on July 1, beginning in 2025, unit prices will be adjusted by up to the percentage listed in the Consumer Price Index for All Urban Consumers for the San Francisco-Oakland-Hayward region (CPI-U) using the 12-month change in April. This adjustment will be documented each year through a signed letter from the City to the Contractor.

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $5,000,000 per occurrence/**$10,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $2,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$2,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability".
4. Professional Liability/Errors and Omissions:
   $1,000,000 per occurrence.
5. Pollution Liability:
   $2,000,000 per occurrence.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special

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limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

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AGREEMENT FOR SERVICES

THIS AGREEMENT is made and entered into this day of , 2024, by and between the City of Livermore ("City"), a municipal corporation, and Platinum Pipeline, Inc. ("Contractor"), a California corporation.

RECITALS

City requires on-call services for the repair and/or replacement of potable water, recycled water, wastewater, and storm water facilities.

Contractor warrants it possesses the distinct skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Contractor acknowledges City has relied upon these warranties to retain Contractor.

AGREEMENT

NOW, THEREFORE, City and Contractor hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Contractor. City hereby retains Contractor, and Contractor hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Contractor and its employees are not City officers or employees. Contractor is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Contractor shall provide services to repair and/or replace potable water. recycled water, wastewater, and stormwater facilities on an on-call basis as more particularly set forth in Exhibit "A" (collectively "the Services").

4. Contractor's Responsibilities. Contractor shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Contractor to practice its profession and to provide the Services;

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(e) Comply with all laws in effect that are related to Contractor and the Services;

(f) Coordinate the Services with Michael Wells, Public Works Supervisor or David Lennier, Water Distribution Operations Manager ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Contractor by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Contractor's invoice shall be in writing and describe the Services performed for the payment requested. Contractor shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Contractor and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Contractor shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Contractor shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Contractor and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Contractor shall correct, at its own expense, all errors in the Services. Should Contractor fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Contractor;

(l) If applicable, Contractor shall ensure that all work for compensation is taken in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Contractor shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Contractor shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Contractor's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as applicable regulations and guidelines issued pursuant to the ADA.

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5. Compensation and Payment.

(a) The total compensation payable by City to Contractor for the Services **SHALL NOT EXCEED** the sum of $2,400,000.00 ("not-to-exceed amount"). City shall compensate Contractor for the Services rendered at the hourly rates or task amounts set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates or task amounts are intended to be Contractor's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, travel expenses, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Contractor, its agents, and employees to provide the Services.

(b) City shall pay Contractor no later than 30 days after City receives a written invoice from Contractor and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 8, 2024, and terminates upon the completion of the Services or June 30, 2027, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Contractor at least 30 calendar-days written notice. Upon receipt of a termination notice, Contractor shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Contractor in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Contractor in the performance of the Services are City's property and Contractor shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Contractor for City under this Agreement are works made for hire, and Contractor shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Contractor agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Contractor to City and Contractor obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

10. Confidentiality. Contractor shall not disclose any confidential or proprietary information received from City to anyone except Contractor's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

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11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Contractor shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the services contemplated by this Agreement, or in connection with Contractor's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Contractor's obligations to hold harmless, indemnify, and defend shall not be excused because of Contractor's inability to evaluate Liability or because Contractor evaluates Liability and determines that Contractor is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Contractor must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Contractor's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Contractor's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Contractor shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Contractor shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Contractor's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Contractor for, the Services does not release Contractor from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Contractor's responsibility or liability by City for any defect or error in the Services.

15. Conflict of Interest. Contractor represents that no City employee or official has a financial interest in Contractor. Contractor shall not offer, encourage, or accept any financial interest in any part of Contractor's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private

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party, Contractor represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Contractor shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Contractors' financial interest. While it is Contractor's sole responsibility to evaluate its conflicts of interest, the Contractor nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other Contractors to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Contractor shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty percent or more in the ownership or control of Contractor constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Contractor must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Water Resources Division Manager
City of Livermore
101 W. Jack London Blvd.
Livermore, California 94551

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TO CONTRACTOR: Attention: Scott Smith
Platinum Pipeline, Inc.
PO Box 1170
Livermore, CA 94551

23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONTRACTOR: **Dated:**

DocuSigned by:
Lisa deFreitas Sundberg
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7/3/2024 | 7:29 AM PDT

By: Lisa DeFreitas Sundberg
Title: Chief Financial Officer

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Tara Mazzanti
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Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

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Risk Manager/Analyst

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2. Safety
   a) Contractor shall follow all applicable safety rules and regulations.
   b) Contractor shall provide all necessary safety equipment.
   c) City staff may be present during and monitor all aspects of the work.
   d) City reserves the right to halt work at any time for noncompliance with this agreement, or unsafe work conditions or practices.
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   f) Contractor shall notify Underground Service Alert prior to any machine digging and comply with all applicable laws and regulations.
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   a) All debris or spoils generated by the work of Contractor shall be properly disposed of by Contractor.

4. Quality of Work
   a) Contractor must provide sufficient and competent administration, staff, and skilled workforce necessary to perform and timely complete the services. Before starting, Contractor must designate in writing and provide complete contact information, including phone numbers and email address, for the officer or employee in Contractor's organization who is to serve as Contractor's primary representative for this agreement, and who has authority

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a) Labor, equipment, and vehicles shall be compensated at the rates below.

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Project Manager	HOUR	$172.80	$259.20
Foreman/Superintendent		$128.84	$166.48
Equipment Operator		$121.50	$157.43
Carpenter		$96.62	$123.79
Cement Mason		$96.62	$123.79
Laborer		$96.62	$123.79

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(when appropriate) in order to be compensated for materials, supplies, and parts.

c) Hand tools and incidental materials are deemed to be included within the rates for labor, equipment, and markup for materials above. No additional compensation shall be granted.

RATE SCHEDULE	UNIT OF MEASURE	REGULAR TIME UNIT PRICE	OVERTIME UNIT PRICE
EQUIPMENT			
Compaction equipment: Wacker/jumping jack/vibraplate	HOUR	$22.00	[redacted]
Skid steer loader (w/necessary attachments, Bobcat or equivalent)		$43.79	
Mini excavator (w/necessary attachments, CAT304 or equivalent)		$71.00	
Excavator (w/necessary attachments, CAT 321 or equivalent)		$147.95	
Skip Loader (w/necessary attachments, CAT 414 or equivalent)		$56.00	
Backhoe (w/necessary attachments, Case 580E or equivalent)		$61.00	
Vibratory smooth drum roller (24-inch)		$31.00	
Compressor – 150 cfm or similar		$31.00	
HydroVac truck		$395.00	
Traffic arrow board		$17.00	
Dump Truck (5 yard or comparable)		$105.00	
Service Truck (pickup truck w/utility body)		$42.00	
OTHER ITEMS			
Mobilization cost per task order	LS	$1,850.00	[redacted]
Markup for subcontractor work	%	5	
Markup for materials and parts	%	10	

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EXHIBIT A
SCOPE OF WORK

d) provide invoices or receipts in order to be compensated for the work of subcontractors.

2. Hourly rates for labor and equipment must include all wages, fringe benefits, and markup/overhead. Hourly rates shall be the only rates used for cost estimate and billing.
3. Hourly rate for Equipment includes use of any and all tools and equipment not separately listed.
4. Only one mobilization charge shall be included per written project assignment order. The charge shall be determined based on the applicable Lump Sum above.
5. Equipment not on the list shall be compensated at the hourly rates contained in the applicable version of the California Department of Transportation Division of Construction “Labor Surcharge and Equipment Rental Rates.”

6. Each year on July 1, beginning in 2025, unit prices will be adjusted by up to the percentage listed in the Consumer Price Index for All Urban Consumers for the San Francisco-Oakland-Hayward region (CPI-U) using the 12-month change in April. This adjustment will be documented each year through a signed letter from the City to the Contractor.

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $5,000,000 per occurrence/**$10,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $2,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$2,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability".
4. Professional Liability/Errors and Omissions:
   $1,000,000 per occurrence.
5. Pollution Liability:
   $2,000,000 per occurrence.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special

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limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.10**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution awarding and authorizing the execution of an agreement with Environmental Logistics, Inc. for services to remove, clean, and dispose of hazardous and non-hazardous materials for a three-year term in an amount not-to-exceed $775,000.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution awarding and authorizing the execution of an agreement with Environmental Logistics, Inc. for services to remove, clean, and dispose of hazardous and non-hazardous materials for a three-year term in an amount not-to-exceed $775,000.

SUMMARY

The Public Works Department regularly utilizes an outside contractor to perform special materials management services including the identification, classification, hauling, shipping, and disposal of hazardous and non-hazardous waste. In addition to these services, the Water Resources Division also requires a contractor who can respond to emergencies to mitigate sewer spills and illicit discharges.

DISCUSSION

The Public Works Department operates various infrastructure and facilities that require the removal and disposal of specialized waste streams. This includes waste oil from fleet and equipment maintenance, the maintenance of oil/water separators, the removal of waste from the Water Reclamation Plant laboratory, and emergency services to abate sewer spills and illicit discharges into the City's storm drain system.

Staff completed a formal bid process in March 2024 to select a provider for these services. Two submissions were received, but one was disqualified for being incomplete. Environmental Logistics, Inc. represents the best value bid and is able to meet the needs of the Public Works Department.

FISCAL AND ADMINISTRATIVE IMPACTS

The FY 2024-25 operating budget includes the expected annual expenditures of approximately $258,000

in the Wastewater Enterprise Fund (620) and the Fleet and Equipment Services Internal Service Fund (730). Funding for FY 2025-26 and FY 2026-27 will be included in future budget proposals. Staff does not anticipate any administrative impacts or impacts to any other City Fund due to approval of this agreement.

COMMUNITY PILLARS

1: A Safe Community That Thrives

GOALS

11: Operate and maintain municipal water systems that provide safe, efficient delivery of potable and recycled water, collect and treat wastewater, and comply with all federal, state, and local regulations.

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement

Prepared by: Laura Mayate-DeAndreis
Management Analyst II

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AWARDING AND AUTHORIZING THE EXECUTION OF A GENERAL SERVICES AGREEMENT TO/WITH ENVIRONMENTAL LOGISTICS, INC. FOR SERVICES TO REMOVE, CLEAN, AND DISPOSE OF HAZARDOUS AND NON-HAZARDOUS MATERIALS FOR A THREE-YEAR TERMIN AN AMOUNT NOT-TO-EXCEED $775,000

The City of Livermore ("City") Public Works Department operates certain infrastructure and facilities that require the removal and disposal of specialized waste streams. The Public Works Department requires an outside contractor to perform special materials management services for the City, including removal and disposal of hazardous and non-hazardous materials from the Water Reclamation Plant, Maintenance Service Center, and City fuel stations.

The City advertised and received two bids for services to remove, clean, and dispose of hazardous and non-hazardous materials, Request for Bid No. 4261. Pursuant to Livermore Municipal Code sections 2.68.370 and 2.68.040, City staff reviewed the bids and determined that Environmental Logistics, Inc. is the best value bidder based on the cost and the ability, capacity, and skill of the contractor to provide the services requested.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Awards to Environmental Logistics, Inc. the general services agreement, attached hereto as Exhibit A, for services to remove, clean, and dispose hazardous and non-hazardous materials, in an amount not-to-exceed $775,000 for a three-year term.

2. Authorizes the City Manager, or her designee, to execute the general services agreement with Environmental Logistics, Inc., attached hereto as Exhibit A, for services to remove, clean, and dispose of hazardous and non-hazardous materials, in an amount not-to-exceed $775,000 for a three-year term.

3. Authorizes the City Manager, or her designee, to take whatever actions are necessary and appropriate to carry out the purpose and intent of this resolution, including approving minor changes to the proposed agreement.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Molly O'Toole
Molly O'Toole
Deputy City Attorney

Exhibit A – General Services Agreement with Environmental Logistics, Inc.

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AGREEMENT FOR SERVICES

THIS AGREEMENT is made and entered into this day of , 2024, by and between the City of Livermore ("City"), a municipal corporation, and Environmental Logistics, Inc. ("Contractor"), a California corporation with California Secretary of State File No. 2857306.

RECITALS

City requires services to remove, clean, and dispose of hazardous and non-hazardous materials.

Contractor warrants it possesses the distinct skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Contractor acknowledges City has relied upon these warranties to retain Contractor.

AGREEMENT

NOW, THEREFORE, City and Contractor hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Contractor. City hereby retains Contractor, and Contractor hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Contractor and its employees are not City officers or employees. Contractor is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Contractor shall provide services to remove, clean, and dispose of hazardous and non-hazardous materials on a scheduled or as-needed basis as more particularly set forth in Exhibit "A" (collectively "the Services").

4. Contractor's Responsibilities. Contractor shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

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(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Contractor to practice its profession and to provide the Services;

(e) Comply with all laws in effect that are related to Contractor and the Services;

(f) Coordinate the Services with Jason Calkins, Public Works Maintenance Supervisor; Kevin Kolte, Water Resources Maintenance Supervisor; Michael Wells, Collections System Supervisor; Kumudini Dharmawardana, Laboratory Supervisor; and Steven Aguiar, Environmental Compliance Supervisor ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Contractor by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Contractor's invoice shall be in writing and describe the Services performed for the payment requested. Contractor shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Contractor and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Contractor shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Contractor shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Contractor and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Contractor shall correct, at its own expense, all errors in the Services. Should Contractor fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Contractor;

(l) If applicable, Contractor shall ensure that all work for compensation is taken in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Contractor shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Contractor shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each laborer, worker, or

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mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Contractor's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as applicable regulations and guidelines issued pursuant to the ADA.

5. Compensation and Payment.

(a) The total compensation payable by City to Contractor for the Services **SHALL NOT EXCEED** the sum of $775,000 ("not-to-exceed amount"). City shall compensate Contractor for the Services rendered at the hourly rates or task amounts set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates or task amounts are intended to be Contractor's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, travel expenses, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Contractor, its agents, and employees to provide the Services.

(b) City shall pay Contractor no later than 30 days after City receives a written invoice from Contractor and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 1, 2024, and terminates upon the completion of the Services or June 30, 2027, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Contractor at least 30 calendar-days written notice. Upon receipt of a termination notice, Contractor shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Contractor in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Contractor in the performance of the Services are City's property and Contractor shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Contractor for City under this Agreement are works made for hire, and Contractor shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Contractor agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Contractor to City and Contractor obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

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10. Confidentiality. Contractor shall not disclose any confidential or proprietary information received from City to anyone except Contractor's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Contractor shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the services contemplated by this Agreement, or in connection with Contractor's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Contractor's obligations to hold harmless, indemnify, and defend shall not be excused because of Contractor's inability to evaluate Liability or because Contractor evaluates Liability and determines that Contractor is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Contractor must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Contractor's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Contractor's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Contractor shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Contractor shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Contractor's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Contractor for, the Services does not release Contractor from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Contractor's responsibility or liability by City for any defect or error in the Services.

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15. Conflict of Interest. Contractor represents that no City employee or official has a financial interest in Contractor. Contractor shall not offer, encourage, or accept any financial interest in any part of Contractor's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private party, Contractor represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Contractor shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Contractors' financial interest. While it is Contractor's sole responsibility to evaluate its conflicts of interest, the Contractor nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other Contractors to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Contractor shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty percent or more in the ownership or control of Contractor constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Contractor must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

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22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Water Resources Division Manager
City of Livermore
101 W. Jack London Blvd.
Livermore, California 94551

TO CONTRACTOR: Attention: Marcial Barragan
P.O. Box 806
Colton, CA 92324

23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

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In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONTRACTOR: **Dated:**

DocuSigned by:
Marcial Barragan
39B57404607443E...

7/10/2024 | 1:50 PM PDT

By: Marcial Barragan
Title: General Manager

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Molly O'Toole
A006EFED3B6E4A5...

Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

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EXHIBIT A
SCOPE OF WORK

Contractor shall provide all necessary labor, materials, equipment, and supplies to perform the following services as scheduled or as needed:

Public Works Maintenance and Fleet Services

1. Dispose of used motor oil, crushed oil filters, and used engine coolant.
2. Dispose of 55-gallon drums of waste emulsion oil/diesel a minimum frequency of every six-months.
3. Pump out approximately seven oil and sand separators annually in accordance with the City's Stormwater Pollution Prevention Plan ("SWPPP"), with one separator to be pumped out twice per year.

Water Resources Division

1. Hazardous waste handling, transportation, and disposals from the plant.
2. Pump out and disposal of UST (industrial waste oil) at the plant.
3. Collection system oil/water separator inspection and cleaning.
4. Spill mitigation from sewer spills or illicit discharge.
5. Emergency spill response and mitigation from streets and storm drains.
6. Disposal of laboratory hazardous waste (5-gallon containers of acids, bases, volatiles, flammables, solid chemicals).
7. Disposal of laboratory E-waste.

Work Locations

- City fuel stations (various locations)
- City Water Reclamation Plant
- Anywhere within the city limits of the City of Livermore

CONTRACTOR RESPONSIBILITIES

1. All employees of Contractor shall wear uniforms or badges clearly identifying them as employees of Contractor all times while completing work.
2. Contractor shall follow all applicable safety rules and regulations, and comply with all laws, rules, and regulations.
3. Contractor shall allow City staff to be present during and monitor all aspects of the work.
4. City reserves the right to halt work at any time for noncompliance with this agreement, or unsafe work conditions or practices.
5. Contractor shall keep worksites reasonably clear of debris and protect the safety and health of the public and City employees at all times.

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EXHIBIT A
SCOPE OF WORK

6. Contractor shall properly transport and dispose of all materials collected and debris or spoils generated by the work of Contractor in compliance with all laws, rules, and regulations.
7. Contractor shall provide any necessary traffic control measures to ensure the safety of the public.
8. Contractor shall properly classify the materials collected and complete any necessary hazardous material manifest or related paperwork as required and in compliance with all laws, rules, and regulations.
9. Regular Time (RT) is defined as the first 8 hours of work in a given workday.
10. Over Time (OT) is defined as work in excess of an eight-hour workday (up to twelve hours) or the first eight hours worked on Saturday.
11. Premium Time (PT) is defined as work in excess of twelve hours in a workday, work in excess of eight hours on a Saturday or any work performed on Sunday or the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

COMPENSATION

1. Personnel rates will be charged portal to portal from the Contractor's Hayward office location.

2. A minimum of four hours per person or piece of equipment shall be charged for all callouts.

3. City shall compensate Contractor for items, personnel, equipment, materials, and drum disposal in this scope of work at the stated rates listed above.

4. Contractor must provide receipts or invoices for all subcontractors (should the City provide written consent for Contractor to utilize subcontractors pursuant to Section 18 of the Agreement), equipment, and materials not listed in the rate sheets which are used in order to be eligible for payment on those items.

5. Surcharges of 9.7% for energy and 2.9% for insurance shall be applied to all labor and materials costs.

6. Equipment listed at a day rate that is operated for more than 12 consecutive hours will be charged at twice the day rate.

7. City shall compensate Contractor for cleaning and/or decontamination of equipment used in the performance of duties under this agreement. Cleaning and decontamination of equipment shall be done in compliance with all laws, rules, and regulations.

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EXHIBIT A
SCOPE OF WORK

8. Drum disposal rates above do not include transportation to the disposal facility, which shall be billed in accordance to the hourly personnel and vehicle rates listed above.

9. Drum disposal rates apply to general waste descriptions. Any waste streams not listed will be billed at documented cost plus 20%.

10. Each year on July 1, beginning in 2025, unit prices will be adjusted by the percentage listed in the Consumer Price Index for All Urban Consumers for the Francisco-Oakland-Hayward region (CPI-U) using the prior year's CPI-U rate in April. This adjustment will be documented each year through a signed letter from the City to the Contractor.

11. City shall compensate Contractor according to the following rates:

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ENVIRONMENTAL LOGISTICS

3200 Depot Road Hayward, Ca 94541

Phone: 510.670.9901 Fax:510.670.9904

DESCRIPTION OF SERVICES DISPOSAL	CONTAINER SIZE	
RCRA Flammable Liquid(s) 	5 Gal Lab Pack	$ 225.00
	5 Gal Bulk	$ 225.00
	15 Gal Lab Pack	$ 250.00
	15 Gal Bulk	$ 250.00
	30 Gal Lab Pack	$ 350.00
	30 Gal Bulk	$ 300.00
	55 Gal Lab Pack	$ 450.00
	55 Gal Bulk	$ 325.00
	55 Gal > 12 K btu <1% H2O <100 ppm Cl	$ 275.00
	55 Gal <12 K btu >10% H2O <1000 ppm Cl	$ 325.00
	55 Gal <8 K btu >10% H2O >1000 ppm Cl	$ 375.00
	85 Gal Bulk	$ 475.00
	Cubic Yard Box	$ 1,250.00
RCRA Flammable Solid(s) 	5 Gal Lab Pack	$ 225.00
	15 Gal Lab Pack	$ 275.00
	30 Gal Lab Pack	$ 325.00
	55 Gal Lab Pack	$ 400.00
	Cubic Yard Box	$ 1,250.00
Toxic Liquids/ Solids 	5 Gal Lab Pack	$ 225.00
	15 Gal Lab Pack	$ 300.00
	30 Gal Lab Pack	$ 400.00
	55 Gal Lab Pack	$ 450.00
	Cubic Yard Box	$ 1,575.00
Corrosive Liquids/ Solids 	5 Gal Lab Pack	$ 225.00
	15 Gal Lab Pack	$ 250.00
	15 Gal Bulk	$ 300.00
	30 Gal Lab Pack	$ 295.00
	30 Gal Bulk	$ 345.00
	55 Gal Lab Pack	$ 375.00
	55 Gal Bulk	$ 425.00
	Tote	$ 1,312.50
	Cubic Yard Box	$ 1,312.50

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EXHIBIT A

DESCRIPTION OF SERVICES DISPOSAL	CONTAINER SIZE	STANDARD
Oxidizer Liquid/ Solids 	5 Gal Lab Pack	$ 275.00
	15 Gal Lab Pack	$ 325.00
	30 Gal Lab Pack	$ 375.00
	55 Gal Lab Pack	$ 490.00
Reactive Liquids/Basics for incineration 	5 Gal Lab Pack	$ 325.00
	15 Gal Lab Pack	$ 375.00
	30 Gal Lab Pack	$ 475.00
	55 Gal Lab Pack	$ 575.00
Mercury Elemental/Compounds/Debris 	5 Gal	$ 475.00
	15 Gal	$ 575.00
	30 Gal	$ 1,100.00
	55 Gal Debris	$ 1,250.00
	55 Gal Elemental	$ 2,950.00
Class 9 Liquid(s)/Solid(s) 	5 Gal	$ 225.00
	15 Gal	$ 250.00
	30 Gal	$ 275.00
	55 Gal	$ 325.00
	Cubic Yard Box	$ 1,137.50
PCB's Ballast 	5 Gal	$ 275.00
	15 Gal	$ 325.00
	30 Gal	$ 425.00
	55 Gal	$ 525.00
Non PCB's Ballast / Capacitors 	5 Gal	$ 95.00
	15 Gal	$ 125.00
	30 Gal	$ 15.00
	55 Gal	$ 175.00
Pesticides 	5 Gal	$ 225.00
	15 Gal	$ 325.00
	30 Gal	$ 425.00
	55 Gal	$ 525.00
Combustible Liquid 	5 Gal	$ 100.00
	15 Gal	$ 150.00
	30 Gal	$ 175.00
	55 Gal	$ 225.00
	85 Gal	$ 275.00
	Tote	$ 575.00
Gasoline-Water Mix 	5 Gal	$ 175.00
	15 Gal	$ 225.00
	30 Gal	$ 275.00
	55 Gal	$ 325.00
	Tote	$ 975.00

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EXHIBIT A

DESCRIPTION OF SERVICES DISPOSAL	CONTAINER SIZE	STANDARD
Oil Based Paint <3" sludge (Paint Related Material) 	5 Gal Lab Pack	$ 225.00
	5 Gal Bulk	$ 225.00
	15 Gal Lab Pack	$ 250.00
	15 Gal Bulk	$ 250.00
	30 Gal Lab Pack	$ 275.00
	30 Gal Bulk	$ 275.00
	55 Gal Lab Pack	$ 425.00
	55 Gal Bulk	$ 425.00
	Cubic Yard Box	$ 1,250.00
Latex Paint 	5 Gal L/P	$ 100.00
	5 Gal	$ 100.00
	15 Gal L/P	$ 150.00
	15 Gal	$ 150.00
	30 Gal L/P	$ 175.00
	30 Gal	$ 175.00
	55 Gal L/P	$ 225.00
	55 Gal	$ 225.00
	Cubic Yard Box L/P	$ 495.00
	Pallet	$ 495.00
	12 yd Bin	$ 1,500.00
Aerosols 	5 Gal	$ 95.00
	15 Gal	$ 125.00
	30 Gal	$ 195.00
	55 Gal	$ 250.00
	Cubic Yard Box	$ 1,250.00
Misc Batteries 	Pound	$ 1.75
	5 Gal	($100 Min)
	15 Gal	($200 Min)
Ni-Cad, NiMH Batteries 	Pound	$ 6.50
	5 Gal	($100 Min)
	15 Gal	($200 Min)
Lithium Ion Batteries  	Pound	$ 10.00
	5 Gal	($100 Min)
	15 Gal	($200 Min)
Lead Acid Batteries  	5 Gal	$ 75.00
	15 Gal	$ 95.00
	30 Gal	$ 125.00
	55 Gal	$ 225.00
Large Cell Lead Acid Batteries	Each	$ 3.00
Lantern Batteries	Pound	$ 1.75
Alkaline, Zinc-Carbonaire Batteries 	5 Gal	$ 100.00
	15 Gal	$ 140.00
	30 Gal	$ 240.00
	55 Gal	$ 310.00

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EXHIBIT A

DESCRIPTION OF SERVICES DISPOSAL	CONTAINER SIZE	STANDARD
Car/ Marine Battery	Each	$ 35.00
Flourescent Tubes	Foot	$ 0.20
Flourescent Bulbs	Each	$ 1.50
Flood Lamps	Each	$ 1.50
U-Lamps, Circular Lamps	Each	$ 1.50
Neon, Ultra-Violet Lamps	Each	$ 5.00
High Pressure/ LP Sodium Vapor, Metal Halide, Mercury Vapor (HID's) Lamps	Each	$ 6.50
E-Waste	5 Gal	$ 75.00
	15 Gal	$ 100.00
	30 Gal	$ 125.00
	55 Gal	$ 175.00
	Cubic Yard Box	$ 375.00
	Pallet	$ 375.00
Transformer (No Oil) (Price varies based on size)	Each	$ 250.00
Smoke Detectors	Each	$ 50.00
Exit Signs (If Double Sided $160)	Each	$ 80.00
Refrigerator Applience	Each	$ 125.00
Microwave/ Air Conditioner Applience	Each	$ 125.00
Fire Extinguisher(s)	Each	$ 35.00
Gas Cylinders (Quart Size)	Each	$ 50.00
Gas Cylinders	Each	$ 100.00
Gas Cylinders (2 ft)	Each	$ 225.00
Gas Cylinders (5 ft)	Each	$ 275.00
Car/ Truck Tires	Each	$15 - $35
Dental Amalgam ($100 Min)	Pound	$ 15.00
Pathological Waste	44 Gal	$ 275.00
Biohazardous Waste	44 Gal	$ 250.00
Shavings/Metal Dust (Non-RCRA)	5 Gal	$ 100.00
	15 Gal	$ 135.00
	30 Gal	$ 150.00
	55 Gal	$ 195.00
Empty Containers (Disposal)	5 Gal	$ 10.00
	15 Gal	$ 25.00
	30 Gal	$ 35.00
	55 Gal	$ 50.00
	85 Gal	$ 65.00
Non RCRA and Non Haz Commodity Packs/Lab Pack (lab	5 Gal	$ 100.00
	15 Gal	$ 50.00
	30 Gal	$ 195.00
	55 Gal	$ 250.00
	85 Gal	$ 325.00
	Cubic Yard Box	$ 675.00

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EXHIBIT A

DESCRIPTION OF SERVICES DISPOSAL	CONTAINER SIZE	STANDARD
Non RCRA Waste Solid/Liquid	5 Gal	$ 100.00
	15 Gal	$ 150.00
	30 Gal	$ 195.00
	55 Gal	$ 250.00
	85 Gal	$ 325.00
	Tote	$ 675.00
	Cubic Yard Box	$ 675.00
Non RCRA Bulk Liquid (*$750 minimum)	Gal	$ 1.25
	Solid Surcharge - Gal	$ 3.00
Non RCRA Bulk Solid ($750 Min.)	Yard/Ton (greater)	$ 125.00
Non Hazardous Waste Solid or Liquid	5 Gal	$ 75.00
	15 Gal	$ 100.00
	30 Gal	$ 125.00
	55 Gal	$ 175.00
	85 Gal	$ 225.00
	Tote	$ 525.00
	Cubic Yard Box	$ 525.00
Non Hazardous Bulk Liquid (*$650 minimum)	Gal	$ 1.05
	Solid Surcharge - Gal	$ 2.00
Non Hazardous Bulk Solid	Yard/Ton (greater)	$ 95.00
Non Hazardous Bulk Solid Debris ($650 Min)	Yard/Ton (greater)	$ 95.00
Discrepancy	Profiled at Hazmat TSDF	$ 35.00
	Profiled for RCRA	$ Varies

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EXHIBIT A

EQUIPMENT & SUPPLIES	UNIT	RATE
Package Group I Container	Each	$ 100.00
5 Gal Carboy	Each	$ 25.00
5 Gal Poly w/ Screw Top Lid	Each	$ 35.00
15 Gal Poly Drum	Each	$ 85.00
30 Gal Poly Drum	Each	$ 95.00
55 Gal Poly Drum	Each	$ 100.00
15 Gal Fiber Drum	Each	$ 85.00
30 Gal Fiber Drum	Each	$ 90.00
55 Gal Fiber Drum	Each	$ 95.00
15 Gal Steel DOT Drums	Each	$ 85.00
30 Gal Steel DOT Drums	Each	$ 90.00
55 Gal Steel DOT Drums	Each	$ 100.00
55 Gal Steel DOT Drum	Each	$ 100.00
55 Gallon 17C PCB Drum	Each	$ 175.00
48 Gal Biohazard Tub	Each	$ 75.00
85 Gal Steel Overpack	Each	$ 195.00
85 Gal Poly Overpacl	Each	$ 225.00
4 Ft Light Tube Drum	Each	$ 110.00
8 Ft Light Tube Drum	Each	$ 110.00
Cubic Yard Box w/ kit	Each	$ 150.00
Cubic Yard Box Liners	Each	$ 15.00
Roll Off Bin Liners	Each	$ 75.00
End Dump Liners	Each	$ 100.00
Drum Liners	Each	$ 20.00
Drum Liner Roll	Roll	$ 150.00
Visqueen/ Plastic Sheeting Roll (100 ft)	Roll	$ 150.00
Asbestos Liners	Each	$ 20.00
Shrink Wrap Roll	Roll	$ 50.00
Bung Caps	Each	$ 5.00
Drum Lids	Each	$ 25.00
Drum Ring & Bolt	Each	$ 25.00
Totes	Each	$ 195.00
Pallet (Wood)	Each	$ 35.00
Pallet Jack	Per Day, Per Job	$ 25.00
Drum Grabber/ Rotator	Per Day, Per Job	$ 205.00
Drum Sling	Per Day, Per Job	$ 15.00
Drum Dolly	Per Day, Per Job	$ 25.00
Drum Funnel	Per Day, Per Job	$ 50.00
Bung Wrench	Per Day, Per Job	$ 20.00
Speed Wrench	Per Day, Per Job	$ 20.00
Squegees	Each	$ 38.00
Scrapers	Each	$ 38.00
Pickaxe	Each	$ 38.00
Shovels	Each	$ 38.00
Brooms	Each	$ 38.00

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EXHIBIT A

EQUIPMENT & SUPPLIES	UNIT	RATE
Mops	Each	$ 25.00
Mop Bucket	Each	$ 25.00
Tool Usage (Broom Use ect...)	Per Day, Per Job	$ 8.00
Misc Tools	Requirement	Open
Rope 1/2" X 100' Poly Roll	Each	$ 75.00
Ladder	Per Day, Per Job	$ 45.00
Sawzall	Per Day, Per Job	$ 100.00
Skill Saw	Per Day, Per Job	$ 100.00
Chainsaw	Per Day, Per Job	$ 250.00
Rivet Buster	Per Day, Per Job	$ 250.00
Air Compressor 175 CFM Tow Behind Unit	Per Day, Per Job	$ 500.00
Power Generator 8000 Watts	Per Day, Per Job	$ 250.00
Portable Light Stands	Per Day, Per Job	$ 175.00
Flood Light	Per Day, Per Job	$ 45.00
Banding Machine	Per Day, Per Job	$ 45.00
30" High Pressure Surface Concrete Cleaner	Per Day, Per Job	$ 300.00
Drum Vacuum Wet/ Dry	Per Day, Per Job	$ 250.00
Mercury Hepa Vacuum	Per Day, Per Job	$ 1,200.00
Electric Stinger Pump	Per Day, Per Job	$ 150.00
Diaphram Pump	Per Day, Per Job	$ 175.00
Electric/ Commercial Fan	Per Day, Per Job	$ 50.00
Hand Pump (Disposable)	Each	$ 50.00
Coliwasa Tubes 6 ft	Each	$ 85.00
Coliwasa Tube 9 ft	Each	$ 90.00
Guzzler Flex Hose 6"	Feet	$ 6.50
Guzzler 5 Micron Bag Filters Set	Each	$ 1,250.00
Boom/ Socks (8" x 10')	Per ft	$ 6.50
Absorbent Pads	Bundle	$ 175.00
Rags	Bundle	$ 100.00
Vermiculite	Each	$ 30.00
Absorbent	Each	$ 25.00
Sand Bags	Each	$ 20.00
Caustic Soda, Lye (Sodium Hydroxide)	Each	$ 100.00
Soda Ash (Sodium Carbonate)	Each	$ 65.00
10 lb Baking Soda (Sodium Bicarbonate)	Each	$ 45.00
Boric Acid	Each	$ 75.00
Sample Jars	Each	$ 10.00
Hudson Sprayer	Each	$ 35.00
Small Hand Sprayer	Each	$ 5.00
Drinking Water (Case)	Each	$ 36.00
Drinking Water (16 oz)	Each	$ 1.50
Simple Green	Gallon	$ 15.00
Bleach	Gallon	$ 12.50
Dawn Soap	Each	$ 15.00
Gold Crew P2	Gallon	$ 50.00

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EXHIBIT A

EQUIPMENT & SUPPLIES	UNIT	RATE
Diesel	Gallon	$ 7.50
Power Wash Cleaner/ Penetone	Gallon	$ 50.00
F9 Barc Acid Stain Remover	Gallon	$ 65.00
Cooking Oil	Gallon	$ 25.00
Vinegar	Gallon	$ 15.00
Dry Ice	Lbs	$ 3.50
Epoxy Plug Putty	Each	$ 25.00
Caution Tape	Each	$ 50.00
Duct Tape	Each	$ 15.00
Digital Camera	Day	$ 35.00
Cell Phone	Day	$ 50.00
PH Strips	Each	$ 25.00
Adheisive Spray	Each	$ 15.00
Sampling Processing, Packaging & Shipping	Day	$ 140.00
Initial Waste Streams	Day	$ 85.00
Hazardous Labels	Each	$ 5.00
Manifest	Each	$ 35.00
Bill of Lading	Each	$ 15.00
Chain of Custody	Each	$ 5.00
Emergency Profile	Each	$ 250.00
Digital Report	Per Job	$ 250.00
Lock Out Tag Out	Day	$ 250.00
Confined Space Air Blower	Day	$ 250.00
Confined Space Tripod	Day	$ 250.00
Confined Space Extraction Tripod	Day	$ 500.00
Confined Space Entry Permit	Per Job (8Hrs)	$ 250.00
Confined Space Rescue Equipment	Day	$ 750.00
Confined Space Equipment Trailer	Day	$ 1,500.00
Safety Harness	Day	$ 45.00
Life Line (100')	Day	$ 150.00
Intrinsic Communication Radios	Day	$ 250.00
LEL Meters	Per Day, Per Job	$ 350.00
Lumex Mercury Meter	Per Day, Per Job	$ 2,250.00
Mercury Vapor Analyzer	Per Day, Per Job	$ 500.00
Organic Vapor Analyzer, PID, HNU Meter	Per Day, Per Job	$ 275.00
Radiation Detector	Per Day, Per Job	$ 1,250.00
Haz Cat Kit	Day	$ 450.00
Draeger Pump	Day	$ 65.00
Draeger Tubes	Each	$ 10.00
Portable Spill Containment	Day	$ 750.00
Decon Pool	Day	$ 125.00
Portable Eye Wash Station	Day	$ 150.00
Chemical Transfer Trailer	Day	$ 2,500.00
Breathing Air Trailer	Day	$ 5,000.00
Breathing Air (224 Cubic Ft Cylinder)	Each	$ 250.00

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EXHIBIT A

EQUIPMENT & SUPPLIES	UNIT	RATE
SCBA/Standby	Each	$ 125.00
Air Chisel	Day	$ 375.00
Level A Personal Protective Equipment	Per Day, Per Man	$ 1,000.00
Level B Personal Protective Equipment	Per Day, Per Man	$ 250.00
Level C Personal Protective Equipment	Per Day, Per Man	$ 100.00
Level D Personal Protective Equipment	Per Day, Per Man	$ 45.00
OV/AG Respirator Cartridges	Each	$ 65.00
Saranex	Each	$ 250.00
Tyvek (Yellow Poly)	Each	$ 65.00
Tyvek (White)	Each	$ 45.00
Dust Mask	Each	$ 7.50
Black PVC Gloves	Each	$ 6.75
Leather Gloves	Each	$ 7.50
Latex Gloves	Box	$ 35.00
Safety Glasses	Each	$ 12.50
Ear Plugs	Each	$ 4.00
Waders	Each	$ 150.00
Black Iron Tanker Washout	Each	$ 650.00
Stainless Tanker Washout (Chemical)	Each	$ 1,250.00
Trailer Door Seal	Each	$ 5.00
Plywood Heat Treated (4x8X11/4)	Each	$ 150.00
Dunnage Wood ISPM 15 (2x6x8)	Each	$ 25.00
Barricades/ Traffic Cones	Each, Per Day	$ 15.00
Temporary Fence	Total	Cost + 30%
Small Bin Rental (3-1/2 Cubic Yards)	Month	$ 125.00
Large Bin Rental (10/20/30/40 Cubic Yards)	Day	$ 25.00
Large Bin Rental (10/20/30/40 Cubic Yards)	Month	$ 500.00
PERSONNEL	**UNIT**	**RATE**
Hazwoper Training, Rate is based on # of students	Per Hour or per student	$ 275 Or $325.00
Emergency Response Coordinator	Hour	$ 150.00
Certified Industrial Hygienist	Hour	$ 200.00
Health & Safety Officer	Hour	$ 125.00
Chemist/ Geologist	Hour	$ 125.00
Project Manager	Hour	$ 95.00
Equipment Operator (Jetter / Guzzler)	Hour	$ 75.00
Heavy Duty Equipment Operator (yellow Iron)	Hour	$ 175.00
Hazmat - Driver	Hour	$ 65.00
Hazmat - Lead Technician	Hour	$ 75.00
Hazmat - Technician	Hour	$ 60.00
Technical Support	Hour	$ 75.00
Prevailing Wage (Additional Per Hour)	Hour	$ 45.00
Field Administration Clerk	Hour	$ 75.00
Per Diem - Lodging	Per Day, Per Man	$ 175.00
Per Diem - Food	Per Day, Per Man	$ 50.00

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EXHIBIT A

VACUUM TRUCK / TRAILERS	UNIT	RATE
Tractor w/ 48 Foot Trailer	Hour	$75
Tractor w/ 48 Foot Flatbed Trailer	Hour	$75
Tractor w/ 28 ft Trailer	Hour	$65
Tractor w/ 120-130 BBL Vacuum Tanker	Hour	$75
Tractor w/ 120-130 BBL Vacuum Tanker (Stainless)	Hour	$250
70 BBL Vacuum Truck	Hour	$65
Tractor w / Rocket Launcher	Hour	$75
Single Roll Off Tractor	Hour	$70
Vactor / Guzzler	Hour	$250
Vactor Support Vehicle	Hour	$95
Jetter/ Air Shovel	Hour	$275
Water Truck	Hour	$150
Front Loader/ Backhoe	Hour	Open
Excavator w/ Thumb 70 K	Hour	Open
Skidsteer/ Bobcat	Hour	Open
End Dump (8000 lbs gvw)	Hour	Open
Forklift (4000 lb)	Hour	Open
Pressure Washer	Hour	$56
Steam Cleaner	Hour	$60
Bobtail 28 ft w/ Lift Gate	Hour	$65
Project Manager Unit	Hour	$45
Emergency Response Unit	Hour	$150
Service/ Gear Pick-Up Truck	Hour	$60
Traffic Control Equipment & Two Men Crew	8 Hour Day	$3,500
Air Gas Cylinders - torch cutting; it costs $58 to refill oxygen tanks and $68 for the acetylene $310 to buy oxy tank with no gas and $235 for acetylene with no gas		

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EXHIBIT A
SCOPE OF WORK

12. Emergency response is subject to the following pricing:

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

Toll Free:888-841-3948
Fax:909-546-1546

EXHIBIT A

GENERATOR INFORMATION		
Customer Name	City of Livermore	
Site Address	Public Works Department	
Billing Address		
Contact Name		
E-Mail Address		
Phone Number		
Purchase Order #		
Change Order #		
EPA-ID Number		

PERSONNEL

Item #	Description	Unit	Rate
GO	Geologist	Hour	195.00
CIH	Certified Industrial Hygienist	Hour	275.00
HSO	Health & Safety Officer	Hour	175.00
FC	Field Chemist	Hour	150.00
ERC	Emergency Response Coordinator	Hour	175.00
PM	Project Manager	Hour	135.00
LT	Lead Technician	Hour	100.00
FT	Field Technician	Hour	75.00
EO	Equipment Operator	Hour	100.00
DR	Commercial Driver	Hour	95.00
FAC	Field Administrator Clerk	Hour	85.00
CST	Confined Space Technician	Hour	95.00
CSRT	Confined Space Rescue Technician	Hour	150.00
LPP	Lodging Per Person	Day	200.00
PDP	Perd Diem Per Person	Hour	50.00
PW	Prevailing Wage Additional Charge	Hour	45.00

Personnel and Vehicles

1) Four Hour Minimum applies to all personnel and vehicles.

2) 1.5 Times the normal labor rate applies between 4:30 PM and 8:00 AM Monday through Friday and all day Saturday or after 8 hours at normal rates.

3) 2.0 Times the normal labor rate applies on Sunday, Holidays, and Holiday weekends and after 4 Hours of overtime.

4) Per Diem Rates for normal subsistence only. Any unusual rates such as airfare, peak hotel rates will be billed at an additional cost plus 10%

5) Time charges begin with equipment and personnel mobilizatioactivities and terminate at the conclusion of the services, including transportationofequipment and personel back to operation centers and any necessary demobilization activities. All hourly rates will be charged Portal-to Portal from the locationof personnel when dispatched.

6) 20% Environmental and Energy Surcharge Will Apply to Invoice Total

7) Prevailing Wage Project? **Yes** ☐ **No** ☐

P.O. Box 806
Colton, CA 92324

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

Toll Free:888-841-3948
Fax:909-546-1546

EXHIBIT A

EQUIPMENT, MATERIALS & SUPPLIES			
Trucks	Vactor Super Sucker / Guzzler	Hour	275.00
	Vactor 6" Flex Suction Hose	Foot	6.00
	Vactor 6'' X 10' Hard Pipe & Clamps	Each/Day	25.00
	Vactor 5 Micron Bag Filter Change-Out	Each	750.00
	Vactor Wash-Out	Each	550.00
	Vactor 2100 Plus / Jetter Combo	Hour	300.00
	Vactor/Jetter Wash-Out	Each	550.00
	Vactor / Guzzler Support Unit	Hour	85.00
	Tractor / 120bbl Vacuum Tanker - Black Iron	Hour	105.00
	Tractor / 120bbl Vacuum Tanker - Stainless Steel	Hour	185.00
	70 bbl Vacum Truck	Hour	95.00
	Tanker Wash-Out (**Varies Based on Waste Clasification and Solids Content**)	Each	TBD
	Tractor / Double Roll-off Trailer	Hour	105.00
	Single Roll-off Truck	Hour	95.00
	Tractor / Dry Van	Hour	105.00
	28' Bobtail Truck With Lift Gate	Hour	105.00
	24' Bobtail Truck With Lift Gate	Hour	95.00
	Tractor / Flat Bed Trailer	Hour	105.00
	Tractor Low Boy Trailer	Hour	150.00
	F550 - Emergency Response Unit	Hour	225.00
	F350 - Project Manager Unit	Hour	125.00
	F350 - Service Truck Unit	Hour	95.00
	F250 - Service Truck	Hour	85.00
Excavation	Mini Excavator	Day	1500.00
	Excavator, up to 37,000 Lbs.	Day	2750.00
	Excavator, Braker Attachment 1500 ft lbs.	Day	1500.00
	Excavator, Thumb or Wheel Attachment	Day	650.00
	Loader up to 4 yds.	Day	2500.00
	Backhoe 580 or Equivalent	Day	1750.00
	Backhoe Concrete Braker	Day	750.00
	Skidsteer Cat 259 or Equivalent	Day	975.00
	Skidsteer Bucket With Grapple Attachment	Day	350.00
	Skidsteer Concrete Braker	Day	700.00
	Jumping Jack Compactor	Day	375.00
	Equipment Mob & Dmob (**Varies based on distance**)	Each	TBD
Containers	21,000 Gallon Frac Tank (add $50/per day if berm is needed)	Day	65.00
	Frack Tank 12X50 Poly Berm	Each	60.00
	8,400 Gallon Mini Frac Tank (add $50/per day if berm is needed)	Day	50.00
	Mini Frac Tank 8X12 Poly Berm	Each	50.00
	40 Cyd Roll-off Bin (add $125 for Bin Liner	Day	30.00
	40 Cyd Bin Liner	Each	100.00
	25 Cyd Roll-off Vacuum Box	Day	55.00

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

Toll Free:888-841-3948
Fax:909-546-1546

Containers Continued	20 Cyd Roll-off Bin	Day	25.00
	20 Cyd Bin Liner	Each	75.00
	20 Cyd Dewatering Box With /Roll Tarp	Day	50.00
	100 Micron Dewatering Box Filter	Each	150.00
	8 Cyd Low Profile Roll-off Bin	Day	35.00
	8 Cyd Bin Liner	Each	50.00
	3 Cyd Bins	Day	15.00
	3 Cyd Bin Liner	Each	50.00
	85 Gallon Poly Screw Top Overpack	Each	225.00
	85 Gallon Steel Overpack	Each	195.00
	55 Gallon DOT T/H Metal Drum	Each	110.00
	55 Gallon DOT O/T Metal Drum	Each	110.00
	55 Gallon DOT T/H Poly Drum	Each	110.00
	55 Gallon DOT O/T Poly Drum	Each	110.00
	55 Gallon DOT Poly Nestable	each	125.00
	30 Gallon DOT T/H Metal Drum	Each	105.00
	30 Gallon DOT O/T Metal Drum	Each	105.00
	30 Gallon DOT T/H Poly Drum	Each	105.00
	30 Gallon DOT O/T Poly Drum	Each	105.00
	15 Gallon DOT T/H Metal Drum	Each	85.00
	15 Gallon DOT O/T Metal Drum	Each	85.00
	15 Gallon DOT T/H Poly Drum	Each	85.00
	15 Gallon DOT O/T Poly Drum	Each	85.00
	5 Gallon DOT O/T Metal Drum With Lid	Each	30.00
	5 Gallon DOT T/H Poly Drum With Screw Top	Each	30.00
	5 Gallon Carboy	Each	25.00
	8' Cardboard Light tube Drum	Each	100.00
	4' Cardboard Light tube Drum	Each	110.00
	Triwall Hazardous Waste Box Kit	Each	150.00
	275 gal Tote	Each	275.00
	Drum Liners 55 galllon/Drum	Each	7.50
	Drum Liners 35 gal / Drum	Each	6.50
Bio-Containers	44 Gallon Bio Tub	Each	150.00
	44 Gallon Bio Liner	Each	6.00
	5 Gallon Sharp Container	Each	75.00
	1 Gallon Sharp Container	Each	35.00
	1 Quart Sharp Container	Each	25.00
Pumps	Pump, up to 1" Petroleum / Chemical	Day	150.00
	Pump, 2" Petroleum	Day	250.00
	Pump, 2" Chemical	Day	350.00
	Pump, 3" Petroleum	Day	350.00
	Pump, 3" Trash	Day	350.00
	Pump, 4" Trash	Day	450.00
	Pump, 6" High Volume Trash Diesel	Day	1750.00
	Pump Wash-out (**Varies based on Material Pumped)**	Each	TBD

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

Toll Free:888-841-3948
Fax:909-546-1546

Hoses	Hose, 2" X 25' Petroleum Suction / Discharge	Day	25.00
	Hose, 2" X 25' Chemical Transfer	Each	50.00
	Hose, 3" X 25' Petroleum Suction / Discharge	Day	75.00
	Hose, 4" X 25' Trash Suction/Discharge	Day	75.00
	Hose Wash-out (**Varies based on Material Pumped)**	Each	TBD
	1" X 50' Air Compressor Hose W/Chicago Fittings	Each	25.00
	3/4" X 50' Garden Hose	each	15.00

Air Equip	Air Compressor, Tow behind 375 CFM	Hour	95.00
	Air Compressor, Tow behind 185 CFM	Hour	75.00
	Air Compressor, Portable 13 CFM	day	250.00
	Air Hose 50' W/Chicago Fitting	Day	25.00
	Air Knife / Air Excavation Tool	Day	250.00
	Air Vac-U-Max	Day	250.00
	Air/Electric Coppus Blower	Day	250.00
	Air Blower Negative Air Exaust 12"	Day	300.00
	Air Exhaust Duct 12" X 25'	Day	50.00
	Air Blower Venturi, Horn	Day	150.00
	Air 90-lb Jack Hammer	Day	250.00
Safety Equp.	Meter, LEL/02/H2S/CO	Day	300.00
	Meter, LEL/02/H2S/CO/PID	Day	350.00
	Meter, 4EC Radiation	Day	650.00
	Meter, Lumex Mercury Vapor Analyser	Day	1500.00
	Meter, Organic Vapor Analyser, PID/HNU/OVA	Day	350.00
	Meter, Personal/Gillian, Single/4-Gas	Day	125.00
	Meter, Personal / Particulate Monitoring	Day	175.00
	Protective Gear Level "A"	Each	1250.00
	Protective Gear Level "B"	Each	275.00
	Protective Gear Level "B" Change	Each	175.00
	Protective Gear Level "C"	Each	95.00
	Protective Gear Level "C" Change	Each	65.00
	Protective Gear Level "D"	Each	45.00
	Protective Gear Level "D" Change	Each	35.00
	Protective Acid Suit, 1 piece	Each	175.00
	Respirator, Cartridge, Single OV, Acid gas, P100	Pair	50.00
	Respirator Cartridges, Combo	Pair	45.00
	Respirator, Cartridge, Mercury/Chlorine	Pair	75.00
	Rain Gear, 2 Piece	Each	45.00
	Tyvek Suit, Saranex Coated, Disposable	Each	95.00
	Tyvek Suit, Uncoated, Disposable	Each	45.00
	Tyvek Suit, Poly-Coated, Disposable	Each	50.00
	Tyvek Suit, Poly-Coated, Fire Resistant, Disposable	Each	125.00
Confined Space	Confined Space Trailer	Day	1250.00
	Six Pack / Regulated Air Supply	Day	325.00
	SCBA or Egress Bottle	Day	150.00

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

Toll Free:888-841-3948
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	SCBA Bottle Refill	Each	50.00
	SCBA Standby	Each	75.00
	Tripod Sala Lift II W/Winch	Day	250.00
	Davit Arm System W/Winch	Day	350.00
	Harness	Day	75.00
	Full Face Respirator	Day	50.00
	Lock Out / Tag Out	Day	75.00
Confined Space	Confined Space Rescue Equipment	Day	500.00
Continued	Confined Space Entry Permit	Each	200.00
Lighting	Tower Trailer Mounted	Day	450.00
	Explosion Proof	Day	250.00
	Stand Regular 500W	Day	125.00
	Stand Regular 1000W	Day	150.00
	10000W Industrial Generator	Day	450.00
	7000W Industrial Generator	Day	350.00
	3000W Industrial Generator	Day	250.00
	Extension Cords	Day	10.00
Sorbents	5" X 10' Absorbent Boom, 4/Bale	Bale	175.00
	8" X 10' Absorbent Boom, 4/Bale	Bale	195.00
	Sorbent Oil Sheet 100/Bale	Bale	150.00
	Sorbent Acid Sheet 100/Bale	Bale	175.00
	Absorbent, Solid Absorb 4 cu. Ft./ Bag	Each	35.00
	Neutralizer (Citric Acid)	Each	75.00
	Neutralizer Soda Ash	Each	50.00
	Neutralizer Bicarb	Each	35.00
	Clay Absorbent	Each	30.00
	Vermiculite	Each	50.00
Cleaners	Simple Green, Industrial Grade	Gal	35.00
	Bleach	Gal	15.00
	HD Citrus Digreaser, Industrial Grade	Gal	50.00
	Gold Crew, VOC Suppressant Biodegradable	Gal	50.00
	Penetone, PES-51	Gal	95.00
	Sporicidin, Zep DZ-7 Disinfectant	Gal	50.00
	Hydrogen Peroxide	Gal	75.00
	Mercury Cleaning Solution	Gal	100.00
	Mercury Vapor Soppressant	Lb	50.00
Support Tools	5000 lb. Forklift	Hour	75.00
	Forklift Trailer	Day	250.00
	Chemical Transfer Trailer	Day	1500.00
	Pallet Jack	Day	30.00
	Drum Dolly	Day	15.00
	Speed Wrench	Day	10.00
	Drum Sling	Day	15.00
	Rivet Buster	Day	200.00

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ENVIRONMENTAL LOGISTICS

2024-2025 Emergency Response Rate Sheet

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EXHIBIT A

	55 Gal Drum Vacuum	Day	150.00
	Mercury Hepa Vacuum	Day	250.00
	Water Buffalo	Day	450.00
	Steel Shovel	Each	38.00
	Pick	Each	38.00
	Push Broom 24"	Each	38.00
	Squeegee	Each	38.00
Support Tools	Surface Concrette Cleaner	Day	250.00
	Sawsall	Day	25.00
	Skill Saw	Day	25.00
	Band Saw	Day	50.00
	Weed Eater	Day	125.00
	Chain Saw	Day	150.00
Miscellanious	Disposable Hand Pump	Each	20.00
	Hudson Sprayer	Each	35.00
	Diposable 4' Calawasa	Each	50.00
	Diposable 8' Calawasa	Each	75.00
	20' Extension Ladder	Day	35.00
	5' to 8' Step Ladder	Day	25.00
	6' X' 12' Panel Temporary Fence	Day	35.00
	Traffic Cones	Each	15.00
	Caution Tape	Roll	50.00
	Shrink Wrap	Roll	50.00
	Visqueen 100' Roll	Each	150.00
	20 Cyd Bin Liners	Each	75.00
	40 Cyd Bin Liners	Each	85.00
	End Dump Liners	Each	125.00
	4' X 8' X 1" Ply Wood	Each	150.00
	Rags Bundle	Each	75.00
	1 X Quart Sample Jars	Each	10.00
	0-14 pH Strips	Box	25.00
	Dust Mask	Each	6.50
	Leather Gloves	Pair	12.50
Disposal	Non-Haz Solid (Bulk) Per Cubic Yard or Ton (Whichever is Greater)	Y/T	85.00
	Non-Haz Liquid (Bulk) 3500 gal Minimum	Gal	0.85
	Non-Haz Liquid (275 gal Tote)	Each	495.00
	Non Haz Solid / Liquid (55 Gal Drum)	Each	175.00
	Non-Rcra Solid (Bulk) Per Cubic Yard or Ton (Whichever is Greater)	Y/T	125.00
	Non-Rcra Liquid (Bulk) 3500 gal Minimum	Gal	1.25
	Non-Rcra Liquid (275 gal Tote)	Each	550.00
	Non Rcra Solid / Liquid (55 Gal Drum)	Each	225.00
	Hazardous Waste Manifest	Each	35.00
	Hazardous Waste Labels	Each	6.50
	Non-Hazardous Waste Manifest	Each	15.00
	Non-Hazardous Waste Labels	Each	5.00

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2024-2025 Emergency Response Rate Sheet

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	Bill Of Ladding (BOL)	Each	10.00
	Lables, Universal, Excluded Recyclable, Etc.	Each	3.50

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $5,000,000 per occurrence/**$10,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $2,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$2,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability".
4. Professional Liability/Errors and Omissions:
   $1,000,000 per occurrence.
5. Pollution Liability:
   $2,000,000 per occurrence.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special

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limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.11**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution appropriating $4,300,000 in Wastewater Enterprise Funds in FY 2024-25 for the repair and relocation of the Livermore Sole-Use Treated Wastewater Pipeline

RECOMMENDED ACTION

Staff recommends that the City Council adopt a resolution appropriating $4,300,000 in wastewater enterprise funds in FY 2024-25 for the repair and relocation of the Livermore sole-use treated wastewater pipeline.

SUMMARY

In early 2023, the pipeline used by the City to transport treated wastewater to the Livermore Amador Valley Water Management Agency (LAVWMA) pump station was damaged by heavy flows in the Arroyo Mocho. LAVWMA has completed repairs and has requested reimbursement. A budget appropriation of $4,300,000 from the wastewater enterprise fund is needed in order to process this reimbursement.

DISCUSSION

The City of Livermore treats approximately 5.5 million gallons of wastewater each day. After some of that treated water has been recycled and used for irrigation and fire protection purposes, the remainder is transported through a gravity pipe to a LAVWMA pump station in Pleasanton where it is pumped over the Dublin grade for disposal in the San Francisco Bay. During the heavy storms of early 2023, a portion of this pipe was damaged by swollen streams. An undercrossing of the Arroyo Mocho near its confluence with the Arroyo Las Positas was exposed and the protective concrete cap over the pipe was destroyed. While the pipe itself was not damaged, leaving it as it was would have increased the potential for a catastrophic failure during future heavy storms.

The LAVWMA Joint Powers Agreement requires that the City of Livermore pay for all expenses related to the maintenance of this pipe which is solely-used by Livermore. LAVWMA has completed a realignment of this pipe away from the arroyo's bank and underneath an existing fish ladder thereby protecting the pipe from future stream-related damage.

FISCAL AND ADMINISTRATIVE IMPACTS

The total cost of this project is approximately $5,800,000. LAVWMA fronted the funds for this project and is requesting reimbursement from the City of Livermore. City staff have requested the use of $1,500,000 of existing repair and replacement reserves for this sole-use pipeline, which are held by LAVWMA, to lower the amount of funds that need to be transferred at this time. The remainder would be funded through the appropriation of $4,300,000 in Wastewater Enterprise Funds in FY 2024-25 for the repair and relocation of the Livermore Sole-Use Treated Wastewater Pipeline. City staff proposes rebuilding the reserve balance that LAVWMA holds in the future by first working with LAVWMA to determine an appropriate asset management fund balance and then programming fund transfers in future City budget proposals. The Wastewater Enterprise Fund currently has sufficient reserves to fund this project.

LAVWMA staff and consultants are actively pursuing Federal Emergency Management Agency reimbursement, but at this stage it is unclear exactly how much reimbursement may be received. Any reimbursement received by LAVWMA will either be returned to Livermore or used to replenish the replacement reserve held by LAVWMA.

Staff does not anticipate any administrative impacts from the approval of this resolution.

COMMUNITY PILLAR

1: A Safe Community That Thrives

GOAL

11: Operate and maintain municipal water systems that provide safe, efficient delivery of potable and recycled water, collect and treat wastewater, and comply with all federal, state, and local regulations.

ATTACHMENTS

1. Resolution

Prepared by: Anthony Smith
Acting Assistant Public Works Director

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROPRIATING $4,300,000 IN WASTEWATER ENTERPRISE FUNDS FOR THE REPAIR AND RELOCATION OF THE LIVERMORE SOLE-USE TREATED WASTER PIPELINE

In early 2023, a wastewater pipeline owned by the Livermore Amador Valley Water Management Agency (LAVWMA) that solely serves the City of Livermore was damaged by heavy rains. LAVWMA has completed a repair and relocation project to protect the pipeline from potential future damage. LAVWMA has requested reimbursement from the City of Livermore for the project's costs which are fully allocated to Livermore per paragraph 12 of the Amended and Restated Joint Exercise of Powers Agreement for the Livermore-Amador Valley Water Management Agency dated June 30, 1997.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Appropriates $4,300,000 in Wastewater Enterprise Funds from Fund 620 in Fiscal Year 2024-25.

2. Authorizes the City Manager to take whatever actions are necessary and appropriate to carry out the purpose and intent of this resolution.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.12**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution authorizing the issuance of a purchase order to Petersen Cat for a Weiler P65 Paver in an amount not-to-exceed $143,554 and an appropriating $143,554 from the Fleet Internal Service Fund to purchase the Paver.

RECOMMENDED ACTION

Staff recommends that the City Council adopt a resolution authorizing the execution of a purchase order with Peterson Cat for a replacement asphalt paver in a not-to-exceed amount of $143,554 and appropriating $143,554 from the Fleet Internal Service Fund.

SUMMARY

Based on the City of Livermore's Fleet Policy and the 25-year Fleet Replacement Plan, it is time to replace an existing Maintenance Division Asphalt paver. Staff has determined that the unit that best meets the needs of the Maintenance Division Streets Section is the 2024 Weiler P65 Paver, which can be purchased under a Sourcewell contract from Peterson CAT in San Leandro California.

DISCUSSION

The Peterson Caterpillar Weiler P65 asphalt paver is critical in performing repairs to City streets and parking lots. The use of this asphalt paver will allow the Street Department to repair and maintain large sections of roadway more efficiently, resulting in shorter lane closure time and less traffic interruptions. Packaged together with the street grinding equipment the City already owns there will be less crack sealing required to prevent potholes and broken-down sections of asphalt. This newer style asphalt paver is self-propelled and will allow continuous paving, allowing staff to maintain the asphalt supply without any down time between loads. Being able to pave larger and wider sections of roadway will reduce the use of outside contracts to make emergency repairs.

The City of Livermore's Fleet Policy recommends replacement of miscellaneous equipment at 10-20 years. This 2024 Weiler P65 asphalt paver will be replacing STR300 a 2003 Layton 505 Trailer Paver. This newly designed unit now incorporates a single engine setup with electric heating which reduces overall engine emissions over the previous designs thus reducing the City's Fleet vehicles overall carbon

footprint.

Staff recommends purchasing this replacement asphalt paver utilizing Sourcewell Acceptance and Award contract #060122-WLR. The Sourcewell bid procedure for the replacement asphalt paver meets the Livermore Municipal Code (LMC) Section 2.68.370 requirements, and therefore, a purchase order can be awarded to Peterson Cat in San Leandro California. Peterson Cat is the local dealer in Northern California, and will facilitate delivery, training, and any needed service or warranty work.

FISCAL AND ADMINISTRATIVE IMPACTS

The proposed purchase of the 2024 Weiler P65 asphalt paver was budgeted in the FY 2023-24 Fleet Internal Service Fund but not purchased in FY 2023-24. As such, the $143,554 needs to be appropriated from the Fleet Internal Service Fund to complete the purchase. The asphalt paver is identified in the Fleet Master 25-year Replacement Plan.

COMMUNITY PILLAR

5: A City That Works

GOAL

14: Develop, operate, and maintain the City's infrastructure.

ATTACHMENTS

1. Sourcewell Contract #060122-WLR
2. Peterson Caterpillar Quotation
3. Resolution

Prepared by: Scott Kooreman
Public Works Supervisor

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

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Sourcewell

Solicitation Number: RFP #060122

CONTRACT

This Contract is between Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 (Sourcewell) and Weiler Inc., 815 Weiler Drive, Knoxville, IA 50138 (Supplier).

Sourcewell is a State of Minnesota local government unit and service cooperative created under the laws of the State of Minnesota (Minnesota Statutes Section 123A.21) that offers cooperative procurement solutions to government entities. Participation is open to eligible federal, state/province, and municipal governmental entities, higher education, K-12 education, nonprofit, tribal government, and other public entities located in the United States and Canada. Sourcewell issued a public solicitation for Roadway Paving Equipment from which Supplier was awarded a contract.

Supplier desires to contract with Sourcewell to provide equipment, products, or services to Sourcewell and the entities that access Sourcewell's cooperative purchasing contracts (Participating Entities).

1. TERM OF CONTRACT

A. EFFECTIVE DATE. This Contract is effective upon the date of the final signature below.

B. EXPIRATION DATE AND EXTENSION. This Contract expires August 1, 2026, unless it is cancelled sooner pursuant to Article 22. This Contract may be extended one additional year upon the request of Sourcewell and written agreement by Supplier.

C. SURVIVAL OF TERMS. Notwithstanding any expiration or termination of this Contract, all payment obligations incurred prior to expiration or termination will survive, as will the following: Articles 11 through 14 survive the expiration or cancellation of this Contract. All other rights will cease upon expiration or termination of this Contract.

2. EQUIPMENT, PRODUCTS, OR SERVICES

A. EQUIPMENT, PRODUCTS, OR SERVICES. Supplier will provide the Equipment, Products, or Services as stated in its Proposal submitted under the Solicitation Number listed above. Supplier's Equipment, Products, or Services Proposal (Proposal) is attached and incorporated into this Contract.

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All Equipment and Products provided under this Contract must be new and the current model. Supplier may offer close-out or refurbished Equipment or Products if they are clearly indicated in Supplier's product and pricing list. Unless agreed to by the Participating Entities in advance, Equipment or Products must be delivered as operational to the Participating Entity's site.

This Contract offers an indefinite quantity of sales, and while substantial volume is anticipated, sales and sales volume are not guaranteed.

B. WARRANTY. Supplier warrants that all Equipment, Products, and Services furnished are free from liens and encumbrances, and are free from defects in design, materials, and workmanship. In addition, Supplier warrants the Equipment, Products, and Services are suitable for and will perform in accordance with the ordinary use for which they are intended. Supplier's dealers and distributors must agree to assist the Participating Entity in reaching a resolution in any dispute over warranty terms with the manufacturer. Any manufacturer's warranty that extends beyond the expiration of the Supplier's warranty will be passed on to the Participating Entity.

C. DEALERS, DISTRIBUTORS, AND/OR RESELLERS. Upon Contract execution and throughout the Contract term, Supplier must provide to Sourcewell a current means to validate or authenticate Supplier's authorized dealers, distributors, or resellers relative to the Equipment, Products, and Services offered under this Contract, which will be incorporated into this Contract by reference. It is the Supplier's responsibility to ensure Sourcewell receives the most current information.

3. PRICING

All Equipment, Products, or Services under this Contract will be priced at or below the price stated in Supplier's Proposal.

When providing pricing quotes to Participating Entities, all pricing quoted must reflect a Participating Entity's total cost of acquisition. This means that the quoted cost is for delivered Equipment, Products, and Services that are operational for their intended purpose, and includes all costs to the Participating Entity's requested delivery location.

Regardless of the payment method chosen by the Participating Entity, the total cost associated with any purchase option of the Equipment, Products, or Services must always be disclosed in the pricing quote to the applicable Participating Entity at the time of purchase.

A. SHIPPING AND SHIPPING COSTS. All delivered Equipment and Products must be properly packaged. Damaged Equipment and Products may be rejected. If the damage is not readily apparent at the time of delivery, Supplier must permit the Equipment and Products to be returned within a reasonable time at no cost to Sourcewell or its Participating Entities. Participating Entities reserve the right to inspect the Equipment and Products at a reasonable

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time after delivery where circumstances or conditions prevent effective inspection of the Equipment and Products at the time of delivery. In the event of the delivery of nonconforming Equipment and Products, the Participating Entity will notify the Supplier as soon as possible and the Supplier will replace nonconforming Equipment and Products with conforming Equipment and Products that are acceptable to the Participating Entity.

Supplier must arrange for and pay for the return shipment on Equipment and Products that arrive in a defective or inoperable condition.

Sourcewell may declare the Supplier in breach of this Contract if the Supplier intentionally delivers substandard or inferior Equipment or Products.

B. SALES TAX. Each Participating Entity is responsible for supplying the Supplier with valid tax-exemption certification(s). When ordering, a Participating Entity must indicate if it is a tax-exempt entity.

C. HOT LIST PRICING. At any time during this Contract, Supplier may offer a specific selection of Equipment, Products, or Services at discounts greater than those listed in the Contract. When Supplier determines it will offer Hot List Pricing, it must be submitted electronically to Sourcewell in a line-item format. Equipment, Products, or Services may be added or removed from the Hot List at any time through a Sourcewell Price and Product Change Form as defined in Article 4 below.

Hot List program and pricing may also be used to discount and liquidate close-out and discontinued Equipment and Products as long as those close-out and discontinued items are clearly identified as such. Current ordering process and administrative fees apply. Hot List Pricing must be published and made available to all Participating Entities.

4. PRODUCT AND PRICING CHANGE REQUESTS

Supplier may request Equipment, Product, or Service changes, additions, or deletions at any time. All requests must be made in writing by submitting a signed Sourcewell Price and Product Change Request Form to the assigned Sourcewell Supplier Development Administrator. This approved form is available from the assigned Sourcewell Supplier Development Administrator. At a minimum, the request must:

- Identify the applicable Sourcewell contract number;
- Clearly specify the requested change;
- Provide sufficient detail to justify the requested change;
- Individually list all Equipment, Products, or Services affected by the requested change, along with the requested change (e.g., addition, deletion, price change); and

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- Include a complete restatement of pricing documentation in Microsoft Excel with the effective date of the modified pricing, or product addition or deletion. The new pricing restatement must include all Equipment, Products, and Services offered, even for those items where pricing remains unchanged.

A fully executed Sourcewell Price and Product Request Form will become an amendment to this Contract and will be incorporated by reference.

5. PARTICIPATION, CONTRACT ACCESS, AND PARTICIPATING ENTITY REQUIREMENTS

A. PARTICIPATION. Sourcewell's cooperative contracts are available and open to public and nonprofit entities across the United States and Canada; such as federal, state/province, municipal, K-12 and higher education, tribal government, and other public entities.

The benefits of this Contract should be available to all Participating Entities that can legally access the Equipment, Products, or Services under this Contract. A Participating Entity's authority to access this Contract is determined through its cooperative purchasing, interlocal, or joint powers laws. Any entity accessing benefits of this Contract will be considered a Service Member of Sourcewell during such time of access. Supplier understands that a Participating Entity's use of this Contract is at the Participating Entity's sole convenience and Participating Entities reserve the right to obtain like Equipment, Products, or Services from any other source.

Supplier is responsible for familiarizing its sales and service forces with Sourcewell contract use eligibility requirements and documentation and will encourage potential participating entities to join Sourcewell. Sourcewell reserves the right to add and remove Participating Entities to its roster during the term of this Contract.

B. PUBLIC FACILITIES. Supplier's employees may be required to perform work at government-owned facilities, including schools. Supplier's employees and agents must conduct themselves in a professional manner while on the premises, and in accordance with Participating Entity policies and procedures, and all applicable laws.

6. PARTICIPATING ENTITY USE AND PURCHASING

A. ORDERS AND PAYMENT. To access the contracted Equipment, Products, or Services under this Contract, a Participating Entity must clearly indicate to Supplier that it intends to access this Contract; however, order flow and procedure will be developed jointly between Sourcewell and Supplier. Typically, a Participating Entity will issue an order directly to Supplier or its authorized subsidiary, distributor, dealer, or reseller. If a Participating Entity issues a purchase order, it may use its own forms, but the purchase order should clearly note the applicable Sourcewell contract number. All Participating Entity orders under this Contract must be issued prior to expiration or cancellation of this Contract; however, Supplier performance, Participating Entity

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payment obligations, and any applicable warranty periods or other Supplier or Participating Entity obligations may extend beyond the term of this Contract.

Supplier's acceptable forms of payment are included in its attached Proposal. Participating Entities will be solely responsible for payment and Sourcewell will have no liability for any unpaid invoice of any Participating Entity.

B. ADDITIONAL TERMS AND CONDITIONS/PARTICIPATING ADDENDUM. Additional terms and conditions to a purchase order, or other required transaction documentation, may be negotiated between a Participating Entity and Supplier, such as job or industry-specific requirements, legal requirements (e.g., affirmative action or immigration status requirements), or specific local policy requirements. Some Participating Entities may require the use of a Participating Addendum, the terms of which will be negotiated directly between the Participating Entity and the Supplier or its authorized dealers, distributors, or resellers, as applicable. Any negotiated additional terms and conditions must never be less favorable to the Participating Entity than what is contained in this Contract.

C. SPECIALIZED SERVICE REQUIREMENTS. In the event that the Participating Entity requires service or specialized performance requirements not addressed in this Contract (such as e-commerce specifications, specialized delivery requirements, or other specifications and requirements), the Participating Entity and the Supplier may enter into a separate, standalone agreement, apart from this Contract. Sourcewell, including its agents and employees, will not be made a party to a claim for breach of such agreement.

D. TERMINATION OF ORDERS. Participating Entities may terminate an order, in whole or in part, immediately upon notice to Supplier in the event of any of the following events:

1. The Participating Entity fails to receive funding or appropriation from its governing body at levels sufficient to pay for the equipment, products, or services to be purchased; or
2. Federal, state, or provincial laws or regulations prohibit the purchase or change the Participating Entity's requirements.

E. GOVERNING LAW AND VENUE. The governing law and venue for any action related to a Participating Entity's order will be determined by the Participating Entity making the purchase.

7. CUSTOMER SERVICE

A. PRIMARY ACCOUNT REPRESENTATIVE. Supplier will assign an Account Representative to Sourcewell for this Contract and must provide prompt notice to Sourcewell if that person is changed. The Account Representative will be responsible for:

- Maintenance and management of this Contract;

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- Timely response to all Sourcewell and Participating Entity inquiries; and
- Business reviews to Sourcewell and Participating Entities, if applicable.

B. BUSINESS REVIEWS. Supplier must perform a minimum of one business review with Sourcewell per contract year. The business review will cover sales to Participating Entities, pricing and contract terms, administrative fees, sales data reports, performance issues, supply issues, customer issues, and any other necessary information.

8. REPORT ON CONTRACT SALES ACTIVITY AND ADMINISTRATIVE FEE PAYMENT

A. CONTRACT SALES ACTIVITY REPORT. Each calendar quarter, Supplier must provide a contract sales activity report (Report) to the Sourcewell Supplier Development Administrator assigned to this Contract. Reports are due no later than 45 days after the end of each calendar quarter. A Report must be provided regardless of the number or amount of sales during that quarter (i.e., if there are no sales, Supplier must submit a report indicating no sales were made).

The Report must contain the following fields:

- Participating Entity Name (e.g., City of Staples Highway Department);
- Participating Entity Physical Street Address;
- Participating Entity City;
- Participating Entity State/Province;
- Participating Entity Zip/Postal Code;
- Participating Entity Contact Name;
- Participating Entity Contact Email Address;
- Participating Entity Contact Telephone Number;
- Sourcewell Assigned Entity/Participating Entity Number;
- Item Purchased Description;
- Item Purchased Price;
- Sourcewell Administrative Fee Applied; and
- Date Purchase was invoiced/sale was recognized as revenue by Supplier.

B. ADMINISTRATIVE FEE. In consideration for the support and services provided by Sourcewell, the Supplier will pay an administrative fee to Sourcewell on all Equipment, Products, and Services provided to Participating Entities. The Administrative Fee must be included in, and not added to, the pricing. Supplier may not charge Participating Entities more than the contracted price to offset the Administrative Fee.

The Supplier will submit payment to Sourcewell for the percentage of administrative fee stated in the Proposal multiplied by the total sales of all Equipment, Products, and Services purchased by Participating Entities under this Contract during each calendar quarter. Payments should

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note the Supplier's name and Sourcewell-assigned contract number in the memo; and must be mailed to the address above "Attn: Accounts Receivable" or remitted electronically to Sourcewell's banking institution per Sourcewell's Finance department instructions. Payments must be received no later than 45 calendar days after the end of each calendar quarter.

Supplier agrees to cooperate with Sourcewell in auditing transactions under this Contract to ensure that the administrative fee is paid on all items purchased under this Contract.

In the event the Supplier is delinquent in any undisputed administrative fees, Sourcewell reserves the right to cancel this Contract and reject any proposal submitted by the Supplier in any subsequent solicitation. In the event this Contract is cancelled by either party prior to the Contract's expiration date, the administrative fee payment will be due no more than 30 days from the cancellation date.

9. AUTHORIZED REPRESENTATIVE

Sourcewell's Authorized Representative is its Chief Procurement Officer.

Supplier's Authorized Representative is the person named in the Supplier's Proposal. If Supplier's Authorized Representative changes at any time during this Contract, Supplier must promptly notify Sourcewell in writing.

10. AUDIT, ASSIGNMENT, AMENDMENTS, WAIVER, AND CONTRACT COMPLETE

A. AUDIT. Pursuant to Minnesota Statutes Section 16C.05, subdivision 5, the books, records, documents, and accounting procedures and practices relevant to this Contract are subject to examination by Sourcewell or the Minnesota State Auditor for a minimum of six years from the end of this Contract. This clause extends to Participating Entities as it relates to business conducted by that Participating Entity under this Contract.

B. ASSIGNMENT. Neither party may assign or otherwise transfer its rights or obligations under this Contract without the prior written consent of the other party and a fully executed assignment agreement. Such consent will not be unreasonably withheld. Any prohibited assignment will be invalid.

C. AMENDMENTS. Any amendment to this Contract must be in writing and will not be effective until it has been duly executed by the parties.

D. WAIVER. Failure by either party to take action or assert any right under this Contract will not be deemed a waiver of such right in the event of the continuation or repetition of the circumstances giving rise to such right. Any such waiver must be in writing and signed by the parties.

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E. CONTRACT COMPLETE. This Contract represents the complete agreement between the parties. No other understanding regarding this Contract, whether written or oral, may be used to bind either party. For any conflict between the attached Proposal and the terms set out in Articles 1-22 of this Contract, the terms of Articles 1-22 will govern.

F. RELATIONSHIP OF THE PARTIES. The relationship of the parties is one of independent contractors, each free to exercise judgment and discretion with regard to the conduct of their respective businesses. This Contract does not create a partnership, joint venture, or any other relationship such as master-servant, or principal-agent.

11. INDEMNITY AND HOLD HARMLESS

Supplier must indemnify, defend, save, and hold Sourcewell and its Participating Entities, including their agents and employees, harmless from any claims or causes of action, including attorneys' fees incurred by Sourcewell or its Participating Entities, arising out of any act or omission in the performance of this Contract by the Supplier or its agents or employees; this indemnification includes injury or death to person(s) or property alleged to have been caused by some defect in the Equipment, Products, or Services under this Contract to the extent the Equipment, Product, or Service has been used according to its specifications. Sourcewell's responsibility will be governed by the State of Minnesota's Tort Liability Act (Minnesota Statutes Chapter 466) and other applicable law.

12. GOVERNMENT DATA PRACTICES

Supplier and Sourcewell must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by or provided to Sourcewell under this Contract and as it applies to all data created, collected, received, maintained, or disseminated by the Supplier under this Contract.

13. INTELLECTUAL PROPERTY, PUBLICITY, MARKETING, AND ENDORSEMENT

A. INTELLECTUAL PROPERTY

1. *Grant of License.* During the term of this Contract:
    a. Sourcewell grants to Supplier a royalty-free, worldwide, non-exclusive right and license to use the trademark(s) provided to Supplier by Sourcewell in advertising and promotional materials for the purpose of marketing Sourcewell's relationship with Supplier.
    b. Supplier grants to Sourcewell a royalty-free, worldwide, non-exclusive right and license to use Supplier's trademarks in advertising and promotional materials for the purpose of marketing Supplier's relationship with Sourcewell.
2. *Limited Right of Sublicense*. The right and license granted herein includes a limited right of each party to grant sublicenses to their respective subsidiaries, distributors, dealers, resellers, marketing representatives, and agents (collectively "Permitted Sublicensees") in

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advertising and promotional materials for the purpose of marketing the Parties' relationship to Participating Entities. Any sublicense granted will be subject to the terms and conditions of this Article. Each party will be responsible for any breach of this Article by any of their respective sublicensees.

3. *Use; Quality Control.*

a. Neither party may alter the other party's trademarks from the form provided and must comply with removal requests as to specific uses of its trademarks or logos.

b. Each party agrees to use, and to cause its Permitted Sublicensees to use, the other party's trademarks only in good faith and in a dignified manner consistent with such party's use of the trademarks. Upon written notice to the breaching party, the breaching party has 30 days of the date of the written notice to cure the breach or the license will be terminated.

4. *Termination*. Upon the termination of this Contract for any reason, each party, including Permitted Sublicensees, will have 30 days to remove all Trademarks from signage, websites, and the like bearing the other party's name or logo (excepting Sourcewell's pre-printed catalog of suppliers which may be used until the next printing). Supplier must return all marketing and promotional materials, including signage, provided by Sourcewell, or dispose of it according to Sourcewell's written directions.

B. PUBLICITY. Any publicity regarding the subject matter of this Contract must not be released without prior written approval from the Authorized Representatives. Publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Supplier individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Contract.

C. MARKETING. Any direct advertising, marketing, or offers with Participating Entities must be approved by Sourcewell. Send all approval requests to the Sourcewell Supplier Development Administrator assigned to this Contract.

D. ENDORSEMENT. The Supplier must not claim that Sourcewell endorses its Equipment, Products, or Services.

14. GOVERNING LAW, JURISDICTION, AND VENUE

The substantive and procedural laws of the State of Minnesota will govern this Contract. Venue for all legal proceedings arising out of this Contract, or its breach, must be in the appropriate state court in Todd County, Minnesota or federal court in Fergus Falls, Minnesota.

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15. FORCE MAJEURE

Neither party to this Contract will be held responsible for delay or default caused by acts of God or other conditions that are beyond that party's reasonable control. A party defaulting under this provision must provide the other party prompt written notice of the default.

16. SEVERABILITY

If any provision of this Contract is found by a court of competent jurisdiction to be illegal, unenforceable, or void then both parties will be relieved from all obligations arising from that provision. If the remainder of this Contract is capable of being performed, it will not be affected by such determination or finding and must be fully performed.

17. PERFORMANCE, DEFAULT, AND REMEDIES

A. PERFORMANCE. During the term of this Contract, the parties will monitor performance and address unresolved contract issues as follows:

1. *Notification.* The parties must promptly notify each other of any known dispute and work in good faith to resolve such dispute within a reasonable period of time. If necessary, Sourcewell and the Supplier will jointly develop a short briefing document that describes the issue(s), relevant impact, and positions of both parties.
2. *Escalation.* If parties are unable to resolve the issue in a timely manner, as specified above, either Sourcewell or Supplier may escalate the resolution of the issue to a higher level of management. The Supplier will have 30 calendar days to cure an outstanding issue.
3. *Performance while Dispute is Pending*. Notwithstanding the existence of a dispute, the Supplier must continue without delay to carry out all of its responsibilities under the Contract that are not affected by the dispute. If the Supplier fails to continue without delay to perform its responsibilities under the Contract, in the accomplishment of all undisputed work, the Supplier will bear any additional costs incurred by Sourcewell and/or its Participating Entities as a result of such failure to proceed.

B. DEFAULT AND REMEDIES. Either of the following constitutes cause to declare this Contract, or any Participating Entity order under this Contract, in default:

1. Nonperformance of contractual requirements, or
2. A material breach of any term or condition of this Contract.

The party claiming default must provide written notice of the default, with 30 calendar days to cure the default. Time allowed for cure will not diminish or eliminate any liability for liquidated or other damages. If the default remains after the opportunity for cure, the non-defaulting party may:

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- Exercise any remedy provided by law or equity, or
- Terminate the Contract or any portion thereof, including any orders issued against the Contract.

18. INSURANCE

A. REQUIREMENTS. At its own expense, Supplier must maintain insurance policy(ies) in effect at all times during the performance of this Contract with insurance company(ies) licensed or authorized to do business in the State of Minnesota having an "AM BEST" rating of A- or better, with coverage and limits of insurance not less than the following:

1. *Workers' Compensation and Employer's Liability.*
Workers' Compensation: As required by any applicable law or regulation.
Employer's Liability Insurance: must be provided in amounts not less than listed below:
Minimum limits:
$500,000 each accident for bodily injury by accident
$500,000 policy limit for bodily injury by disease
$500,000 each employee for bodily injury by disease

2. *Commercial General Liability Insurance.* Supplier will maintain insurance covering its operations, with coverage on an occurrence basis, and must be subject to terms no less broad than the Insurance Services Office ("ISO") Commercial General Liability Form CG0001 (2001 or newer edition), or equivalent. At a minimum, coverage must include liability arising from premises, operations, bodily injury and property damage, independent contractors, products-completed operations including construction defect, contractual liability, blanket contractual liability, and personal injury and advertising injury. All required limits, terms and conditions of coverage must be maintained during the term of this Contract.
Minimum Limits:
$1,000,000 each occurrence Bodily Injury and Property Damage
$1,000,000 Personal and Advertising Injury
$2,000,000 aggregate for products liability-completed operations
$2,000,000 general aggregate

3. *Commercial Automobile Liability Insurance.* During the term of this Contract, Supplier will maintain insurance covering all owned, hired, and non-owned automobiles in limits of liability not less than indicated below. The coverage must be subject to terms no less broad than ISO Business Auto Coverage Form CA 0001 (2010 edition or newer), or equivalent.
Minimum Limits:
$1,000,000 each accident, combined single limit

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4. *Umbrella Insurance*. During the term of this Contract, Supplier will maintain umbrella coverage over Employer's Liability, Commercial General Liability, and Commercial Automobile.

Minimum Limits:
$2,000,000

5. *Network Security and Privacy Liability Insurance*. During the term of this Contract, Supplier will maintain coverage for network security and privacy liability. The coverage may be endorsed on another form of liability coverage or written on a standalone policy. The insurance must cover claims which may arise from failure of Supplier's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data – including but not limited to, confidential or private information, transmission of a computer virus, or denial of service.

Minimum limits:
$2,000,000 per occurrence
$2,000,000 annual aggregate

Failure of Supplier to maintain the required insurance will constitute a material breach entitling Sourcewell to immediately terminate this Contract for default.

B. CERTIFICATES OF INSURANCE. Prior to commencing under this Contract, Supplier must furnish to Sourcewell a certificate of insurance, as evidence of the insurance required under this Contract. Prior to expiration of the policy(ies), renewal certificates must be mailed to Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 or sent to the Sourcewell Supplier Development Administrator assigned to this Contract. The certificates must be signed by a person authorized by the insurer(s) to bind coverage on their behalf.

Failure to request certificates of insurance by Sourcewell, or failure of Supplier to provide certificates of insurance, in no way limits or relieves Supplier of its duties and responsibilities in this Contract.

C. ADDITIONAL INSURED ENDORSEMENT AND PRIMARY AND NON-CONTRIBUTORY INSURANCE CLAUSE. Supplier agrees to list Sourcewell and its Participating Entities, including their officers, agents, and employees, as an additional insured under the Supplier's commercial general liability insurance policy with respect to liability arising out of activities, "operations," or "work" performed by or on behalf of Supplier, and products and completed operations of Supplier. The policy provision(s) or endorsement(s) must further provide that coverage is primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for the additional insureds.

D. WAIVER OF SUBROGATION. Supplier waives and must require (by endorsement or otherwise) all its insurers to waive subrogation rights against Sourcewell and other additional insureds for losses paid under the insurance policies required by this Contract or other

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insurance applicable to the Supplier or its subcontractors. The waiver must apply to all deductibles and/or self-insured retentions applicable to the required or any other insurance maintained by the Supplier or its subcontractors. Where permitted by law, Supplier must require similar written express waivers of subrogation and insurance clauses from each of its subcontractors.

E. UMBRELLA/EXCESS LIABILITY/SELF-INSURED RETENTION. The limits required by this Contract can be met by either providing a primary policy or in combination with umbrella/excess liability policy(ies), or self-insured retention.

19. COMPLIANCE

A. LAWS AND REGULATIONS. All Equipment, Products, or Services provided under this Contract must comply fully with applicable federal laws and regulations, and with the laws in the states and provinces in which the Equipment, Products, or Services are sold.

B. LICENSES. Supplier must maintain a valid and current status on all required federal, state/provincial, and local licenses, bonds, and permits required for the operation of the business that the Supplier conducts with Sourcewell and Participating Entities.

20. BANKRUPTCY, DEBARMENT, OR SUSPENSION CERTIFICATION

Supplier certifies and warrants that it is not in bankruptcy or that it has previously disclosed in writing certain information to Sourcewell related to bankruptcy actions. If at any time during this Contract Supplier declares bankruptcy, Supplier must immediately notify Sourcewell in writing.

Supplier certifies and warrants that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Supplier certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this Contract. Supplier further warrants that it will provide immediate written notice to Sourcewell if this certification changes at any time.

21. PROVISIONS FOR NON-UNITED STATES FEDERAL ENTITY PROCUREMENTS UNDER UNITED STATES FEDERAL AWARDS OR OTHER AWARDS

Participating Entities that use United States federal grant or FEMA funds to purchase goods or services from this Contract may be subject to additional requirements including the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 C.F.R. § 200. Participating Entities may have additional requirements based on specific funding source terms or conditions. Within this Article, all

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references to "federal" should be interpreted to mean the United States federal government. The following list only applies when a Participating Entity accesses Supplier's Equipment, Products, or Services with United States federal funds.

A. EQUAL EMPLOYMENT OPPORTUNITY. Except as otherwise provided under 41 C.F.R. § 60, all contracts that meet the definition of "federally assisted construction contract" in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. §60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 C.F.R. §, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 C.F.R. § 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." The equal opportunity clause is incorporated herein by reference.

B. DAVIS-BACON ACT, AS AMENDED (40 U.S.C. § 3141-3148). When required by federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. § 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 C.F.R. § 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-federal entity must report all suspected or reported violations to the federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations (29 C.F.R. § 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-federal entity must report all suspected or reported violations to the federal awarding agency. Supplier must be in compliance with all applicable Davis-Bacon Act provisions.

C. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. § 3701-3708). Where applicable, all contracts awarded by the non-federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. § 5). Under 40 U.S.C. § 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of

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not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. This provision is hereby incorporated by reference into this Contract. Supplier certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

D. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT. If the federal award meets the definition of "funding agreement" under 37 C.F.R. § 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 C.F.R. § 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency. Supplier certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

E. CLEAN AIR ACT (42 U.S.C. § 7401-7671Q.) AND THE FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. § 1251-1387). Contracts and subgrants of amounts in excess of $150,000 require the non-federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. § 7401- 7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Supplier certifies that during the term of this Contract will comply with applicable requirements as referenced above.

F. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689). A contract award (see 2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. §180 that implement Executive Orders 12549 (3 C.F.R. § 1986 Comp., p. 189) and 12689 (3 C.F.R. § 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

G. BYRD ANTI-LOBBYING AMENDMENT, AS AMENDED (31 U.S.C. § 1352). Suppliers must file any required certifications. Suppliers must not have used federal appropriated funds to pay any

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person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Suppliers must disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the non-federal award. Suppliers must file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352).

H. RECORD RETENTION REQUIREMENTS. To the extent applicable, Supplier must comply with the record retention requirements detailed in 2 C.F.R. § 200.333. The Supplier further certifies that it will retain all records as required by 2 C.F.R. § 200.333 for a period of 3 years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

I. ENERGY POLICY AND CONSERVATION ACT COMPLIANCE. To the extent applicable, Supplier must comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

J. BUY AMERICAN PROVISIONS COMPLIANCE. To the extent applicable, Supplier must comply with all applicable provisions of the Buy American Act. Purchases made in accordance with the Buy American Act must follow the applicable procurement rules calling for free and open competition.

K. ACCESS TO RECORDS (2 C.F.R. § 200.336). Supplier agrees that duly authorized representatives of a federal agency must have access to any books, documents, papers, and records of Supplier that are directly pertinent to Supplier's discharge of its obligations under this Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to Supplier's personnel for the purpose of interview and discussion relating to such documents.

L. PROCUREMENT OF RECOVERED MATERIALS (2 C.F.R. § 200.322). A non-federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. § 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

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M. FEDERAL SEAL(S), LOGOS, AND FLAGS. The Supplier cannot use the seal(s), logos, crests, or reproductions of flags or likenesses of Federal agency officials without specific pre-approval.

N. NO OBLIGATION BY FEDERAL GOVERNMENT. The U.S. federal government is not a party to this Contract or any purchase by an Participating Entity and is not subject to any obligations or liabilities to the Participating Entity, Supplier, or any other party pertaining to any matter resulting from the Contract or any purchase by an authorized user.

O. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS. The Contractor acknowledges that 31 U.S.C. 38 (Administrative Remedies for False Claims and Statements) applies to the Supplier's actions pertaining to this Contract or any purchase by a Participating Entity.

P. FEDERAL DEBT. The Supplier certifies that it is non-delinquent in its repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowance, and benefit overpayments.

Q. CONFLICTS OF INTEREST. The Supplier must notify the U.S. Office of General Services, Sourcewell, and Participating Entity as soon as possible if this Contract or any aspect related to the anticipated work under this Contract raises an actual or potential conflict of interest (as described in 2 C.F.R. Part 200). The Supplier must explain the actual or potential conflict in writing in sufficient detail so that the U.S. Office of General Services, Sourcewell, and Participating Entity are able to assess the actual or potential conflict; and provide any additional information as necessary or requested.

R. U.S. EXECUTIVE ORDER 13224. The Supplier, and its subcontractors, must comply with U.S. Executive Order 13224 and U.S. Laws that prohibit transactions with and provision of resources and support to individuals and organizations associated with terrorism.

S. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT. To the extent applicable, Supplier certifies that during the term of this Contract it will comply with applicable requirements of 2 C.F.R. § 200.216.

T. DOMESTIC PREFERENCES FOR PROCUREMENTS. To the extent applicable, Supplier certifies that during the term of this Contract will comply with applicable requirements of 2 C.F.R. § 200.322.

22. CANCELLATION

Sourcewell or Supplier may cancel this Contract at any time, with or without cause, upon 60 days' written notice to the other party. However, Sourcewell may cancel this Contract immediately upon discovery of a material defect in any certification made in Supplier's

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Proposal. Cancellation of this Contract does not relieve either party of financial, product, or service obligations incurred or accrued prior to cancellation.

Sourcewell

DocuSigned by:
By: Jeremy Schwartz
C0FD2A139D06489...

Jeremy Schwartz
Title: Chief Procurement Officer
Date: 7/29/2022 | 12:58 PM CDT

Weiler Inc.

DocuSigned by:
By: Bill Hood
EEC59E090FE3416...

Bill Hood
Title: VP
Date: 8/9/2022 | 1:23 PM PDT

Approved:

DocuSigned by:
By: Chad Coauette
7E42B8F817A64CC...

Chad Coauette
Title: Executive Director/CEO
Date: 8/9/2022 | 3:23 PM CDT

DocuSign Envelope ID: C279AE06-C79C-404C-90A9-BF5B88395528

RFP 060122 - Roadway Paving Equipment

Vendor Details

Company Name:	Weiler Inc.
Does your company conduct business under any other name? If yes, please state:	IA
Address:	815 Weiler Drive Knoxville, IA 50138
Contact:	Andy Adamcik
Email:	aadamcik@weilerproducts.com
Phone:	641-828-2334
Fax:	641-218-0776
HST#:	42-1499763

Submission Details

Created On:	Monday May 09, 2022 10:20:12
Submitted On:	Tuesday May 31, 2022 07:59:25
Submitted By:	Andy Adamcik
Email:	aadamcik@weilerproducts.com
Transaction #:	6cd35d3f-7022-4c79-96b7-33c822fea292
Submitter's IP Address:	69.18.48.141

ATTACHMENT 1

Specifications

Table 1: Proposer Identity & Authorized Representatives

General Instructions (applies to all Tables) Sourcewell prefers a brief but thorough response to each question. Do not merely attach additional documents to your response without also providing a substantive response. Do not leave answers blank; respond "N/A" if the question does not apply to you (preferably with an explanation).

Line Item	Question	Response *	
1	Proposer Legal Name (one legal entity only): (In the event of award, will execute the resulting contract as "Supplier")	Weiler Inc.	*
2	Identify all subsidiary entities of the Proposer whose equipment, products, or services are included in the Proposal.	N/A	*
3	Identify all applicable assumed names or DBA names of the Proposer or Proposer's subsidiaries in Line 1 or Line 2 above.	Weiler Weiler Products	*
4	Provide your CAGE code or Unique Entity Identifier (SAM):	N/A	*
5	Proposer Physical Address:	815 Weiler Drive Knoxville, IA 50138	*
6	Proposer website address (or addresses):	www.weilerproducts.com	*
7	Proposer's Authorized Representative (name, title, address, email address & phone) (The representative must have authority to sign the "Proposer's Assurance of Compliance" on behalf of the Proposer and, in the event of award, will be expected to execute the resulting contract):	Bill Hood VP 815 Weiler Drive Knoxville, IA 50138 bhood@weilerproducts.com (641) 828-5243	*
8	Proposer's primary contact for this proposal (name, title, address, email address & phone):	Andy Adamcik Marketing Manager 815 Weiler Drive Knoxville, IA 50138 aadamcik@weilerproducts.com (641) 828-2334	*
9	Proposer's other contacts for this proposal, if any (name, title, address, email address & phone):	Greg Haglin President, Government Solutions Team 523 Carver Lane Lebanon, TN 37087 weiler@govsolutionsteam.com (218) 894-6815	

Table 2: Company Information and Financial Strength

Line Item	Question	Response *	

10	Provide a brief history of your company, including your company's core values, business philosophy, and industry longevity related to the requested equipment, products or services.	Weiler is an engineering based manufacturer of equipment for the asphalt paving market. The company was founded in 2000 by Pat Weiler. Weiler was an executive with Vermeer prior to starting a contract manufacturing company. The company began by building machines on a contract basis with the intent to have it's own product line. The company purchased the intellectual property of the BG730 road widener and BG650 windrow elevator from Caterpillar in 2005, updated the product and sold and serviced the product through the Caterpillar dealer network. With the input of dealers and end users, the company has introduced more than 25 products to the asphalt paving market since 2005. Weiler continued its relationship with Caterpillar by signing every North America Cat dealers as Weiler dealers. The company has grown from its original 40,000 square foot facility to more than 400,000 square feet and 550 employees. Weiler is vertically integrated and strives to control as much of the manufacturing process as possible with in-house state-of-the-art machining centers, welding, wet and powder coating and assembly operations. As an engineering based manufacturer, products are the focus. Product development comes from listening to the contractor and designing products that meet their needs. We support the product through the Cat dealer network of paving specialists and service technicians along with Weiler product and service support specialists. Weiler has been manufacturing roadway paving equipment since 2005.	*
11	What are your company's expectations in the event of an award?	Weiler's expectations in the event of an award would begin with continued growth in sales of our products to governmental agencies through our Sourcewell contract. This contract will continue to be our go-to-market strategy in the governmental market, and we will position this solution as the top priority for the governmental business of our sales network. Cat equipment is offered on various Sourcewell contracts, therefore, our sales network is familiar with Sourcewell and selling through contracts. Many of the agencies that would have interest in our products are currently purchasing Cat equipment through Sourcewell and have a strong relationship with the sales, service and support team from their local Cat dealer. This is the same group that will be selling, servicing and supporting Weiler products. As a testament to our commitment to contract success in the event of another award, we will continue to engage the proven support and abilities of GST - Government Solutions Team of Lebanon, TN to utilize the Sourcewell contract to its fullest potential. Greg and his team are currently working with Cat dealers and will continue to be a great asset to integrate Weiler products into the Cat dealer governmental sales strategies.	*
12	Demonstrate your financial strength and stability with meaningful data. This could include such items as financial statements, SEC filings, credit and bond ratings, letters of credit, and detailed reference letters. Upload supporting documents (as applicable) in the document upload section of your response.	Weiler is a privately held company and does not release financial statements. The company is financially strong with continued growth for the past 15 years. The business started in a 40,000 square foot facility in 2000. Six major expansions to the facility have taken place since 2008 to the current 400,000 square feet of manufacturing and office space. Employment has grown exponentially as well to more than 550 employees. Sales have grown annually, including during the challenging 2020 fiscal year. Throughout this growth, the company continues to operate debt free. For a financial reference, please contact Brian Hannah at (515) 245-3037 or brian.hannah@wellsfargo.com.	*
13	What is your US market share for the solutions that you are proposing?	By subcategory of equipment: Commercial Pavers - 47% full product offering. The P385B is the highest selling commercial paver in the U.S., 2-to-1 over the closest competitive machine. Road Wideners - 80% Windrow Elevators - 90% Material Transfer Vehicles - 75% Static, Split Drum Compactors - 80% Front Mount Screeds - 50% Tack Distributors - 25% Soil Stabilizer - 50% Force Feed Loader - 25%	*
14	What is your Canadian market share for the solutions that you are proposing?	By subcategory of equipment: Commercial Pavers - 35% Road Wideners - 70% Windrow Elevators - 80% Material Transfer Vehicles - 70% Front Mount Screeds - 40% Tack Distributors - 20%	*
15	Has your business ever petitioned for bankruptcy protection? If so, explain in detail.	No.	*

ATTACHMENT 1

16	How is your organization best described: is it a manufacturer, a distributor/dealer/reseller, or a service provider? Answer whichever question (either a) or b) just below) best applies to your organization. a) If your company is best described as a distributor/dealer/reseller (or similar entity), provide your written authorization to act as a distributor/dealer/reseller for the manufacturer of the products proposed in this RFP. If applicable, is your dealer network independent or company owned? b) If your company is best described as a manufacturer or service provider, describe your relationship with your sales and service force and with your dealer network in delivering the products and services proposed in this RFP. Are these individuals your employees, or the employees of a third party?	Weiler is best described as a manufacturer. Weiler has a very close working relationship with Caterpillar, although no formal partnership connection. All Weiler products are sold and serviced exclusively at Caterpillar dealers across North America. All Cat dealers in North America are also Weiler dealers. Weiler employs 7 territory sales managers in addition to a sales manager. Weiler territory managers work directly with, and support the Cat dealer sales reps and municipal customers through and after the sales process of Weiler machines. Weiler employs 5 product specialists who work with customers for operational training, machine startup support and post sale operation and maintenance support. Weiler employs 5 service support specialists and a service support manager. Weiler service support works directly with Cat dealer service managers and technicians for service related items. In addition, Weiler hosts annual service training at the factory for Cat technicians. To date, more than 500 Cat technicians have been to Weiler service training. Weiler territory managers, product specialists and service specialists are Weiler employees. Dealer sales reps and service technicians are employees of Cat dealers.	*
17	If applicable, provide a detailed explanation outlining the licenses and certifications that are both required to be held, and actually held, by your organization (including third parties and subcontractors that you use) in pursuit of the business contemplated by this RFP.	N/A. Licenses and certifications are not required.	*
18	Provide all “Suspension or Debarment” information that has applied to your organization during the past ten years.	NA – No suspension or disbarment information has been applied to Weiler.	*

Table 3: Industry Recognition & Marketplace Success

Line Item	Question	Response *	
19	Describe any relevant industry awards or recognition that your company has received in the past five years	Weiler equipment has been widely recognized by industry publications as product leaders in the asphalt paving field. Weiler and our products have been recognized with the following awards: Asphalt Contractor Top 30 Product (E1650) 2018. Asphalt Contractor Top 30 Product (P385B) 2019. Equipment Today Top 50 Product (P265) 2019. Association of Equipment Manufacturers Pillar of the Industry Award 2019. Asphalt Contractor Top 30 Product (P395) 2020. Association of Equipment Manufacturers Advocates Gold Award 2020. Asphalt Contractor Top 30 Product (E1650A) 2021. Equipment Today Top 50 Product (P395) 2021. Asphalt Contractor Top 30 Product (E2850C) 2022. Asphalt Contractor Top 30 Product (P285) 2022.	*
20	What percentage of your sales are to the governmental sector in the past three years	7% of our sales are to governmental agencies. The paving process is quite often outsourced by government agencies, thus our equipment is more typically sold to private contractors. But as we stated in our answers to questions 12 and 13, we are the market share leader in the paving equipment industry. Municipal agencies who perform their own paving prefer Weiler equipment.	*
21	What percentage of your sales are to the education sector in the past three years	0%. Our product is not applicable to the education sector.	*
22	List any state, provincial, or cooperative purchasing contracts that you hold. What is the annual sales volume for each of these contracts over the past three years?	Our current Sourcewell contract, and continuing with our future contract if awarded through this RFP, is our go-to-market strategy in the governmental market. As the manufacturer, Weiler does not hold any other cooperative contracts besides Sourcewell.	*
23	List any GSA contracts or Standing Offers and Supply Arrangements (SOSA) that you hold. What is the annual sales volume for each of these contracts over the past three years?	N/A. Weiler currently does not hold any GSA contracts.	*

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Table 4: References/Testimonials

Line Item 24. Supply reference information from three customers who are eligible to be Sourcewell participating entities.

Entity Name *	Contact Name *	Phone Number *	
City of Atchison, KS	Seth Howard	(913) 367-5515	*
Franklin County, Alabama	David Palmer	(256) 332-8434	*
Livingston County (NY) Highway Department	Bryan Gall	(585) 243-6700	*

Table 5: Top Five Government or Education Customers

Line Item 25. Provide a list of your top five government, education, or non-profit customers (entity name is optional), including entity type, the state or province the entity is located in, scope of the project(s), size of transaction(s), and dollar volumes from the past three years.

Entity Name	Entity Type *	State / Province *	Scope of Work *	Size of Transactions *	Dollar Volume Past Three Years *	
South Dakota DOT	Government	South Dakota - SD	Highway Paving	$200,000 $200,000 $200,000 $200,000 $200,000	$1,000,000	*
Livingston Co. Highway Department	Government	New York - NY	Road Widening	$300,000 $300,000	$600,000	*
South Carolina DOT	Government	South Carolina - SC	Highway Paving	$200,000 $200,000 $200,000	$600,000	*
Indiana DOT - Indianapolis	Government	Indiana - IN	Highway Paving	$200,000 $200,000 $200,000	$600,000	*
Tennessee DOT	Government	Tennessee - TN	Highway Paving Road Widening	$300,000 $100,000	$400,000	*

Table 6: Ability to Sell and Deliver Service

Describe your company's capability to meet the needs of Sourcewell participating entities across the US and Canada, as applicable. Your response should address in detail at least the following areas: locations of your network of sales and service providers, the number of workers (full-time equivalents) involved in each sector, whether these workers are your direct employees (or employees of a third party), and any overlap between the sales and service functions.

Line Item	Question	Response *	
26	Sales force.	Weiler dealer network is exclusively the Caterpillar dealer network. The vast number of sales reps in our CAT/Weiler dual dealerships are the "feet on the street" in our US and Canadian sales force at Weiler. Weiler also employs 7 territory sales manager, in addition to a sales manager. Territory sales managers work directly with Cat dealer sales reps across the US and Canada, including governmental sales reps, to determine the appropriate machine to fit the needs of the agency purchasing, pricing and machine specs. Weiler reps will work with dealer reps to ensure machine is ordered with proper options and establish delivery date to meet the needs of the purchasing agency.	*
27	Dealer network or other distribution methods.	Weiler products are sold exclusively through Cat dealers in North America. Every Cat dealer in North America is also a Weiler dealer. Weiler has contracts with each dealer outlining the dealer's primary responsibility for developing and promoting Weiler sales, rentals, parts and servicing of Weiler products within the service territory established by Caterpillar. The Cat dealer network has coverage of every county in the U.S. and province in Canada.	*

28	Service force.	Weiler products are supported and serviced through our dealers' (common with Caterpillar) expert service departments, which are second to none. To further support our customers, Weiler employs 5 service support specialists, in addition to a service manager. Service support specialists work directly with our (and Cat) dealer service teams to quickly diagnose and repair Weiler machines. Weiler conducts annual service training for our (and Cat) dealer technicians with more than 500 Cat dealer technicians having attended in the last five years.	*
29	Describe the ordering process. If orders will be handled by distributors, dealers or others, explain the respective roles of the Proposer and others.	Our smooth ordering process will take place at the local level, done with and through our experienced dealers. When a Sourcewell member decides to purchase a Weiler product through our Sourcewell contract: 1. The Sourcewell member will include their contract number and Sourcewell member number on the Purchase order they issue to our (the Cat) dealer. 2. Our (and Cat) dealer will issue a PO to Weiler to order machine, if not in inventory at dealer. 3. Our (and Cat) dealer will issue an invoice, accept payment and deliver the machine to the member agency. 4. After the machine has been delivered, the dealer will include the member number when filing their sales claim with Weiler. 5. Weiler will create the quarterly report and send sales information to Sourcewell along with the corresponding administrative fees. Important to note: if additional terms or conditions are requested by a customer, such agreement should be executed with the local dealer.	*
30	Describe in detail the process and procedure of your customer service program, if applicable. Include your response-time capabilities and commitments, as well as any incentives that help your providers meet your stated service goals or promises.	Our front-line customer service team with whom the Sourcewell members will interact is the sales and service teams within our (and CAT's) dealer network. Weiler strategically placed territory managers, product specialists and service specialists work very closely with dealer sales, parts and service personnel to ensure prompt response and resolution to customer service issues. With our relationship with Caterpillar, all Weiler equipment uses Cat engines providing familiarity for field technicians as well as common parts for best-in-class parts availability. Weiler service specialists are available 24 hours a day, 7 days a week for dealer support. Weiler service specialists and design engineers will travel to the customer when needed to address a service and/or machine performance concern. Weiler provides suggested stocking lists for dealers for all Weiler equipment. Weiler has parts readily available to ship in the event the dealer does not have in stock. Parts orders have priority over production parts in the factory, meaning all parts orders will be processed through the factory before production parts, if the part is not in stock. 95% of parts are available to customers within 24 hours.	*
31	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in the United States.	Weiler is able and willing to provide our products and services to Sourcewell members throughout the United States. Our current and pending Sourcewell contract is Weiler's go-to-market strategy in the governmental market. Weiler has sold and serviced equipment in all 50 states. The Weiler dealer network has strategic, geographical coverage for every county in the U.S.	*
32	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in Canada.	Weiler is able and willing to provide our products and services to Sourcewell members throughout Canada. Our current and pending Canoe contract is Weiler's go-to-market strategy in the Canadian governmental market. Weiler has sold and serviced equipment in 8 provinces. The Weiler (and CAT) dealer network has strategic, geographical coverage for every province in Canada.	*
33	Identify any geographic areas of the United States or Canada that you will NOT be fully serving through the proposed contract.	There is NO geographical area of the United States or Canada which Weiler does not serve.	*
34	Identify any Sourcewell participating entity sectors (i.e., government, education, not-for-profit) that you will NOT be fully serving through the proposed contract. Explain in detail. For example, does your company have only a regional presence, or do other cooperative purchasing contracts limit your ability to promote another contract?	Weiler is capable of servicing all Sourcewell participating entity sectors. We are not limited by any existing contracts. Sourcewell is our go-to-market strategy.	*
35	Define any specific contract requirements or restrictions that would apply to our participating entities in Hawaii and Alaska and in US Territories.	Weiler has NO unique requirements for members in Hawaii, Alaska or the US Territories.	*

Table 7: Marketing Plan

ATTACHMENT 1

Line Item	Question	Response *	
36	Describe your marketing strategy for promoting this contract opportunity. Upload representative samples of your marketing materials (if applicable) in the document upload section of your response.	If awarded a new Sourcewell contract, this will continue to be our go-to-market strategy for the governmental market. Weiler is very committed to cooperate with Sourcewell to further train our sales management team and our dealer sales representatives to ensure maximum awareness and embracement of our Sourcewell contract. To show our commitment to our Sourcewell contract, we have engaged to deploy the proven ability of GST - Government Solutions Team of Lebanon, TN to build maximum embracement throughout our dealer network. GST will be available in-territory to assist our dealers to increase awareness and comfort for members' in the Sourcewell process. If awarded a contract, Weiler will send out a Pavecast (a Weiler video podcast distributed to our dealer network) announcing the award and providing information on the new contract number. See attachment Weiler Govt Purchasing Brochure. We will update our Governmental Purchasing Guide literature to include the new contract information. This guide is available on our public (weilerproducts.com) and dealer (weilerdealer.com) website. We will update our Government Solutions website page (weilerproducts.com/support/government-solutions) with the new contract new and link to Sourcewell website. At every opportunity Weiler territory managers have to present at dealer sales meetings, we provide a slide with information about our Sourcewell contract. We will continue to promote the contract at internal and external sales meetings. Weiler participates in the annual Cat dealer GIDEX event as a sponsor and presenter, and will continue to do so and promote our Sourcewell contract, if awarded.	*
37	Describe your use of technology and digital data (e.g., social media, metadata usage) to enhance marketing effectiveness.	Our dealer focused Pavecasts, video podcasts, are sent directly to our dealer sales force via email and accessible on our dealer website. These Pavecasts cover a variety of topics related to Weiler sales initiatives and will include one dedicated to the new Sourcewell contract if awarded. We are active on various social media platforms and will include a post across all platforms announcing the new contract, if awarded.	*
38	In your view, what is Sourcewell's role in promoting contracts arising out of this RFP? How will you integrate a Sourcewell-awarded contract into your sales process?	Sourcewell is a well-respected contracting agency within the public procurement industry. It is important, in the event of an award, that our products and logos be included in Sourcewell marketing and website. We believe that the most important role that Sourcewell can play in marketing our contract and products, is to market themselves and promote contract purchasing across the industry. Weiler will promote the Sourcewell contract during all sales meetings with governmental agencies. Our territory managers remind dealer sales reps that Weiler has a Sourcewell contract anytime we learn of an opportunity to sell to a governmental entity and ask the question if they have presented the Sourcewell contract as a purchase option.	*
39	Are your products or services available through an e-procurement ordering process? If so, describe your e-procurement system and how governmental and educational customers have used it.	With limited application. Our products are very technical in nature and require significant interaction with our product experts to ensure the machine is configured to meet the needs of the agency. Our dealers will work with their local agencies to become registered vendors in their e-procurement system.	*

Table 8: Value-Added Attributes

ATTACHMENT 1

Line Item	Question	Response *	
40	Describe any product, equipment, maintenance, or operator training programs that you offer to Sourcewell participating entities. Include details, such as whether training is standard or optional, who provides training, and any costs that apply.	Weiler provides operation and maintenance training at the startup of each machine. A Weiler factory representative will coordinate with the servicing dealer as to when the machine will startup and be onsite throughout the first day of operation. In addition to Weiler factory reps, our dealers have a Paving Specialist who is also available to the member for training and follow up support. Many dealers, along with Weiler reps, offer off-season training classes for operation and maintenance. Dealers will communicate with members if and when those trainings are available. Jobsite starting training with Weiler factory representation is provided at no charge.	*
41	Describe any technological advances that your proposed products or services offer.	Weiler holds seven patents, with additional patents pending, for features on our products. Weiler innovations have become the standard throughout the industry. Weiler engineers are continually advancing the products to provide extended wear life and lower operating costs for the customer. We feel we are the value leader in the industry with lowest cost of ownership and highest resale values.	*
42	Describe any “green” initiatives that relate to your company or to your products or services, and include a list of the certifying agency for each.	Our machines use the latest Cat engines with lowest fuel consumption in the paving industry. Asphalt is a recyclable product. Much of the new asphalt produced today consists of up to 50% recycled materials, including old asphalt and recycled roof shingles.	*
43	Identify any third-party issued eco-labels, ratings or certifications that your company has received for the equipment or products included in your Proposal related to energy efficiency or conservation, life-cycle design (cradle-to-cradle), or other green/sustainability factors.	Weiler strives for energy efficiency throughout the factory. LED lights were installed for significantly reduced energy usage. Steel is recycled and sent back to steel mills for zero waste.	*
44	Describe any Women or Minority Business Entity (WMBE), Small Business Entity (SBE), or veteran owned business certifications that your company or hub partners have obtained. Upload documentation of certification (as applicable) in the document upload section of your response.	N/A.	*
45	What unique attributes does your company, your products, or your services offer to Sourcewell participating entities? What makes your proposed solutions unique in your industry as it applies to Sourcewell participating entities?	Weiler products are industry leading and have changed the standard for commercial size paver and material transfer vehicle customers. Competitors have introduced new products in an attempt to offer similar features and benefits found in our products. Weiler’s relationship with Caterpillar provides us with the most extensive dealer network in the paving industry. Our dealers hold the largest parts inventory and largest number of service technicians available in the industry.	*

ATTACHMENT 1

Table 9A: Warranty

Describe in detail your manufacturer warranty program, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your warranty materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
46	Do your warranties cover all products, parts, and labor?	Yes. Our warranty covers all products, part and labor. Details are included in the Attached Weiler Limited Warranty document.	*
47	Do your warranties impose usage restrictions or other limitations that adversely affect coverage?	We do not impose usage restrictions. Our warranty covers defects in workmanship and material throughout the specified warranty timeframe, as long as the machine is used as designed.	*
48	Do your warranties cover the expense of technicians' travel time and mileage to perform warranty repairs?	No, Our warranty does not cover travel time and mileage, as standard in our industry.	*
49	Are there any geographic regions of the United States or Canada (as applicable) for which you cannot provide a certified technician to perform warranty repairs? How will Sourcewell participating entities in these regions be provided service for warranty repair?	We have no geographical region which we are unable to provide a certified technician to perform warranty repair. Our dealer network provides unmatched coverage throughout North America.	*
50	Will you cover warranty service for items made by other manufacturers that are part of your proposal, or are these warranties issues typically passed on to the original equipment manufacturer?	Warranty repair for Weiler machines is typically performed by our dealer service technicians. Certain components, such as tires, batteries, etc., are warranted by their manufacturers and may have different warranty than that of Weiler.	*
51	What are your proposed exchange and return programs and policies?	We warrant that each Weiler machine will be free of defects in workmanship and material and operate as intended at time of delivery. If not, Weiler will make any necessary corrections.	*
52	Describe any service contract options for the items included in your proposal.	Through this proposed contract, Weiler is offering extended warranty options with various term length and coverage options including: 1) Powertrain 2) Powertrain + Hydraulics 3) Powertrain + Hydraulics + Electric Details of these extended warranty options are included in the attached Weiler Extended Warranty documents. Our dealers offer members the option to enter into a Customer Service Agreement (CSA) to perform routine maintenance and/or repairs. Each CSA contract is customizable to the member needs. Members can work with their local Weiler dealer for additional details on available CSA options.	*

Table 9B: Performance Standards or Guarantees

Describe in detail your performance standards or guarantees, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your performance materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
53	Describe any performance standards or guarantees that apply to your services	Weiler stands behind our product 100%. If the product does not perform to expectations, we will buy back the product or replace with a mutually agreed upon substitute.	*
54	Describe any service standards or guarantees that apply to your services (policies, metrics, KPIs, etc.)	Weiler strives for minimal downtime for customers through dealer inventoried parts and trained technicians. Our parts analyst works closely with our dealers to ensure they have the appropriate amount of Suggested Stocking List parts on-hand, based on the number of similar machines within their servicing territory. In the instance, the dealer does not have the part on-hand, Weiler will strive to have the part delivered as soon as possible to minimize machine downtime for the member. Weiler standard policy is for dealer technicians to contact Weiler service specialists with any questions as soon as needed. In the instance, the issue cannot be resolved over the phone, Weiler service specialists will travel to the machine to diagnose and repair with as minimal downtime as possible.	*

ATTACHMENT 1

Table 10: Payment Terms and Financing Options

Line Item	Question	Response *	
55	Describe your payment terms and accepted payment methods.	Our dealers accept payment from members and their terms and accepted methods may vary. Net 30 is the most common term.	*
56	Describe any leasing or financing options available for use by educational or governmental entities.	Our dealers offer many leasing and financing options. Weiler equipment has special financing rates available through Cat Finance and Wells Fargo. In addition, our dealers may have additional financing programs established within their service territory available to Sourcewell members.	*
57	Describe any standard transaction documents that you propose to use in connection with an awarded contract (order forms, terms and conditions, service level agreements, etc.). Upload a sample of each (as applicable) in the document upload section of your response.	Dealers are required to provide Weiler with a copy of the sales agreement with the member to: 1) Ensure proper pricing has been applied 2) Ensure the proper administrative fee is submitted to Sourcewell	*
58	Do you accept the P-card procurement and payment process? If so, is there any additional cost to Sourcewell participating entities for using this process?	Since our dealers will be receiving payments direct from Sourcewell members, accepting P-card procurement will be at their discretion. Many dealers accept this method without additional fees. Some have limitations on the amount that can be processed.	*

ATTACHMENT 1

Table 11: Pricing and Delivery

Provide detailed pricing information in the questions that follow below. Keep in mind that reasonable price and product adjustments can be made during the term of an awarded Contract as described in the RFP, the template Contract, and the Sourcewell Price and Product Change Request Form.

Line Item	Question	Response *	
59	Describe your pricing model (e.g., line-item discounts or product-category discounts). Provide detailed pricing data (including standard or list pricing and the Sourcewell discounted price) on all of the items that you want Sourcewell to consider as part of your RFP response. If applicable, provide a SKU for each item in your proposal. Upload your pricing materials (if applicable) in the document upload section of your response.	Our proposed contract pricing is simple. We offer to all Sourcewell members, a substantial discount off current list price at the date of their order. Current machine list price is in the attached Sourcewell Price List document, For execution of the agreement, we will ask dealers and members to use the price list that is current at the time of the quote. Dealers will work with the member to configure the machine with desired specs and apply the minimum Sourcewell discount.	*
60	Quantify the pricing discount represented by the pricing proposal in this response. For example, if the pricing in your response represents a percentage discount from MSRP or list, state the percentage or percentage range.	Weiler will offer a discount of 10% off list price for the entire Weiler product offering.	*
61	Describe any quantity or volume discounts or rebate programs that you offer.	Our dealers are empowered to consider purchase order volume, repeat customer relationships, etc., and may provide additional volume discounts at their discretion.	*
62	Propose a method of facilitating “sourced” products or related services, which may be referred to as “open market” items or “nonstandard options”. For example, you may supply such items “at cost” or “at cost plus a percentage,” or you may supply a quote for each such request.	Sourced goods/open market items are available to members from our dealers. These goods and services will be priced at fair market value and will be determined between the member and the selling dealer.	*
63	Identify any element of the total cost of acquisition that is NOT included in the pricing submitted with your response. This includes all additional charges associated with a purchase that are not directly identified as freight or shipping charges. For example, list costs for items like pre-delivery inspection, installation, set up, mandatory training, or initial inspection. Identify any parties that impose such costs and their relationship to the Proposer.	Dealers will include a PDI price in the initial quote to the member. The PDI (Pre- Delivery Inspection) price varies by dealer and machine being quoted. Any additional dealer costs will be itemized and included in the quote to the member.	*
64	If freight, delivery, or shipping is an additional cost to the Sourcewell participating entity, describe in detail the complete freight, shipping, and delivery program.	Machine pricing is F.O.B. from Weiler’s facility in Knoxville, IA. Sourcewell members will be charged for freight to their local dealer, which will vary by dealer location. Delivery from the dealer location to the Sourcewell member's location will also be charged to the member if delivery is requested.	*
65	Specifically describe freight, shipping, and delivery terms or programs available for Alaska, Hawaii, Canada, or any offshore delivery.	Machine pricing is F.O.B. from Weiler’s facility in Knoxville, IA. No unique conditions apply to these regions.	*
66	Describe any unique distribution and/or delivery methods or options offered in your proposal.	If there are any unique member requirements our dealers will work with the members on a case by base basis.	*

Table 12: Pricing Offered

Line Item	The Pricing Offered in this Proposal is: *	Comments
67	c. better than the Proposer typically offers to GPOs, cooperative procurement organizations, or state purchasing departments.	This proposed contract will be our go-to-market strategy across the US and Canada and is priced accordingly.

Table 13: Audit and Administrative Fee

ATTACHMENT 1

Line Item	Question	Response *	
68	Specifically describe any self-audit process or program that you plan to employ to verify compliance with your proposed Contract with Sourcewell. This process includes ensuring that Sourcewell participating entities obtain the proper pricing, that the Vendor reports all sales under the Contract each quarter, and that the Vendor remits the proper administrative fee to Sourcewell. Provide sufficient detail to support your ability to report quarterly sales to Sourcewell as described in the Contract template.	For each Sourcewell sale, we require the dealer to submit to Weiler a copy of the sales order to the purchasing entity to confirm: 1) that proper pricing has been applied, 2) the proper contract and member numbers were included on the sales offer to the customer, and 3) to provide the proper administrative fee to Sourcewell. We internally track sales of all our products to end users. Each quarter we review all sales to governmental agencies and verify if that sale was through the Sourcewell contract. Two Weiler employees review sales quarterly to ensure all Contract sales are reported. Once Sourcewell sales are verified, the quarterly report is prepared by our marketing coordinator, approved by the marketing manager and submitted for payment to our accounting department.	*
69	If you are awarded a contract, provide a few examples of internal metrics that will be tracked to measure whether you are having success with the contract.	Weiler will review governmental sales quarterly and compare Sourcewell versus overall sales. Our goal with the contract is to increase the percentage of Sourcewell sales in relation to overall governmental sales.	*
70	Identify a proposed administrative fee that you will pay to Sourcewell for facilitating, managing, and promoting the Sourcewell Contract in the event that you are awarded a Contract. This fee is typically calculated as a percentage of Vendor's sales under the Contract or as a per-unit fee; it is not a line-item addition to the Member's cost of goods. (See the RFP and template Contract for additional details.)	Weiler proposes a 1% administrative fee to Sourcewell for the sale of new machines made through the Sourcewell contract.	*

Table 14A: Depth and Breadth of Offered Equipment Products and Services

ATTACHMENT 1

Line Item	Question	Response *	
71	Provide a detailed description of the equipment, products, and services that you are offering in your proposal.	Weiler manufactures an extensive range of paving related equipment, sold and serviced through our dealers' highly qualified personnel. We will be offering new and used asphalt pavers, road wideners, windrow elevators, material transfer vehicles, compactors, soil stabilizer, force feed loader and tack distributors. Our dealers will provide parts, service and CSA options to meet the needs of the agencies. Asphalt Pavers Weiler offers 6 models of pavers with various paving ranges. Our path/utility paver has a paving range of 3'10" - 9', and utilized for utility patch work and path paving throughout communities. Our line of 8' pavers provide options for new road construction, road overlays and commercial work including parking lots and patch work. A variety of governmental agencies, from state DOTs to counties and cities, are currently utilizing Weiler pavers for roadway maintenance throughout North America. Road Wideners Weiler road wideners are used for widening roads, maintaining shoulders and trench filling. Weiler offers four wideners. The wideners are capable of widening from 1’ to 14’ with depths 12” below and 12” above grade. Wideners are typically utilized by county and state road departments to maintain and build shoulders alongside two and four lane highways. Windrow Elevators Windrow elevators are used in the paving process to pick up asphalt material laid by bellow-dump trucks and place in the paver hopper. Windrow paving is utilized in the western half of North America. Windrow elevators are typically used in highway paving new construction and resurfacing applications. Material Transfer Vehicles Weiler remixing transfer vehicles are used in the paving process to provide non-contact, non-stop paving with reduced particulate and thermal segregation. Typically used in highway paving new construction and resurfacing applications, but can be used in applications where the transfer vehicle is feeding material to the paver in an area where trucking is challenging. Compactors Weiler offers 3 static compactors and 1 pneumatic compactor used in a variety of road maintenance operations. The compactor’s split front drum reduces tearing in the new asphalt mat, especially in curved sections of roads. Soil Stabilizer The Weiler S200 soil stabilizer is offered with either a soil or combination rotor and is utilized in base stabilization and is currently being used by a number counties to condition gravel roads by mixing an additive into the roads that improves and extends the life of the rock on the road. Force Feed Loader The Weiler E1050 force feed loader is engineered to perform in a variety of applications year-round. The loader picks up soil, asphalt millings, snow, debris and other windrowed materials for high production material transfer. MotorGrader The G65 motor grader is built from a lineage of market leaders for more than 70 years and is the industry leading compact motor grader. The G65 incorporated big grader features in a compact package with canopy or cab option along with versatile optional equipment including moldboard extensions, bank slope, scarifier, dozer blade and ripper. Tack Distributors Weiler offers 8 different trailer and skid mounted tack distributors ranging from 150 gallon to 600 gallon capacity. Tack distributors are used to spray tack prior to placing asphalt on the new or existing surface. Lower capacity tack distributors are ideal for patch work common with city, county and state road departments.	*
72	Within this RFP category there may be subcategories of solutions. List subcategory titles that best describe your products and services.	Road Construction Equipment Road Widening Equipment Asphalt Paving	*

ATTACHMENT 1

Table 14B: Depth and Breadth of Offered Equipment Products and Services

Indicate below if the listed types or classes of equipment, products, and services are offered within your proposal. Provide additional comments in the text box provided, as necessary.

Line Item	Category or Type	Offered *	Comments
73	Asphalt pavers, screeds, distributors, and loaders	(•) Yes ( ) No	6 asphalt paver models. 3 screed models. 4 material transfer vehicle models. 2 windrow elevator models. 1 force feed loader model.
74	Steel-wheeled and pneumatic tire rollers	(•) Yes ( ) No	3 steel-drum compactor models. 1 pneumatic tire compactor model.
75	Wideners, tack distributors, cold planers, and compactors	(•) Yes ( ) No	4 road widener modes. 8 tack distributor models. 1 soil stabilizer model.
76	Concrete mixers, and gunite or shotcrete delivery equipment	( ) Yes (•) No	N/A
77	Other	( ) Yes (•) No	N/A

Table 15: Exceptions to Terms, Conditions, or Specifications Form

Line Item 78. **NOTICE**: To identify any exception, or to request any modification, to the Sourcewell template Contract terms, conditions, or specifications, a Proposer must submit the exception or requested modification on the **Exceptions to Terms, Conditions, or Specifications Form** immediately below. The contract section, the specific text addressed by the exception or requested modification, and the proposed modification must be identified in detail. Proposer's exceptions and proposed modifications are subject to review and approval of Sourcewell and will not automatically be included in the contract.

Contract Section	Term, Condition, or Specification	Exception or Proposed Modification

Documents

Ensure your submission document(s) conforms to the following:

1. Documents in PDF format are preferred. Documents in Word, Excel, or compatible formats may also be provided.

2. Documents should NOT have a security password, as Sourcewell may not be able to open the file. It is your sole responsibility to ensure that the uploaded document(s) are not either defective, corrupted or blank and that the documents can be opened and viewed by Sourcewell.

3. Sourcewell may reject any response where any document(s) cannot be opened and viewed by Sourcewell.

4. If you need to upload more than one (1) document for a single item, you should combine the documents into one zipped file. If the zipped file contains more than one (1) document, ensure each document is named, in relation to the submission format item responding to. For example, if responding to the Marketing Plan category save the document as “Marketing Plan.”

ATTACHMENT 1

- Pricing - Weiler_Sourcewell Pricing Documents.zip - Thursday May 26, 2022 14:08:59
- Financial Strength and Stability - Weiler_Credit References.pdf - Thursday May 26, 2022 14:09:25
- Marketing Plan/Samples - Weiler_Sourcewell Marketing Samples.zip - Thursday May 26, 2022 09:26:53
- WMBE/MBE/SBE or Related Certificates (optional)
- Warranty Information - Weiler Warranty Statements.zip - Thursday May 26, 2022 09:27:03
- Standard Transaction Document Samples - Weiler Standard Transaction Document Samples.zip - Thursday May 26, 2022 09:27:12
- Upload Additional Document (optional)

ATTACHMENT 1

Addenda, Terms and Conditions

PROPOSER AFFIDAVIT AND ASSURANCE OF COMPLIANCE

I certify that I am the authorized representative of the Proposer submitting the foregoing Proposal with the legal authority to bind the Proposer to this Affidavit and Assurance of Compliance:

1. The Proposer is submitting this Proposal under its full and complete legal name, and the Proposer legally exists in good standing in the jurisdiction of its residence.

2. The Proposer warrants that the information provided in this Proposal is true, correct, and reliable for purposes of evaluation for contract award.

3. The Proposer, including any person assisting with the creation of this Proposal, has arrived at this Proposal independently and the Proposal has been created without colluding with any other person, company, or parties that have or will submit a proposal under this solicitation; and the Proposal has in all respects been created fairly without any fraud or dishonesty. The Proposer has not directly or indirectly entered into any agreement or arrangement with any person or business in an effort to influence any part of this solicitation or operations of a resulting contract; and the Proposer has not taken any action in restraint of free trade or competitiveness in connection with this solicitation. Additionally, if Proposer has worked with a consultant on the Proposal, the consultant (an individual or a company) has not assisted any other entity that has submitted or will submit a proposal for this solicitation.

4. To the best of its knowledge and belief, and except as otherwise disclosed in the Proposal, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest. An organizational conflict of interest exists when a vendor has an unfair competitive advantage or the vendor's objectivity in performing the contract is, or might be, impaired.

5. The contents of the Proposal have not been communicated by the Proposer or its employees or agents to any person not an employee or legally authorized agent of the Proposer and will not be communicated to any such persons prior to Due Date of this solicitation.

6. If awarded a contract, the Proposer will provide to Sourcewell Participating Entities the equipment, products, and services in accordance with the terms, conditions, and scope of a resulting contract.

7. The Proposer possesses, or will possess before delivering any equipment, products, or services, all applicable licenses or certifications necessary to deliver such equipment, products, or services under any resulting contract.

8. The Proposer agrees to deliver equipment, products, and services through valid contracts, purchase orders, or means that are acceptable to Sourcewell Members. Unless otherwise agreed to, the Proposer must provide only new and first-quality products and related services to Sourcewell Members under an awarded Contract.

9. The Proposer will comply with all applicable provisions of federal, state, and local laws, regulations, rules, and orders.

10. The Proposer understands that Sourcewell will reject RFP proposals that are marked "confidential" (or "nonpublic," etc.), either substantially or in their entirety. Under Minnesota Statutes Section 13.591, subdivision 4, all proposals are considered nonpublic data until the evaluation is complete and a Contract is awarded. At that point, proposals become public data. Minnesota Statutes Section 13.37 permits only certain narrowly defined data to be considered a "trade secret," and thus nonpublic data under Minnesota's Data Practices Act.

11. Proposer its employees, agents, and subcontractors are not:
    1. Included on the "Specially Designated Nationals and Blocked Persons" list maintained by the Office of Foreign Assets Control of the United States Department of the Treasury found at: https://www.treasury.gov/ofac/downloads/sdnlist.pdf;

    2. Included on the government-wide exclusions lists in the United States System for Award Management found at: https://sam.gov/SAM/; or

    3. Presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated

by the State of Minnesota; the United States federal government or the Canadian government, as applicable, or any Participating Entity. Vendor certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this solicitation.

☑ By checking this box I acknowledge that I am bound by the terms of the Proposer's Affidavit, have the legal authority to submit this Proposal on behalf of the Proposer, and that this electronic acknowledgment has the same legal effect, validity, and enforceability as if I had hand signed the Proposal. This signature will not be denied such legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation. - Andy Adamcik, Marketing Manager, Weiler Inc.

The Proposer declares that there is an actual or potential Conflict of Interest relating to the preparation of its submission, and/or the Proposer foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the bid.

○ **Yes** ◉ **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document.

Check the box in the column "**I have reviewed this addendum"** below to acknowledge each of the addenda.

File Name	I have reviewed the below addendum and attachments (if applicable)	Pages
Addendum_4_Roadway_Paving_Eqpt_RFP_060122 Tue May 24 2022 04:31 PM	☑	1
Addendum_3_Roadway_Paving_Eqpt_RFP_060122 Thu May 19 2022 09:01 AM	☑	1
Addendum_2_Roadway_Paving_Eqpt_RFP_060122 Fri April 29 2022 04:09 PM	☑	1
Addendum_1_Roadway_Paving_Eqpt_RFP_060122 Fri April 15 2022 03:54 PM	☑	1

DocuSign Envelope ID: 39F375C9-5D93-476F-9D49-B829B3D12391

AMENDMENT #1
TO
CONTRACT # 060122-WLR

THIS AMENDMENT is effective upon the date of the last signature below by and between **Sourcewell** and **Weiler Inc.** (Supplier).

Sourcewell awarded a contract to Supplier to provide Roadway Paving Equipment to Sourcewell and its Participating Entities, effective August 9, 2022, through August 1, 2026 (Contract).

NOW, THEREFORE, the parties wish to amend the Contract as follows:

> Section 18. Insurance–Subsection A. Requirements– Item 5. Network Security and Privacy Liability Insurance of the Contract is deleted in its entirety.

Except as amended by this Amendment, the Contract remains in full force and effect.

Sourcewell

By: DocuSigned by: Jeremy Schwartz C0FD2A139D06489...

Jeremy Schwartz, Director of Operations/CPO

Date: 1/17/2024 | 3:21 PM CST

Weiler Inc.

By: DocuSigned by: Megan Weiler Green 53DFC2D21A824E7...

Megan Weiler Green, General Counsel

Date: 1/17/2024 | 10:49 AM PST

PETERSON CAT

SOURCEWELL CONTRACT 060122-WLR QUOTE / WEILER P65 PAVER

Contract Agency: CITY OF LIVERMORE
RFQ/Solicitation #: QUOTE#227403

Date Quoted: 6/12/2024
Quote Expires: 12/9/2024

Contracting Officer: SCOTT KOOREMAN
Phone: 925 960 8032
Email: smkoorman@livermoreca.gov
Customer/End User: SCOTT KOOREMAN
Phone: 925 960 8032
Fax:
E-Mail: smkoorman@livermoreca.gov
Address: 3500 ROBERTSON PARK RD

Quote Prepared by:
Name: Mathew Durfinger
Title: Governmental Sales Representati
Dealer Name: Peterson H370
Phone: 510 254 1203

Email: Mddurflinger@gmail.com

Machine Item Number	Description	List Price
P65-001	T4 PAVER	$ 133,960.00
P65-270	SCREED GROUP W/ EXTENSTION	INCLUDED
P65-260	HEATED END GATES GROUP	INCLUDED
P65-112	7 GALLON SPRAY DOWN TANK GROUP	INCLUDED
P65-110	LED STROBE LIGHT GROUP	INCLUDED
P65-601	US, CANADA ENGLISH LANGUAGE &	INCLUDED
P65-115	LIGHTING GROUP	INCLUDED
P65-107	SECOND SIDE STEERING INDICATOR	INCLUDED
	DECAL GROUP	INCLUDED
	MOUNTED AUGERS	INCLUDED

Total List Price (USD): $ 133,960.00

Sourcewell Machine Discount **10.00%** $ (13,396.00)

Sub Total: $ 120,564.00

Sales Tax Tax(10.25%) $ 12,357.81

Additional Items

Description		Net Price
Dealer Pre Delivery Service		$ 1,302.00
Freight / Local Delivery		$ 4,650.00
60 Month or 4000 Hour Powertrain + Hyd +Elec + Engine Warranty		$ 4,679.24

GRAND TOTAL: $ 143,553.05

Standard Warranty 24 Months / Unlimited Hours
Travel Time and Mileage Not Included
Delivery Timeframe Up To 180 Days After Award
F.O.B. 3500 ROBERTSON PARK RD. LIVERMORE CA 94550

This quote is made in accordance with SOURCEWELL CONTRACT 060122-WLR.

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING ISSUANCE OF A PURCHASE ORDER TO PETERSEN CAT FOR A WEILER P65 PAVER IN AN AMOUNT NOT-TO-EXCEED $143,554 AND APPROPRIATING $143,554 FROM THE FLEET INTERNAL SERVICE FUND TO PURCHASE THE PAVER

The City of Livermore ("City") Maintenance Division utilizes various equipment, including an asphalt paver, to repair asphalt surfaces throughout the City. The City's Fleet Policy currently recommends the replacement of the City's asphalt paver.

Livermore Municipal Code section 2.68.370 allows for the purchase of equipment with a value higher than $50,000 through a cooperative purchasing arrangement. Livermore Municipal Code section 2.68.390 identifies specific cooperative purchasing agencies and counties that are pre-approved.

Weiler Inc. ("Supplier") holds the Sourcewell (formerly National Joint Powers Alliance) competitively bid cooperative purchasing contract for roadway paving equipment. Livermore Municipal Code section 2.68.390 identifies the National Joint Powers Alliance as an approved cooperative purchasing arrangement.

On June 12, 2024, the City received a quote from Peterson Tractor Co. d/b/a Peterson Cat ("Dealer"), an authorized dealer of paving equipment manufactured by Supplier, for one 2024 Weiler P65 Paver in the amount of $143,554. Dealer agreed that the quoted price would remain valid until December 9, 2024.

The funding for the replacement asphalt paver was included in the Fleet Internal Services Fund FY 2023-24 budget. Since FY 2023-24 ended on June 30, 2024, the unused replacement asphalt paver budget reverted to fund balance. As such, an appropriation of $143,554 from the Fleet Internal Services Fund is required to purchase the 2024 Weiler P65 Paver.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Authorizes the City Manager, or her designee, to execute a purchase order, on behalf of the City of Livermore, with Peterson Tractor Co. d/b/a Peterson Cat in an amount not-to-exceed $143,554 for the purchase and delivery of one 2024 Weiler P65 Paver in accordance with the terms, specifications and general provisions specified in Sourcewell Contract #060122-WLR and sections 2.68.370 and 2.68.390 of the Livermore Municipal Code.

2. Appropriates $143,554 from the Fleet Internal Service Fund for the purchase of one 2024 Weiler P65 Paver.

3. Authorizes the City Manager, or her designee, to take whatever actions are necessary and appropriate to carry out the purpose and intent of this resolution.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Molly O'Toole
Molly O'Toole
Deputy City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.13**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Tina Olson, Administrative Services Director

SUBJECT: Resolution authorizing execution of an agreement with NFP Retirement, Inc. for consultant services pertaining to the City's Deferred Compensation Plans in an amount not-to-exceed $208,000, and a term ending June 30, 2029.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute the agreement with NFP Retirement, Inc. for consultant services pertaining to the City's Deferred Compensation Plans in an amount not-to-exceed $208,000, and a term ending June 30, 2029.

SUMMARY

The City requires professional services to assist in the administration of deferred compensation plans, including, but not limited to, investment options, investment performance evaluation, record keeping, requests for proposals from third party plan providers, and other matters related to the plans.

NFP Retirement, Inc. possesses the distinct professional skills, qualifications, experience, and resources necessary to timely perform the services described in the agreement.

DISCUSSION

The City sponsors a 457(b) plan for the benefit of its eligible employees. The City's Deferred Compensation Committee will use the consultant services of NFP Retirement Inc. to serve as an advisor to the City on matters relating to Deferred Compensation Plan administration and compliance; provide technical and professional support to the City regarding the Plans, including working with Human Resources to update/complete Plan documents. NFP Retirement Inc. will meet quarterly with the City's Deferred Compensation Committee to review the Annual Investment Policy Statement, report on legislative updates and ongoing educational sessions, provide periodic investment performance review analysis, periodic vendor performance review analysis, periodic compliance reviews, provider renegotiation, and additional services. Staff recommends City Council approve a five-year contract with the consultant so that the City can continue to provide professional services to assist in the administration of deferred compensation plans.

FISCAL AND ADMINISTRATIVE IMPACTS

The Deferred Compensation Plan provides funding for this agreement therefore no additional appropriations are necessary.

COMMUNITY PILLAR

5: A City That Works

GOAL

8: Attract, develop, engage, and retain a diverse and highly skilled workforce across the organization.

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement

Prepared by: Eddie Jimenez
Human Resource Analyst I

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT WITH NFP RETIREMENT, INC. FOR CONSULTING SERVICES PERTAINING TO DEFERRED COMPENSATION PLANS IN AN AMOUNT NOT-TO-EXCEED $208,000, AND A TERM ENDING JUNE 20, 2029

The City of Livermore ("City") requires professional services to assist in the administration of deferred compensation plans, including, but not limited to, investment options, investment performance evaluation, record keeping, requests for proposals from third party plan providers, and other matters related to the plans.

The City's Deferred Compensation Committee ("Committee") selected NFP Retirement, Inc. based on overall experience, familiarity with Livermore processes, quality of personnel, and ability to respond to the City's needs on a timely basis. Based on the unanimous vote of the Committee, NFP Retirement, Inc. was selected to serve as the advisor to the City on matters relating to the deferred compensation plan's administration and compliance; and provide technical and professional support to the City regarding the plans, including working with Human Resources to update/complete plan documents.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager to execute an agreement with NFP Retirement, Inc., attached hereto as Exhibit A, to perform professional, technical, and specialized benefits services related to Deferred Compensation Plan administration as specified by City of Livermore in support of its Human Resources business activities, in an amount not-to-exceed $208,000 and a term ending June 30, 2029.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

Exhibit A - NFP Retirement, Inc. Agreement

DocuSign Envelope ID: 46DA1E59-1C42-41AB-871D-29D0CB7B4500

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this ___ day of _____, 2024, by and between the City of Livermore ("City"), a municipal corporation, and NFP Retirement, Inc., ("Consultant"),a California corporation.

RECITALS

City requires professional services to assist the City in the administration of deferred compensation plans, including, but not limited to, investment options, investment performance evaluation, record keeping, requests for proposals from third party plan providers, and other matters related to the plans.

Consultant warrants it possesses the distinct professional skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Consultant acknowledges City has relied upon these warranties to retain Consultant.

AGREEMENT

NOW, THEREFORE, City and Consultant hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Consultant. City hereby retains Consultant, and Consultant hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Consultant and its employees are not City officers or employees. Consultant is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Consultant shall provide the following professional services as more particularly set forth in Exhibit "A" (collectively "the Services"):

Consultant shall serve as the advisor of the City on matters relating to Deferred Compensation Plan administration and compliance; and provide technical and professional support to the City regarding the Plans, including working with Human Resources to update/complete Plan documents. Consultant shall provide services including, but not limited to, investment options, investment performance evaluation, record keeping, request for proposals from third-party plan providers, renegotiation services with third-party plan providers, assuming specified fiduciary obligations, and other matters related to the Plan. It is understood that the City may choose which individual component services it desires from Consultant on an as needed basis, and may determine when those services are to be provided. The City is not obligated to select any specific services as more particularly set forth in Exhibit "A".

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Fiduciary Role under ERISA (Disclosed pursuant to and in accordance with the 408(b)(2) regulation): The Advisor acknowledges that it is a fiduciary with respect to the Plan under Section 3(21)(A)(ii) of the Employee Retirement Income Security Act of 1974, as amended (ERISA) and, as such, is a co-fiduciary with the plan sponsor fiduciary(ies) of the Client's Plan solely with respect to (a) the provision of investment education of the employer and/or plan participants (depending on the specific advisory services provided; (b) the periodic reporting on, and analysis of, the investment options available under the Plan, excluding company stock and investments made available through a brokerage account/window or similar such investment vehicle; and (c) the provision of advice to the plan sponsor fiduciary(ies) regarding the elimination or addition of investment options available under the Plan; provided, however, that the plan sponsor fiduciary(ies) acknowledge and agree that the plan sponsor fiduciary(ies) have the final and conclusive responsibility for the investment options selected to be available under the Plan. The Adviser will not be responsible for investment decisions made by the Plan participants with respect to the investment of their individual accounts.

4. **Consultant's Responsibilities.** Consultant shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Consultant to practice its profession and to provide the Services;

(e) Comply with all laws in effect that are related to Consultant and the Services;

(f) Coordinate the Services with Eddie Jimenez, Human Resources ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Consultant by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Consultant's invoice shall be in writing and describe the Services performed for the payment requested. Consultant shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Consultant and must include time sheets, work progress reports,

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and other documentation to adequately explain all the Services invoiced for payment. Consultant shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Consultant shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Consultant and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Consultant shall correct, at its own expense, all errors in the Services. Should Consultant fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Consultant;

(l) If applicable, Consultant shall ensure that all work for compensation is provided in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Consultant shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Consultant shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Consultant's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as all applicable regulations and guidelines issued pursuant to the ADA.

5. Compensation and Payment.

(a) The total compensation payable by City to Consultant for the Services **SHALL NOT EXCEED** the sum of $208,000 ("not-to-exceed amount"). City shall compensate Consultant for the Services rendered at the hourly rates, task amounts or travel expenses set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates, task amounts or travel expenses are intended to be Consultant's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Consultant, its agents, and employees to provide the Services.

(b) City shall pay Consultant no later than 30 days after City receives a written invoice from Consultant and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 1, 2024, and terminates upon the completion of the Services or June 30, 2029, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Consultant at least 30 calendar-days written notice. Upon receipt of a termination notice, Consultant shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and then assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Consultant in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Consultant in the performance of the Services are City's property and Consultant shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Consultant for City under this Agreement are works made for hire, and Consultant shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Consultant agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Consultant to City and Consultant obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

10. Confidentiality. Consultant shall not disclose any confidential or proprietary information received from City to anyone except Consultant's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Consultant shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Consultant's performance of the services contemplated by this Agreement, or in connection with Consultant's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Consultant's obligations to hold harmless, indemnify, and defend shall not be excused because of Consultant's inability to evaluate Liability or because Consultant evaluates Liability and determines that Consultant is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Consultant must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Consultant's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Consultant's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Consultant shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Consultant shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Consultant's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Consultant for, the Services does not release Consultant from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Consultant's responsibility or liability by City for any defect or error in the Services.

15. Conflict of Interest. Consultant represents that no City employee or official has a financial interest in Consultant. Consultant shall not offer, encourage, or accept any financial interest in any part of Consultant's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private party, Consultant represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Consultant shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Consultants' financial interest. While it is Consultant's sole responsibility to evaluate its conflicts of interest, the Consultant nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other consultants to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Consultant shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty-percent or more in the ownership or control of Consultant constitutes an assignment. Notwithstanding anything to the contrary in the foregoing, no assignment, as interpreted under the Investment Advisers Act of 1940, as amended ("Advisers Act") and Securities and Exchange Commission guidance, of the Agreement shall be made by the Consultant without City consent. In the event of a change-in-control of the Consultant, such consent may be obtained through a "negative consent" process by which the Consultant notifies City in writing of the planned transaction and gives it an opportunity to object in writing (i.e., at least thirty (30) days) to a continuation of the Agreement after the change-in-control.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Consultant must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Eddie Jimenez, HR Analyst I
City of Livermore
1052 S Livermore Avenue
Livermore, California 94550

TO CONSULTANT: Attention: Solomon Stewart, SVP
West Region Retirement Leader
NFP Retirement, Inc.
120 Vantis, Suite 400
Aliso Viejo, CA 92656

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23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONSULTANT: **Dated:**

DocuSigned by:
Solomon Stewart
DAFF1CE630014E3...

7/1/2024 | 12:48 PM PDT

Solomon Stewart
SVP, West Retirement Leader

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Jason Alcala
6666D2D1A884431...

Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

EXHIBIT A

Exhibit A – Scope of Services

Perform professional, technical, and specialized Benefits services related to Deferred Compensation Plan administration as specified by City of Livermore in support of its Human Resources business activities. The City shall select the services to be provided from time to time from the list of services below. The cost of the selected services shall not exceed the amount(s) indicated for the term of this agreement:

FIDUCIARY RESPONSIBILITIES	
• Annual Investment Policy Statement **(per review)** • Committee meetings to include legislative updates and ongoing educational sessions **(per meeting)**	**$2,000** **$4,000**
PERIODIC INVESTMENT PERFORMANCE REVIEW ANALYSIS (per review)	**$6,000**
• Market Overview • Executive Summary specific to the City's combined plans • Performance to peer group and index benchmarking • Watch list recommendations • Assist with investment fund additions/deletions	
PERIODIC VENDOR PERFORMANCE REVIEW ANALYSIS (per review)	**$ 5,500**
• Development of performance standards and financial guarantees • Review of provider performance standards • Determination of financial guarantees • Addressing performance issues	
PERIODIC COMPLIANCE REVIEWS	**INCLUDED**
☐ Review and analysis of existing compliance and administrative procedures including the Plan Document and Investment Policy Statement	
COMPREHENSIVE COMPLIANCE AUDIT	**$20,000**
☐ Comprehensive audit of additional areas likely to be examined in an IRS audit including, but not limited to, eligibility requirements, adherence to annual maximums, catch up provisions, hardship withdrawal, loan requirements and domestic relations orders	
PROVIDER RENEGOTIATION	**$24,500**
We will solicit plan enhancements from the existing provider to improve previously targeted areas. This component includes: • Meet with the City and Committee to establish goals and objectives to attain through renegotiation • Develop a timeline for the renegotiation process • Negotiate with current provider based upon desired goals and objectives • Lead the transition from current plan to negotiated plan • Assist with participant communications throughout the process • Assist with the preparation of the recommendation to City Council • Contract review based upon negotiated agreements	
For additional Services Requested Outside of Scope at Hourly Rate	
• Professional Staff • Administrative Staff	**$325** **$165**

All Consultant payment(s) shall be made from funds paid to the City by its Deferred Compensation provider. Such payment(s) shall not exceed the amounts listed above in this scope of services.

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $2,000,000 per occurrence/**$4,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $1,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability."
4. Professional Liability/Errors and Omissions:
   $2,000,000 per claim. Consultant/Contractor warrants that any retroactive date under this policy shall precede the effective date of this contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two years beginning at the time work under this contract is completed.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated

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volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.14**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Tina Olson, Administrative Services Director

SUBJECT: Resolution authorizing the execution of an agreement with Eide Bailly, LLP for auditing services in an amount not-to-exceed $360,000 for fiscal years 2023-24 and 2024-25.

RECOMMENDED ACTION

Staff recommends that the City Council adopt a resolution authorizing the City Manager to execute an agreement with Eide Bailly, LLP for auditing services in an amount not-to-exceed $360,000 for fiscal years 2023-24 and 2024-25.

SUMMARY

All local government entities are required to have an independent audit of their annual financial statements.

The City has been in contract with Eide Bailly for the last three years to provide auditing services. At the start of that contract, the City had the option of entering a contract with Eide Bailly for an additional two years. City staff would like to continue with Eide Bailly through the next two years.

DISCUSSION

The City is required to undergo an audit of its year-end financial reporting and the supporting accounting records by independent auditors. The independent auditors play an important and reassuring role in testing and evaluating the City's system of internal controls and overall financial management for signs of strengths and weaknesses and reporting the results. The auditors also perform compliance testing and assist in the preparation of reports required by the State and Federal governments.

The City's current three-year agreement has ended with the completion of the annual financial audit for the fiscal year ended June 30, 2023. The City had the option to extend the contract for an additional two years. The City recently completed the transition to the new Enterprise Resource Planning (ERP) financial system. Staff believes it would be beneficial to execute the option of a two-year contract with Eide Bailly to complete the two audits that includes the first year of the transition to the ERP financial system. Eide Bailly is familiar with the chart of accounts in the prior financial system which will make it

easier for Eide Bailly to understand the crosswalk of the chart of accounts to the new ERP financial system. In addition, staff has had a positive working relationship with Eide Bailly. Therefore, staff recommends that City Council award a professional services agreement for auditing services to Eide Bailly. The proposed agreement would provide audit services for fiscal years 2023-24 through 2024-25.

FISCAL AND ADMINISTRATIVE IMPACTS

The total amount of the two-year agreement is not to exceed $360,000, with the base audit fee of $300,228 and a contingency of $59,772 for testing of second major program for the federal awards audit and other reports if required.

This fee is shared amongst the General Fund, Measure B funds, and certain other funds, which require compliance reporting. The amount for fiscal years 2023-24 and 2024-25 audit has already been incorporated into the approved budget, therefore no additional appropriation is required at this time.

COMMUNITY PILLAR
5: A City That Works

GOAL
17: Ensure effective use of public resources.

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement

Prepared by: Erik Peterson
Finance Manager

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE EXECUTION OF AN AGREEMENT WITH EIDE BAILLY, LLP FOR AUDITING SERVICES IN AN AMOUNT NOT-TO-EXCEED $360,000 FOR FISCAL YEARS 2023-24 AND 2024-25

The City of Livermore ("City") is required to undergo an audit of its year-end financial reporting and the supporting accounting records by independent auditors. The independent auditors play an integral role in testing and evaluating the City's internal controls and overall financial management for strengths and weaknesses and for reporting these results.

The City has been in contract with Eide Bailly, LLP for the last three years to provide auditing services. City staff would like to continue with Eide Bailly, LLP through the next two fiscal years.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager to execute a professional services agreement with Eide Bailly LLP for auditing services for fiscal years 2023-24 and 2024-25, attached hereto as Exhibit A, in an amount not to exceed $360,000.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

Exhibit A – Eide Bailly, LLP Agreement

RESOLUTION NO. _____

Docusign Envelope ID: 160DCF32-9DA2-437F-B819-56F74E464CE4

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this ___ day of _____, 2024, by and between the City of Livermore ("City"), a municipal corporation, and Eide Bailly Advisors, LLC("Consultant"),a limited liability company.

RECITALS

City requires professional services to provide independent auditing services and preparation of financial reports.

Consultant warrants it possesses the distinct professional skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Consultant acknowledges City has relied upon these warranties to retain Consultant.

AGREEMENT

NOW, THEREFORE, City and Consultant hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Consultant. City hereby retains Consultant, and Consultant hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Consultant and its employees are not City officers or employees. Consultant is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Consultant shall provide the following professional services as more particularly set forth in Exhibit "A" (collectively "the Services"):

To provide independent auditing services and preparation of financial reports

4. Consultant's Responsibilities. Consultant shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

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(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Consultant to practice its profession and to provide the Services;

(e) Comply with all laws in effect that are related to Consultant and the Services;

(f) Coordinate the Services with Erik Peterson, Finance Manager ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Consultant by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Consultant's invoice shall be in writing and describe the Services performed for the payment requested. Consultant shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Consultant and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Consultant shall make the invoices and records promptly available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. If City requests the invoices and records prior to their destruction, Consultant and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Consultant shall correct, at its own expense, all errors in the Services. Should Consultant fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Consultant;

(l) If applicable, Consultant shall ensure that all work for compensation is provided in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Consultant shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law.

(m) Consultant's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as all applicable regulations and guidelines issued pursuant to the ADA.

5. <u>Compensation and Payment</u>.

(a) The total compensation payable by City to Consultant for the Services

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SHALL NOT EXCEED the sum of $360,000 (base fee of $155,341 for fiscal year 2023-24; $157,748 for fiscal year 2024-25 and contingency of $10,000 for testing of second major program for federal award audits each year) ("not-to-exceed amount"). City shall compensate Consultant for the Services rendered at the hourly rates, task amounts or travel expenses set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates, task amounts or travel expenses are intended to be Consultant's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Consultant, its agents, and employees to provide the Services.

(b) City shall pay Consultant no later than 30 days after City receives a written invoice from Consultant and verifies the Services were performed for the payment requested.

6. Term. The term of this Agreement commences on July 22, 2024, and terminates upon the completion of the Services or March 31, 2026, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Consultant at least 30 calendar-days written notice. Upon receipt of a termination notice, Consultant shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and then assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Consultant in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items specifically prepared or obtained by Consultant for and required to be delivered to City under this Agreement ("Deliverables") are City's property and Consultant shall deliver them to City upon payment.

9. Copyright and Right of Use. All Deliverables created by Consultant for City under this Agreement are works made for hire, and Consultant shall give City the copyright and all intellectual property rights to Deliverables. Consultant agrees that all Deliverables will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Consultant to City and Consultant obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

10. Confidentiality. Consultant shall not disclose any confidential or proprietary information received from City to anyone except Consultant's employees who require access to the information to perform the Services, unless required by law or applicable professional standards. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

11. Defense, Indemnity, and Hold Harmless. Consultant is not required to indemnify City for the City's acts as provided by AICPA standard 1.228.020.01. However, to the fullest extent permitted by law, Consultant shall hold harmless, indemnify, and defend the City and its elected and appointed officials, officers, directors, employees, agents and

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designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") , except for such Liability caused by the City, and that no defense shall be required where such Liability arises out of the actual or alleged acts or omissions in Consultant's performance of professional services. Consultant's obligations to hold harmless and indemnify shall not be excused because of Consultant's inability to evaluate Liability or because Consultant evaluates Liability and determines that Consultant is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Consultant must respond within 30 days to the tender of any claim for indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Consultant's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Consultant's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Consultant shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Consultant shall endeavor to comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager, or Consultant may terminate this Agreement.

13. Acceptance of Final Payment. Consultant's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Consultant for, the Services does not release Consultant from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Consultant's responsibility or liability by City for any defect or error in the Services.

15. Conflict of Interest. Consultant represents that no City employee or official has a financial interest in Consultant. Consultant shall not offer, encourage, or accept any financial interest in any part of Consultant's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private party, Consultant represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

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16. Economic Disclosure. Consultant shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Consultants' financial interest. While it is Consultant's sole responsibility to evaluate its conflicts of interest, the Consultant nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other consultants to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Consultant shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty-percent or more in the ownership or control of Consultant constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Consultant must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Erik Peterson, Finance Manager
City of Livermore
1052 S Livermore Avenue
Livermore, California 94550

TO CONSULTANT: Attention: Ahmad Gharaibeh, CPA, Partner
Eide Bailly LLP
1900 S Norfolk St., Ste. 225
San Mateo, CA 94403

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23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

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In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONSULTANT: **Dated:**

DocuSigned by:
Ahmad Gharaibeh
E8D5549089BE4EF...

7/15/2024 | 11:38 AM PDT

Ahmad Gharaibeh
Partner

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Jason Alcala
Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

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EXHIBIT A

EideBailly

CPAs & BUSINESS ADVISORS

May 3, 2024

To Management of the City of Livermore
Livermore, California

This letter outlines the fees for the various projects to be contracted between Eide Bailly LLP (Eide Bailly) and the City of Livermore (City).

Scope of Engagement

We will work with you to provide the following services:

- Audit the Annual Comprehensive financial Report of the City.
- Audit of the financial statements of the Livermore-Pleasanton Fire Department Joint Powers Authority
- Audit of the financial statements of Measure F fund and compliance requirements applicable to the Measure F Funds
- Audit of the financial statements of Measure B fund and compliance requirements applicable to the Measure B Funds
- Audit of the financial statements of Measure BB fund and compliance requirements applicable to the Measure BB Funds
- Audit of the City's major federal programs
- Audit of the City's Compliance with the Transportation Development Act
- Agreed Upon Procedures related to the City's GANN limit
- Assistance in preparing the California State Controller's Financial Transaction Report
- Assistance in drafting the financial statements of the projects noted above.

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EXHIBIT A

Our fees for the projects listed above are as follows:

Project	**2024**	**2025**	**2026**
Audit of Annual Comrehensive Financial Report	$ 91,953	$ 93,792	$ 95,668
Assist in compling the City's Financial Statements	35,000	35,000	35,000
Audit of Livermore-Pleasanton Fire Department JPA	10,612	10,824	11,041
Audit of Measure F	1,592	1,624	1,656
Audit of Measure B	1,592	1,624	1,656
Audit of Measure BB	1,592	1,624	1,656
Signle Audit *	6,367	6,494	6,624
Audit of Transportation Development Act	1,592	1,624	1,656
GANN Agreed Upon Procedures	796	812	828
Compilting the City's Financial Transaction Report	4,245	4,330	4,416
	$ 155,341	$ 157,748	$ 160,201

** Per federal program*

We appreciate the opportunity to be of service to you and look forward to working with you and your staff.

Respectfully,

Ahmad Gharaibeh, CPA
Partner

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $3,000,000 per occurrence/**$6,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $1,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability".
4. Professional Liability/Errors and Omissions:
   $3,000,000 per claim. Consultant/Contractor warrants that any retroactive date under this policy shall precede the effective date of this contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two years beginning at the time work under this contract is completed.

Deductibles and Self-Insured Retention

Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A-: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special

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limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.15**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brandon Cardwell, Innovation and Economic Development Director

SUBJECT: Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.

RECOMMENDED ACTION

The Commission for the Arts and staff recommend the City Council adopt a resolution approving the applications and authorizing the execution of the following Project and Program Grant Agreements:

1. Livermore Pride, in the amount of $10,000 for Art Programming at the 5th Annual Livermore Pride Fest.
2. Livermore Valley Opera (LVO), in the amount of $10,000 for LVO's Education and Community Engagement Program.
3. Thomasin Dewhurst Fine Art, in the amount of $10,000 for a visual arts collaboration between Arts and Science in the form of a mural project and event.

SUMMARY

The Commission for the Arts administers the Project and Program Grant Program, including reviewing funding applications twice per year in March and September and providing funding recommendations to the City Council for final approval.

In March 2024, a total of five (5) applications were received for Project and Program funds. The Commission for the Arts and staff recommend the City Council adopt a resolution approving the execution of a Project and Program Grant Agreement with each of the following three (3) applicants: Livermore Pride, Livermore Valley Opera (LVO), and Thomasin Dewhurst Fine Art.

DISCUSSION

In 2004, the City Council created the Public Art Fund for the purpose of funding art and cultural programming. In 2008, the City Council created the Project and Program Grant Program to provide funding from the Public Art Fund for local organizations and artists providing cultural enrichment

experiences in Livermore.

The Commission for the Arts administers the Project and Program Grant Program, including reviewing funding applications twice per year in March and September and providing funding recommendations to the City Council for final approval. Opportunities for funding were posted on the City website and social media.

On March 1, 2024, staff received a total of five (5) applications, which were reviewed by a subcommittee of the Commission for the Arts. The subcommittee reviewed the applications and presented its funding recommendations to the full Commission at its regular meeting on March 26, 2024. The following three applications were recommended for funding: Livermore Pride, Livermore Valley Opera, and Thomasin Dewhurst Fine Art.

Agency	Project	Funds Requested	Grant Recommendation
Livermore Pride	A Variety of Art Programming at the 5th Annual Livermore Pride Fest	$10,000	$10,000
Livermore Valley Opera (LVO)	Education and Community Engagement Program	$10,000	$10,000
Thomasin Dewhurst Fine Art	Visual Arts Collaboration Between Arts and Science Mural Project and Event	$10,000	$10,000

Livermore Pride's Art Programming at the 5th Annual Pride Fest includes live music, spoken word, DJ music, dance, drag, physical arts, and new media. LVO's Education and Community Engagement program includes an opera reduction performance for elementary schools, master classes at middle schools, high schools, and the community college, as well as opera recitals scheduled at a senior community center and library. Thomasin Dewhurst Fine Arts' project engages adult and youth artists to create a mural and event celebrating Livermore's innovations in clean air transportation.

FISCAL AND ADMINISTRATIVE IMPACTS

The Project and Program Grants are funded with Public Art Fee funds (F608). Funds have been included in the FY 2024-25 budget. No further appropriation is needed at this time.

COMMUNITY PILLAR

4: Inclusive and Inviting Spaces & Places

GOAL

1: Further enhance Livermore's unique sense of place

ATTACHMENTS

1. Resolution

2. Exhibit A - Livermore Pride Agreement
3. Exhibit B - Livermore Valley Opera Agreement
4. Exhibit C - Thomasin Dewhurst Fine Art Agreement

Prepared by: Theresa de la Vega
Management Analyst II

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE EXECUTION OF PUBLIC ART FUND PROJECT AND PROGRAM GRANT AGREEMENTS WITH LIVERMORE PRIDE IN THE AMOUNT OF $10,000, LIVERMORE VALLEY OPERA IN THE AMOUNT OF $10,000, AND THOMASIN DEWHURST FINE ART IN THE AMOUNT OF $10,000

The City Council created the Public Art Fund for the purpose of funding public art and cultural programming consistent with the public art policy administered by the Commission for the Arts. The Project and Program Grant program was created by the City Council for use of the Public Art Fund for the purpose of encouraging programs for the cultural enrichment of the residents of, and visitors to, Livermore.

The Commission for the Arts reviews applications for the Project and Program Grant program twice per year, in March and September. The Commission for the Arts received a total of five applications for March 2024. Following a review of those five applications, the Commission for the Arts recommends funding three of the five Project and Program applications.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager, or her designee, to execute the following Project and Program Grant Agreements:

1. Livermore Pride, in the amount of $10,000 for a variety of Arts Programming at the 5th Annual Pride Fest, attached hereto as Exhibit A;
2. Livermore Valley Opera, in the amount of $10,000 for Education and Community Engagement Program, attached hereto as Exhibit B; and
3. Thomasin Dewhurst Fine Art, in the amount of $10,000 for a visual arts collaboration between Arts and Science in the form of a mural project and event, attached hereto as Exhibit C.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Livermore Pride Agreement
Exhibit B – Livermore Valley Opera Agreement
Exhibit C – Thomas Dewhurst Fine Art Agreement

EXHIBIT A

AGREEMENT BETWEEN CITY OF LIVERMORE AND LIVERMORE PRIDE FOR FISCAL YEAR 2024-25 PROJECT AND PROGRAM GRANT AGREEMENT

This AGREEMENT, entered into this ____ day of _____, 2024, between the City of Livermore, a municipal corporation ("City"), and Livermore Pride, a California non-profit Corporation ("Grantee").

RECITALS

A. City created Project and Program Grants for the purpose of encouraging programs for the cultural enrichment in the City of Livermore.

B. The primary goal of the Project and Program Grant Program is to serve one or more of the main strands found in the Cultural Arts Master Plan, artsALIVE!, adopted by City Council Resolution number 2007-109 on June 11, 2007.

C. The Commission for the Arts reviews all Project and Program Grant applications and provides City Council with recommendations for funding. Funding is not authorized until City Council approves the Commission for the Arts' funding recommendations evidenced by City's signature on this agreement.

D. Grantee has applied to City for funding for a project or program to support art programming for the 5th Annual Livermore Pride Fest ("Project").

E. City wishes to engage Grantee to assist City in utilizing Public Art Fee fund money to provide art projects and programs to Livermore residents.

F. City and Grantee understand that the Project and Program Grant shall be administered consistent with the procedures, standards, regulations, and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

AGREEMENT

NOW THEREFORE, City and Grantee hereby agree that the aforementioned recitals are true and correct, and in recognition of the mutual consideration provided herein, further agree as follows:

I. SCOPE OF SERVICE

A. Activities

Grantee is responsible for administering the Project and Program Grant in a manner satisfactory to City, and consistent with the standards, terms and conditions imposed by the 2008 Art in Public Places Program Policy and Procedures Manual,

Cultural Arts Master Plan, and herein. The Project will include the following activities eligible under the Project and Program Grant Program: The 5th Annual Pride Fest to be held on October 19, 2024.

1. *Project and Program Delivery*: Grantee agrees to the goals and performance standards as defined below and outlined in the Grantee's Project and Program Grant application attached as Exhibit "A".

2. *Service Objective:* provide funds for performers of live music, spoken word, DJ music, dance, drag, physical arts and new media across two, logistics and infrastructure. ("Activities").

3. *General Administration:* The Funds for the Activities are to be administered under the direction of the Grantee's Executive Director and shall comply with the procedures, standards, regulations and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

B. Budget

City will grant, and Grantee will use, funds in the amount of $10,000 ("Funds") to perform the Activities consistent with the terms and conditions of this Agreement, the 2008 Art in Public Places Program Policy and Procedures Manual, and the Cultural Arts Master Plan.

C. Performance Monitoring

City will monitor Grantee's performance against the project or program description outlined in the Grantee's Project and Program Grant application attached as Exhibit "A". Substandard performance as determined by City will constitute non-compliance with this Agreement.

II. TIME OF PERFORMANCE

Grantee shall complete its Activities within one year of the date of execution of this Agreement. If Grantee requires an extension of time for full performance, it may request an extension from the Commission for the Arts. The decision of the Commission for the Arts shall be final.

III. PAYMENT

It is expressly agreed and understood that the total amount of the Funds available from City to Grantee for the Activities under this Agreement shall not exceed $10,000.

The City shall disburse the Project & Program Grant in three installments: 30 percent in advance, 40 percent once material progress can be shown and evidence of the matching grant cash requirement has been submitted, and the final 30 percent after a satisfactory Final Report has been filed. The Project & Program subcommittee of the Commission for the Arts has sole discretion to decide whether each of these milestones has been reached.

IV. NOTICES

Any notice required or permitted under the terms of this Agreement shall be effective upon receipt in writing either by personal service upon the authorized agent for the party, or by mailing the notice via U.S. Mail to the party as follows:

City: City of Livermore
Attn: Theresa De La Vega, Commission for the Arts Staff Liaison
1052 S. Livermore Avenue
Livermore, California 94550

Grantee: Livermore Pride
Attn: Amy Rose
[redacted]

V. GENERAL CONDITIONS

A. General Compliance

Grantee agrees to comply with the requirements of state and local laws and regulations governing the Funds available under this Agreement. Grantee also agrees to comply with all additional regulations and policies issued pursuant to these regulations. Grantee further agrees to utilize the Funds available under this Agreement to supplement, rather than supplant, funds otherwise available. Furthermore, with respect to the performance of Activities under this Agreement, Grantee agrees to comply with all federal, state, and local laws, statutes, rules, and regulations pertaining to the performance of those Activities.

B. Independent Contractor

Nothing contained in this Agreement is intended to, nor shall be construed in any manner to, create or establish the relationship of employer/employee between the parties. Grantee shall at all times remain an Independent Contractor with respect to the services to be performed under this Agreement. City shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as Grantee is an Independent Contractor.

C. Hold Harmless

Grantee agrees to defend, indemnify, and hold City, its elected officials, officers, directors, employees, agents, and designated volunteers harmless from and against any and all loss, liability, damage, including reasonable attorney's and expert fees and/or court costs, arising out of the performance of the Activities under this Agreement, except for the gross negligence and willful misconduct of City, its elected officials, officers, directors, employees, agents, and designated volunteers.

D. Insurance

Grantee shall procure and maintain insurance for the duration of the contract in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Project. Upon reasonable written notice, Grantee shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by the City of Livermore Risk Manager.

E. City Recognition

Grantee shall acknowledge City's financial support in all appropriate materials and media. The acknowledgment shall read, "Supported in part by a grant from the City of Livermore" or similar language, unless the City of Livermore is a part of a list of supporters. In the latter case, the acknowledgement may say only "City of Livermore." Grantee shall display the City of Livermore's logo whenever other sponsor logos are displayed, and in accordance with the City of Livermore's logo use guidelines.

F. Amendments

City or Grantee may amend this Agreement at any time provided such amendments make specific reference to this Agreement, and are executed in writing, signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release City or Grantee from its obligations under this Agreement.

City may, in its discretion, amend this Agreement to conform with state or local laws, regulations, guidelines, or policies related to the use of the Funds for the Activities. However, if such amendments result in a change in the funding, the scope of services, or the Activities, such modifications shall be incorporated only by written amendment signed by both City and Grantee.

G. Suspension, Termination, Return of Funds

1. *Termination for Cause.* City may suspend or terminate this Agreement if Grantee materially fails to comply with any term or condition of this Agreement, including but not limited to, the following:

a. Failure to comply with any of the rules, regulations or provisions referred to herein, or such statues, regulations, policies, or directives as may become applicable at any time;
b. Failure, for any reason, of Grantee to fulfill in a timely and proper manner its obligation under this Agreement;
c. Ineffective or improper use of Funds provided under this Agreement; or
d. Submission by Grantee to City reports that are incorrect or incomplete in any material respect.

City shall give Grantee written notice of any failure to comply with the Agreement. If Grantee does not remedy the deficiency or non-compliance within fifteen (15) calendar days after the date the notice is sent, City may exercise any of the remedies available under law and equity, including but not limited to the termination of this Agreement.

Pending correction of any compliance, City shall withhold fifteen percent (15%) of the remaining Agreement Funds until Grantee corrects the deficiency, Grantee is otherwise found to be in compliance by City, or Grantee is otherwise adjudicated to be in compliance with the Agreement.

2. *Termination for Convenience:* This Agreement may also be terminated for convenience by either City or Grantee, in whole or in part, by giving notice of such termination, the effective date of the termination, and in the case of partial termination, the portion to be terminated. However, if in the case of a partial termination, if City determines that the remaining portion of the Funds or Activities will not accomplish the purpose for which the award was made, City may terminate the Agreement in its entirety.

Written notice of termination must be provided at least thirty (30) calendar days before the effective date of such termination.

3. *Effect of Termination:* In the event of termination, all finished or unfinished documents, data, studies, photographs, reports, or other materials prepared by Grantee under this Agreement shall, at City r's option, become the property of City, and Grantee shall only be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination. Any remaining Funds shall be returned to the City's Public Art Fund for reallocation.

Termination for failure to comply with any term or condition of this Agreement may result in Grantee becoming ineligible to participate in future Commission for the Arts grant programs.

Termination for any reason shall immediately suspend the Funds available under this Agreement, terminate any claim Grantee has to such Funds, and result in Funds being immediately refunded to City for use and reallocation by City.

VI. **ADMINISTRATIVE REQUIREMENTS**

A. Documentation and Recordkeeping

1. *Records to be Maintained*: Grantee shall maintain the following records including, but not limited to:

   a. Records providing a full description of each activity undertaken and the date(s) on which the activity occurred;

   b. Records demonstrating that each activity undertaken meets one of the objectives of the Program & Program Grant; and

c. Quarterly and annual revenue and expense reports for Activities funded by this Agreement.

2. *Retention*: Grantee shall retain all records pertinent to expenditures incurred in the performance of the Activities under this Agreement for a period of two (2) years after the termination of all activities funded under this Agreement.

3. *Objectives*: Grantee agrees to maintain documentation that demonstrates that the Activities meet one or more of the objectives of the strands identified in the Cultural Arts Master Plan.

4. *Audits and Inspections*: All Grantee records with respect to any matters covered by this Agreement shall be made available to City at any time during normal business hours, as often as City deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data.

Any deficiencies noted in audit reports must be corrected by Grantee within thirty (30) calendar days after receipt of notice of deficiency by Grantee. Failure of Grantee to comply with the above audit requirements will constitute a violation of this Agreement and constitute cause for termination pursuant to Paragraph V.

B. Reporting and Payment Procedures

1. *Payment Procedures*: City will pay to Grantee Funds available under this Agreement based upon information submitted by Grantee, and consistent with the 2008 Art in Public Places Program Policy and Procedures Manual. City reserves the right to liquidate Funds available under this Agreement for costs incurred by City on behalf of Grantee.

2. *Progress Reports*: Grantee shall submit a Material Progress Report to the Commission for the Arts when it feels the Project has made material progress. Grantee shall also submit a Final Report when its Project Activities are complete. These reports are prerequisites to receiving the second and third grant installment payments, in accordance with Section III. The Grantee shall determine the form and content of the Progress Reports.

3. *Quarterly Revenue and Expense Reports*: Grantee shall submit Quarterly Revenue and Expense Reports for grant activities to the Community Development Director.

VII. PERSONNEL AND PARTICIPANT CONDITIONS

A. Assignability

Grantee shall not assign or transfer any interest in this Agreement without the prior written consent of City. However, claims for money due or to become due to Grantee from City under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to Grantee.

B. Conflict of Interest

Grantee agrees to abide by the provisions of the California Political Reform Act (Gov. Code §§ 81000 *et seq.*) and related regulations (2 Cal. Code Regs. §§ 18109 *et seq.*) with respect to conflicts of interest, and covenants that it presently has no financial interest, and shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the Activities under this Agreement.

Grantee further covenants that in the performance of this Agreement, no persons who exercise or have exercised any functions or responsibilities with respect to the Activities, or who are in a position to participate in a decision-making process or gain inside information with regard to such Activities, have a financial interest in any contract, subcontract or agreement with respect to the Activities or with respect to the proceeds from the Activities, either for themselves or those with whom they have a business or immediate family ties, during their tenure or for a period of one (1) year thereafter.

These conflict of interest provisions apply to any person who is an employee, agent, Grantee, officer, or elected or appointed official of Grantee.

C. Subcontracts

1. *Approvals*: Grantee shall not enter into any subcontracts with an agency or individual in the performance of this Agreement without the prior written consent of City.

2. *Monitoring*: Grantee will monitor all subcontracted services to assure Agreement compliance. Results of monitoring efforts must be summarized in written reports, and supported with documented evidence, of follow-up actions taken to correct areas of noncompliance.

3. *Content*: Grantee shall cause all of the provisions of this Agreement in its entirety to be included in, and made a part of, any subcontract executed in the performance of this Agreement.

D. Copyright

If this Agreement results in any copyrightable material, City reserves the right to royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use, the work for government purposes.

E. Religious Organization

Grantee agrees that funds provided under this Agreement will not be utilized for religious activities, to promote religious interests, or for the benefit of a religious organization.

VIII. SEVERABILITY

If any provision of this Agreement is held invalid, the remainder of the Agreement shall not be affected thereby and all other parts of this Agreement shall nevertheless be in full force and effect.

IX. WAIVER

City's failure to act with respect to a breach by Grantee does not waive its right to act with respect to subsequent or similar breaches. The failure of City to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

X. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between City and Grantee for the use of Funds received under this Agreement and it supersedes all prior or contemporaneous communications and proposals, whether electronic, oral, or written between City and Grantee with respect to this Agreement.

XI. BINDING EFFECT

All the terms, covenants, and conditions of this Agreement shall inure to the benefits of and be binding upon successors and assigns of the parties to this Agreement.

XII. COUNTERPARTS

This Agreement may be executed in counterparts by delivering a facsimile or secure electronic copy of the signed agreement to the other party, followed by delivery of the original documents bearing the original signatures. However, failure to deliver the original documents does not affect the enforceability of this Agreement.

****

SIGNATURES AND ATTACHMENT LIST ON NEXT PAGE

EXHIBIT A

IN WITNESS THEREOF, the Parties have executed this Agreement as of the date first written above.

Livermore Pride
a California non-profit corporation
"Grantee"

DocuSigned by:
By: David Hurst _____ **Dated:** 7/16/2024 | 12:04 PM PDT
5C0149B8CA0D411...

PRINT NAME: David Hurst

TITLE: Chair of the Board

CITY OF LIVERMORE
a Municipal Corporation
"City"

By:_____ **Dated**:_____
Brandon Cardwell
Innovation & Economic Development Director

APPROVED AS TO FORM:

DocuSigned by: DocuSigned by:
Katherine Mirassou _____ Amber Hatfield
D48B6A0C4F27411... 12BC7F4D88224F6...

DEPUTY/ASSISTANT/CITY ATTORNEY

Attachments:

Exhibit A	Application for Project and Program Grant from the City of Livermore
Exhibit B	Insurance Requirements

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EXHIBIT A

Applicant Name: Amy Rose, on behalf of Livermore Pride

APPLICATION CHECKLIST - This Checklist is required and must be submitted as part of the completed Application. All Project & Program Grant applicants are required to submit the following:

One original set of the Application, collated in the following order:

- ☒ 1. Application Checklist (this page).
- ☒ 2. Start date: Do(es) the event(s) related to this project begin at least two (2) months after the application deadline? Yes - October 19, 2024
- ☒ 3. Organizational Summary, signed by the organization's executive director, managing director, president, board chair, or other authorized officer of the organization, or by the applying artist.
- ☒ 4. If you are an organization, submit a list of current officers and Board members with their term of office.
- ☒ 5. If you are a 501(c)(3), submit a copy of your 501(c)(3) determination letter from IRS.
- ☒ 6. Application Form, beginning on page 1, continuing through the Project Budget Summary.
- ☒ 7. Notes to the Project Budget, and a detailed list of In-Kind contributions.
- ☒ 8. List of key project individuals, including principal artists and project managers, with a very brief job description (e.g., a self-explanatory job title) for each.
- ☒ 9. Resumes/biographies of key project individuals, generally one page each.
- ☒ 10. Up to four items in any combination of brochures, catalogues, performance programs, or similar organizational publications/materials; if available.
- ☒ 11. Up to four recent press reviews or articles, or similar independently generated published materials, if available. (*Note*: Calendar listings are not suitable.)
- ☐ 12. NOTE: During the review process you may be requested to submit samples of other work you have produced (work samples). See Chapter 3 – Grants for more information about work samples.

Standards for Preparing Applications

Please read the following carefully. Applicants are responsible for completing and submitting a full application package with all required attachments by the deadline. Incomplete applications will not be accepted for Commission evaluation.

1. Applicants must not modify the format of the application form or exceed the maximum length of any section of the form, except where otherwise noted.
2. All required attachments (except pre-printed ones) must be typed or computer-prepared in a type size that is no smaller than 12 pt. Times/Times New Roman, or 10 pt. Arial/Helvetica.
3. Complete all pages of the application form and all required attachments. (Use "N.A." if a section does not apply to your organization.) Provide information that is current as of the application deadline. Budget pages and budget notes must be complete.

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EXHIBIT A

Certification

If applicant is an organization:

I certify that the by-laws of this organization or a resolution of its governing body authorizes me to enter into legal agreements for the organization and to submit this application. To the best of my knowledge and belief, this organization meets the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Amy Rose
Authorized Officer's Signature

March 1, 2024
Date

AMY ROSE
Print Name of Officer signing this form

Co-Founder & Board Member
Title of Officer signing this form

- or -

If applicant is an individual artist:

To the best of my knowledge and belief, I meet the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Artists Signature

Date

Print name of Artist signing this form

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EXHIBIT A

Application Form - Project & Program Grants

Deadline: Hand delivered or received via US Mail by 5:00 pm on March 1 or September 1

Submission Date: March 1, 2024

Amount of Grant Request: $ 10,000 Total Project Budget: $ 75,000

Applicant/Organization: Livermore Pride

Applicant/Organization's Address: Livermore Pride

[redacted]

Applicant/Organization's Web site: www.livermorepride.org

Preparer's Name and Title: Amy Rose, Co-Founder & Board Member

Preparer's Phone: [redacted] Preparer's E-mail: amy@livermorepride.org

Address (for formal notification): Amy Rose

[redacted]

Describe the art form of the project or program for which support is requested (i.e., Dance, Theater, Visual Arts, Heritage, Infrastructure, Media/Film/New Media, etc.):

Performances of Live Music, Spoken word, DJ'd Music, Dance, Drag, Physical Arts / New Media

Briefly describe the project or program for which support is requested:

The 5th Annual Livermore Pride Fest will host 30,000+ people in Downtown Livermore on October 19th, 2024. There will be arts programming for a multitude of audiences in our community, including youth, families, young adults, and adults+.

Number of people intended to reach: Audience: 30,000+ Participants: 100-200 Performers, Volunteers, & booth staff

For the purpose of this application, "audience" means the people who will attend the project or program; "participant" means someone who attends a workshop or class, or else has hands-on involvement in the project or program. If the project or program will have both audiences and participants as defined here, please enter both goals.

Date project or program is scheduled to begin: October 19, 2024
Note: Project events may begin no earlier than two (2) months after the application deadline.

Date project or program is scheduled to end: October 19, 2024

EXHIBIT A

Application Form - Project & Program Grants

If needed, please use additional paper for this section.

1. State/describe your organization's mission or provide an artist's statement. Include the kind of arts work the organization or artist has done previously and does now. How does this work relate to the proposed project/program? If yours is not an arts organization, state briefly how the arts relate to its mission. (250 words or less)

Livermore Pride's mission is to end isolation and celebrate the LGBTQ+ community in Livermore. With a welcoming, family-focused celebration, we honor the diversity of our community, highlighting the intersectionality of sexual orientation, gender identity, gender expression, race, religion, political ideology, and economic status. We strive to have all LGBTQ+ people feel seen and heard as valued members of our community. Events have been a major part of our mission to end isolation, and bringing Queer artists to queer and ally audiences for our community is a major way we bridge divides and celebrate our similarities *and diversity.*

2. Describe the project or program for which you are seeking the grant. Discuss the project's origins. Describe the venue/location, the implementation process, and the timeframe. Discuss the resources — people, money, etc. — you will need to implement the project, whether you already have those resources within your organization or, if not, how you plan to obtain them.

Livermore Pride Fest will be at the Bankhead Plaza + 1st Street (between Livermore Ave. & Maple St.), McLeod St., and Livermorium Plaza. We are completely volunteer run, and are partnering with the Bankhead. This is the 5th annual event and has been held prior at The Bankhead Plaza and Carnegie Park.

3. How will the requested grant be used in the planning and implementation of the project or program? (500 words or less.)

The grant will go directly to the costs of: paying performers for a day of programming across 2 stages and some event logistic / infrastructure expenses.

4. Describe how the program or project specifically addresses one or more of the main strands found in the Cultural Arts Master Plan, artsAlive! (Refer to the Cultural Arts Master Plan Executive Summary in the Public Art Policy Guideline manual.) (250 words or less.)

According to the Cultural Arts Master Plan, this is both A) Exhibitions, events, performances, temporary exhibits, and/or art work installations located in a public space and B) Art works produced through involvement of the community

5. List the individual(s) or organization(s) you will be partnering with on this project. Be specific regarding the support, both financial and in-kind, they will be providing.

1. The Bankhead - Some light logistics partnership, and TBD on fiscal support (but no more than $5k most likely)
2. The City of Livermore - Event grant support TBD up to $2,000

Application Form - Project & Program Grants

Project/Program Budget Worksheet *(enter N/A if item does not apply. Attach Budget Notes if necessary.)*

PROJECT SUPPORT *(Do not include in-kind support)*

Earned Revenue	Amount	Notes
Ticket Sales/Admissions	$ 5,000	Free Event, All Individual Donations
Tuition/Workshop fees	$ 0	
Other:	$ 10,000	Donations Fund Drives
Subtotal: Earned Revenue	$ 15,000	

Contributed Income	Amount	In-hand	Pending
Contributions (Individuals/Businesses)	$ 10,000	$ 0	$ 0
Grants *(Foundations/Government other than City)*	$ 0	$ 0	$ 0
City of Livermore *(other than this grant request)*	$ 2,000	$ 0	$ 0
Other:	$	$	$
Subtotal: Contributed Income	$ 12,000	$	$

Project & Program Grant Amount Requested	$ 10,000
Total Project Support (Revenue + Income + Grant)	$ 37,000

PROJECT EXPENSE *(Do not include in-kind expense)*

Personnel	**Amount**	**Notes**
Artistic	$ 20,000	
Production	$ 0	In-Kind/Pro Bono + volunteers
Administrative	$ 0	
Other: *(describe in Notes)*	$ TBD	Security
Subtotal: Personnel	$ 20,000	

General	**Amount**	**Notes**
Venue Rental	$ 0	Free use through Bankhead & City
Materials and Supplies	$ 20,000	Decor, Stages, AV, Tents, City Signage
Marketing and Promotion	$ 1,000	
Transportation	$ 0	
Insurance	$ 2,500	
Other: *(describe in Notes)*	$ 10,500	Merchandise, Bathrooms, Trash, Hydration Stations, etc.
Subtotal: General	$ 34,000	

Total Project Expenses (Personnel + General)	$ 54,000
Project Surplus (Loss) *(Total Support minus Total Expense)*	$ 17,000

Livermore Pride Budget

If Project Net is a negative value, explain in the Budget Notes how it will be covered.

The goal is to break even via donations, sponsorships, and merchandise donation in-kind, but should we not we do have budget to cover the additional expense up to $17,000.

EXHIBIT A

Matching Funds

All Project and Program Grant applicants must provide at least a dollar-for-dollar (one-to-one) match for the grant award, no less than 50 percent of which must be a cash match. The cash match must be from sources other than the City of Livermore.

In-kind contributions are allowed as part of the match only on the following limited basis:

1. In-kind contributions cannot be used for more than half of the required match, in other words, they cannot represent more than 50 percent of the value of the grant award; and,
2. The value of in-kind contributions, i.e., goods and services, must offset line item expenditures in the project budget and their value must be documentable with invoices or billing statements.

In-kind contributions must be listed below or on a separate sheet attached to the Budget Notes.

Source	Description	Fair Market Value
Three Little Birds Agency, LLC	ProBono Festival Event Production (In-Kind)	$ 15,000
Community Fundraising	Special Events, Fund Drives, Donation "Tickets"	$15,000
Sponsor Fundraising	Sponsors receive benefits in exchange for their tax deductible donation	$ 10,000
Livermore Pride	Operating Budget	$ 17,000
		$
		$

Requested Grant Amount: $ 10,000

Cash Match Amount: $ 42,000

In-kind Match Amount: $ 15,000

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EXHIBIT A

Organizational Summary:

Livermore Pride is a 501(c)(3) nonprofit organization, founded in Livermore, CA, by a group of local residents in 2019. Our Mission is to reduce isolation amongst our entire community, and celebrate the LGBTQ+ community in Livermore. With a welcoming, family-focused celebration, we will honor the diversity of our community, highlighting the intersectionality of sexual orientation, gender identity, gender expression, race, religion, political ideology, and economic status. We strive to have all LGBTQ+ people feel seen and heard as valued members of our community.

Amy Rose March 1, 2024

AMY ROSE

CO-FOUNDER + Member of the Board

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EXHIBIT A

City of Livermore
Office of Innovation & Economic Development
Commission for the Arts
Application for the Project & Program Grant - LIVERMORE PRIDE FEST 2024
March 1, 2024

APPLICATION CHECKLIST - This Checklist is required and must be submitted as part of the completed Application. All Project & Program Grant applicants are required to submit the following:

One original set of the Application, collated in the following order:
1. Application Checklist (this page).

2. Start date: Do(es) the event(s) related to this project begin at least two (2) months after the application deadline? **Yes, October 19, 2024**

3. Organizational Summary, signed by the organization's executive director, managing director, president, board chair, or other authorized officer of the organization, or by the applying artist.

4. If you are an organization, submit a list of current officers and Board members with their term of office.
David Hurst, Chair, 3 years
Brittni Kiick, Co-Chair, 2 years
Gretchen Mora, Secretary, 2 years
Jodi Mikel, Treasurer, 2 years
Amy Rose, Co-Founder, 3 years
Lesa Gray, 2 years
Donnell Brown, 2 years
Roianne Heath, 3 years

5. If you are a 501(c)(3), submit a copy of your 501(c)(3) determination letter from IRS. **(Included in packet)**

6. Application Form, beginning on page 1, continuing through the Project Budget Summary. **(Included in packet)**

7. Notes to the Project Budget, and a detailed list of In-Kind contributions. **N/A**

8. List of key project individuals, including principal artists and project managers, with a very brief job description (e.g., a self-explanatory job title) for each.

EXHIBIT A

Project Manager: Amy Rose, Member of the Board
Talent & Performance Coordinator: Donnell Brown, Member of the Board
Social Media & Email Communication: Brittni Kiick
Additional Event Planning Committee: Jodi Mikel, Lesa Gray, Amanda Cannon

9. Resumes/biographies of key project individuals, generally one page each.
Included for Amy Rose, primary Project Manager

10. Up to four items in any combination of brochures, catalogues, performance programs, or similar organizational publications/materials; if available.
Instagram: https://www.instagram.com/livermorepride

11. Up to four recent press reviews or articles, or similar independently generated published materials, if available. (*Note*: Calendar listings are not suitable.)
https://www.livermorevine.com/local-news/community/livermore-pridefest-celebrates-lgbtq-history-7746611
https://www.livermorevine.com/local-news/2022/09/30/love-is-love-in-the-tri-valley/
https://www.independentnews.com/culture/livermore-celebrates-pridefest/collection_41c05afa-739f-11ee-912d-9b80ae336936.html
https://www.independentnews.com/news/celebrate-with-livermore-pride/article_234a2c52-2cf9-11ec-8500-bbdb0f92d21a.html

12. NOTE: During the review process you may be requested to submit samples of other work you have produced (work samples). See Chapter 3 – Grants for more information about work samples.

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EXHIBIT A

STATE OF CALIFORNIA
FRANCHISE TAX BOARD
PO Box 1286
Rancho Cordova CA 95741-1286

LIVERMORE PRIDE
ATTN: AMY ROSE LAW
[redacted]

Date: 10.25.2021
Case: 35350769783967140
Case Unit: 35350769783967143
In reply refer to: 760:WRM:F120

Regarding	: Tax-Exempt Status
Organization's Name	: LIVERMORE PRIDE
CCN	: 4656504
Purpose	: Charitable
R&TC Section	: 23701d
Form of Organization	: Incorporated
Accounting Period Ending	: 12/31
Tax-Exempt Status Effective	: 10/21/2020

Exempt Determination Letter

We have determined the organization is tax-exempt from California franchise or income tax as stated in the above Revenue and Taxation Code (R&TC) section.

To retain tax-exempt status, the organization must be organized and operating for nonprofit purposes within the provisions of the above R&TC section. An inactive organization is not entitled to tax-exempt status.

We have based our decision on the information submitted and the assumption that the organization's present operations will continue unchanged or conform to those proposed in the organization's application. In order for us to determine any effect on the tax-exempt status, the organization must immediately report to us any change in:

- Operation
- Character
- Purpose
- Name
- Address

Our determination may no longer be applicable, if these changes occur:

- Material facts or circumstances relating to the organization application.
- Relevant statutory, administrative, or judicial case law.
- Federal interpretation of federal law in cases where our decision was based on such interpretation.

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EXHIBIT A

It is the organization's responsibility to be aware of these changes should they occur. This paragraph constitutes written advice, other than a chief counsel ruling, within the meaning of R&TC Section 21012(a)(2).

For filing requirements, get Pub. 1068, *Exempt Organizations - Filing Requirements and Filing Fees*. Go to **ftb.ca.gov** and search for **1068**.

All California public benefit corporations must register with the California Attorney General's Office Registry of Charitable Trusts within 30 days of first receiving any assets.

The Attorney General regulates charities and the professional fundraisers who solicit on their behalf. The purpose of this oversight is to protect charitable assets for their intended use and ensure that the charitable donations contributed by Californians are not misapplied and squandered through fraud or other means.

Please refer to **oag.ca.gov/Charities** for further information on registration requirements and contact information. Also see the publication Attorney General's Guide for Charities.

This exemption is for state franchise or income tax purposes only. For information regarding sales tax exemption, contact the California Department of Tax and Fee Administration at 800.400.7115, or go to their website at **cdtfa.ca.gov**.

Exempt Organization Unit
Telephone: 916.845.4171

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EXHIBIT A

Amy Rose

Global Marketing & Events, Strategy, & Partnerships

Senior Leader with 18 years experience growing events, businesses, partnerships, and teams, with special focus on thinking globally, building locally, & weaving equity.
I help organizations and teams perform and transform.

Three Little Birds Agency 2023
Founder & CEO - Marketing, Events, & Strategic Services for business Partners & Platforms

Salesforce & Salesforce.org 2014-2023
Sr. Director, Global Partner Engagement
2014-2015: Dreamforce Sponsorship Team, Responsible for activations across all Ancillary Zones
2015-2023: Salesforce.org Partner Engagement - Designed, implemented, and grew the Partner Engagement Team for Salesforce.org over the last 7 years, contributing to **>463% growth in partner attached revenue,** grew Salesforce.org Partner Network **members by 648%**, increased **174% in program revenue**, and increased **1300% in sponsorships revenue**. I worked across our leadership team to integrate partners into our GTM, including Marketing, Events, Brand, Social, Customer Success, Sales Enablement, Impact, Legal, Enablement, Equality, and Operations.
Events: Founded & grew **Unite Partner Summits** for 7 years, Managed partner integration & experience and partner-customer engagement into **Dreamforce**, **World Tours**, **SKO & Sales Camps**, and more.

Livermore Pride 2019-2023
Executive Director & President of the Board (2019-2022)
Co-founded & grew this Nonprofit, dedicated to ending isolation and fostering the local LGBTQ+ community. **Lead annual festival planning**, City government collaboration, and acquired our 501(c)3 status.

Brightpearl 2013
Partner Marketing Manager
Lead Partner Marketing for B2B e-commerce start-up expanding its channel GTM engagement with strategic platforms (Amazon, Shopify, Bigcommerce), with large emphasis on industry & partner conferences.

Training Squadron 2011-2013
Director of Marketing
Lead Marketing, Advertising, Brand, Communications, PR, Events, and more for this co-founded start-up.

AT&T 2007-2010
Sr. Marketing Manager
Lead Developer Marketing for Enterprise, Consumer, and SMB. Owned strategy and execution of AT&T Developer Program, leading to 100% increase in membership, **800% event attendance increase** with **90% satisfaction rates**. Managed Strategic Partnerships with Microsoft, Qualcomm, Motorola, & Samsung. AT&T Service Excellence Award.

Microsoft 2006-2007
Associate Marketing Manager
Managed the Operations, Communications, and Events for the Visual Studio Industry Partner Program.

Education

- Diversity, Equity, & Inclusion, Cornell University, 2021
- B.A. International Studies, University of Washington, Henry M. Jackson School, 2005

[redacted]

EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance
Grantee shall maintain limits no less than:

Commercial General Liability, including operations, products and completed operations, as applicable: **$1,000,000/$2,000,000** aggregate per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

Deductibles and Self-Insured Retention
All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers
Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions
The general liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Grantee. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.
2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy,

including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.

4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550.

Verification of Coverage

Grantee shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

EXHIBIT B

AGREEMENT BETWEEN CITY OF LIVERMORE AND LIVERMORE VALLEY OPERA FOR FISCAL YEAR 2024-25 PROJECT AND PROGRAM GRANT AGREEMENT

This AGREEMENT, entered into this ____ day of _____, 2024, between the City of Livermore, a municipal corporation ("City"), and Livermore Valley Opera, a California non-profit Corporation ("Grantee").

RECITALS

A. City created Project and Program Grants for the purpose of encouraging programs for the cultural enrichment in the City of Livermore.

B. The primary goal of the Project and Program Grant Program is to serve one or more of the main strands found in the Cultural Arts Master Plan, artsALIVE!, adopted by City Council Resolution number 2007-109 on June 11, 2007.

C. The Commission for the Arts reviews all Project and Program Grant applications and provides City Council with recommendations for funding. Funding is not authorized until City Council approves the Commission for the Arts' funding recommendations evidenced by City's signature on this agreement.

D. Grantee has applied to City for funding for a project or program to support the Livermore Valley Opera's (LVO) Education and Community Engagement Program ("Project").

E. City wishes to engage Grantee to assist City in utilizing Public Art Fee fund money to provide art projects and programs to Livermore residents.

F. City and Grantee understand that the Project and Program Grant shall be administered consistent with the procedures, standards, regulations, and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

AGREEMENT

NOW THEREFORE, City and Grantee hereby agree that the aforementioned recitals are true and correct, and in recognition of the mutual consideration provided herein, further agree as follows:

I. SCOPE OF SERVICE

A. Activities

Grantee is responsible for administering the Project and Program Grant in a manner satisfactory to City, and consistent with the standards, terms and conditions imposed by the 2008 Art in Public Places Program Policy and Procedures Manual, Cultural Arts Master Plan, and herein. The Project will include the following activities

eligible under the Project and Program Grant Program: to support LVO's Education and Community Engagement Program, a continuation and expansion of the ongoing education and community engagment program.

1. *Project and Program Delivery*: Grantee agrees to the goals and performance standards as defined below and outlined in the Grantee's Project and Program Grant application attached as Exhibit "A".

2. *Service Objective:* Grant funds will be used to provide a reduction of a full opera presented at elementary schools with four singers and piano accompanist, master classes at middle and high school choruses twice a year with one singer and piano accompanist, opera recital at a senior community twice a year with two singers and one piano accompanist, and an opera recital at the library twice a year with two singers and a piano accompanist. ("Activities").

3. *General Administration:* The Funds for the Activities are to be administered under the direction of the Grantee's Executive Director and shall comply with the procedures, standards, regulations and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

B. Budget

City will grant, and Grantee will use, funds in the amount of $10,000 ("Funds") to perform the Activities consistent with the terms and conditions of this Agreement, the 2008 Art in Public Places Program Policy and Procedures Manual, and the Cultural Arts Master Plan.

C. Performance Monitoring

City will monitor Grantee's performance against the project or program description outlined in the Grantee's Project and Program Grant application attached as Exhibit "A". Substandard performance as determined by City will constitute non-compliance with this Agreement.

II. TIME OF PERFORMANCE

Grantee shall complete its Activities within one year of the date of execution of this Agreement. If Grantee requires an extension of time for full performance, it may request an extension from the Commission for the Arts. The decision of the Commission for the Arts shall be final.

III. PAYMENT

It is expressly agreed and understood that the total amount of the Funds available from City to Grantee for the Activities under this Agreement shall not exceed $10,000.

The City shall disburse the Project & Program Grant in three installments: 30 percent in

advance, 40 percent once material progress can be shown and evidence of the matching grant cash requirement has been submitted, and the final 30 percent after a satisfactory Final Report has been filed. The Project & Program subcommittee of the Commission for the Arts has sole discretion to decide whether each of these milestones has been reached.

IV. **NOTICES**

Any notice required or permitted under the terms of this Agreement shall be effective upon receipt in writing either by personal service upon the authorized agent for the party, or by mailing the notice via U.S. Mail to the party as follows:

City: City of Livermore
Attn: Theresa De La Vega, Commission for the Arts Staff Liaison
1052 S. Livermore Avenue
Livermore, California 94550

Grantee: Livermore Valley Opera
Attn: Keith Sawyer
[redacted]

V. **GENERAL CONDITIONS**

A. General Compliance

Grantee agrees to comply with the requirements of state and local laws and regulations governing the Funds available under this Agreement. Grantee also agrees to comply with all additional regulations and policies issued pursuant to these regulations. Grantee further agrees to utilize the Funds available under this Agreement to supplement, rather than supplant, funds otherwise available. Furthermore, with respect to the performance of Activities under this Agreement, Grantee agrees to comply with all federal, state, and local laws, statutes, rules, and regulations pertaining to the performance of those Activities.

B. Independent Contractor

Nothing contained in this Agreement is intended to, nor shall be construed in any manner to, create or establish the relationship of employer/employee between the parties. Grantee shall at all times remain an Independent Contractor with respect to the services to be performed under this Agreement. City shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as Grantee is an Independent Contractor.

C. Hold Harmless

Grantee agrees to defend, indemnify, and hold City, its elected officials, officers, directors, employees, agents, and designated volunteers harmless from and against any and all loss, liability, damage, including reasonable attorney's and expert fees and/or court costs, arising out of the performance of the Activities under this Agreement, except for the gross

negligence and willful misconduct of City, its elected officials, officers, directors, employees, agents, and designated volunteers.

D. Insurance

Grantee shall procure and maintain insurance for the duration of the contract in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Project. Upon reasonable written notice, Grantee shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by the City of Livermore Risk Manager.

E. City Recognition

Grantee shall acknowledge City's financial support in all appropriate materials and media. The acknowledgment shall read, "Supported in part by a grant from the City of Livermore" or similar language, unless the City of Livermore is a part of a list of supporters. In the latter case, the acknowledgement may say only "City of Livermore." Grantee shall display the City of Livermore's logo whenever other sponsor logos are displayed, and in accordance with the City of Livermore's logo use guidelines.

F. Amendments

City or Grantee may amend this Agreement at any time provided such amendments make specific reference to this Agreement, and are executed in writing, signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release City or Grantee from its obligations under this Agreement.

City may, in its discretion, amend this Agreement to conform with state or local laws, regulations, guidelines, or policies related to the use of the Funds for the Activities. However, if such amendments result in a change in the funding, the scope of services, or the Activities, such modifications shall be incorporated only by written amendment signed by both City and Grantee.

G. Suspension, Termination, Return of Funds

1. *Termination for Cause.* City may suspend or terminate this Agreement if Grantee materially fails to comply with any term or condition of this Agreement, including but not limited to, the following:

a. Failure to comply with any of the rules, regulations or provisions referred to herein, or such statues, regulations, policies, or directives as may become applicable at any time;
b. Failure, for any reason, of Grantee to fulfill in a timely and proper manner its obligation under this Agreement;
c. Ineffective or improper use of Funds provided under this Agreement; or
d. Submission by Grantee to City reports that are incorrect or incomplete in any material respect.

City shall give Grantee written notice of any failure to comply with the Agreement. If Grantee does not remedy the deficiency or non-compliance within fifteen (15) calendar days after the date the notice is sent, City may exercise any of the remedies available under law and equity, including but not limited to the termination of this Agreement.

Pending correction of any compliance, City shall withhold fifteen percent (15%) of the remaining Agreement Funds until Grantee corrects the deficiency, Grantee is otherwise found to be in compliance by City, or Grantee is otherwise adjudicated to be in compliance with the Agreement.

2. *Termination for Convenience:* This Agreement may also be terminated for convenience by either City or Grantee, in whole or in part, by giving notice of such termination, the effective date of the termination, and in the case of partial termination, the portion to be terminated. However, if in the case of a partial termination, if City determines that the remaining portion of the Funds or Activities will not accomplish the purpose for which the award was made, City may terminate the Agreement in its entirety.

Written notice of termination must be provided at least thirty (30) calendar days before the effective date of such termination.

3. *Effect of Termination:* In the event of termination, all finished or unfinished documents, data, studies, photographs, reports, or other materials prepared by Grantee under this Agreement shall, at City r's option, become the property of City, and Grantee shall only be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination. Any remaining Funds shall be returned to the City's Public Art Fund for reallocation.

Termination for failure to comply with any term or condition of this Agreement may result in Grantee becoming ineligible to participate in future Commission for the Arts grant programs.

Termination for any reason shall immediately suspend the Funds available under this Agreement, terminate any claim Grantee has to such Funds, and result in Funds being immediately refunded to City for use and reallocation by City.

VI. **ADMINISTRATIVE REQUIREMENTS**

A. Documentation and Recordkeeping

1. *Records to be Maintained*: Grantee shall maintain the following records including, but not limited to:

a. Records providing a full description of each activity undertaken and the date(s) on which the activity occurred;

b. Records demonstrating that each activity undertaken meets one of the objectives of the Program & Program Grant; and

c. Quarterly and annual revenue and expense reports for Activities

funded by this Agreement.

2. *Retention*: Grantee shall retain all records pertinent to expenditures incurred in the performance of the Activities under this Agreement for a period of two (2) years after the termination of all activities funded under this Agreement.

3. *Objectives*: Grantee agrees to maintain documentation that demonstrates that the Activities meet one or more of the objectives of the strands identified in the Cultural Arts Master Plan.

4. *Audits and Inspections*: All Grantee records with respect to any matters covered by this Agreement shall be made available to City at any time during normal business hours, as often as City deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data.

Any deficiencies noted in audit reports must be corrected by Grantee within thirty (30) calendar days after receipt of notice of deficiency by Grantee. Failure of Grantee to comply with the above audit requirements will constitute a violation of this Agreement and constitute cause for termination pursuant to Paragraph V.

B. Reporting and Payment Procedures

1. *Payment Procedures*: City will pay to Grantee Funds available under this Agreement based upon information submitted by Grantee, and consistent with the 2008 Art in Public Places Program Policy and Procedures Manual. City reserves the right to liquidate Funds available under this Agreement for costs incurred by City on behalf of Grantee.

2. *Progress Reports*: Grantee shall submit a Material Progress Report to the Commission for the Arts when it feels the Project has made material progress. Grantee shall also submit a Final Report when its Project Activities are complete. These reports are prerequisites to receiving the second and third grant installment payments, in accordance with Section III. The Grantee shall determine the form and content of the Progress Reports.

3. *Quarterly Revenue and Expense Reports*: Grantee shall submit Quarterly Revenue and Expense Reports for grant activities to the Community Development Director.

VII. PERSONNEL AND PARTICIPANT CONDITIONS

A. Assignability

Grantee shall not assign or transfer any interest in this Agreement without the prior written consent of City. However, claims for money due or to become due to Grantee from City under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to Grantee.

B. Conflict of Interest

Grantee agrees to abide by the provisions of the California Political Reform Act (Gov. Code §§ 81000 *et seq.*) and related regulations (2 Cal. Code Regs. §§ 18109 *et seq.*) with respect to conflicts of interest, and covenants that it presently has no financial interest, and shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the Activities under this Agreement.

Grantee further covenants that in the performance of this Agreement, no persons who exercise or have exercised any functions or responsibilities with respect to the Activities, or who are in a position to participate in a decision-making process or gain inside information with regard to such Activities, have a financial interest in any contract, subcontract or agreement with respect to the Activities or with respect to the proceeds from the Activities, either for themselves or those with whom they have a business or immediate family ties, during their tenure or for a period of one (1) year thereafter.

These conflict of interest provisions apply to any person who is an employee, agent, Grantee, officer, or elected or appointed official of Grantee.

C. Subcontracts

1. *Approvals*: Grantee shall not enter into any subcontracts with an agency or individual in the performance of this Agreement without the prior written consent of City.

2. *Monitoring*: Grantee will monitor all subcontracted services to assure Agreement compliance. Results of monitoring efforts must be summarized in written reports, and supported with documented evidence, of follow-up actions taken to correct areas of noncompliance.

3. *Content*: Grantee shall cause all of the provisions of this Agreement in its entirety to be included in, and made a part of, any subcontract executed in the performance of this Agreement.

D. Copyright

If this Agreement results in any copyrightable material, City reserves the right to royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use, the work for government purposes.

E. Religious Organization

Grantee agrees that funds provided under this Agreement will not be utilized for religious activities, to promote religious interests, or for the benefit of a religious organization.

VIII. **SEVERABILITY**

If any provision of this Agreement is held invalid, the remainder of the Agreement shall not be affected thereby and all other parts of this Agreement shall nevertheless be in full force and effect.

IX. **WAIVER**

City's failure to act with respect to a breach by Grantee does not waive its right to act with respect to subsequent or similar breaches. The failure of City to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

X. **ENTIRE AGREEMENT**

This Agreement constitutes the entire agreement between City and Grantee for the use of Funds received under this Agreement and it supersedes all prior or contemporaneous communications and proposals, whether electronic, oral, or written between City and Grantee with respect to this Agreement.

XI. **BINDING EFFECT**

All the terms, covenants, and conditions of this Agreement shall inure to the benefits of and be binding upon successors and assigns of the parties to this Agreement.

XII. **COUNTERPARTS**

This Agreement may be executed in counterparts by delivering a facsimile or secure electronic copy of the signed agreement to the other party, followed by delivery of the original documents bearing the original signatures. However, failure to deliver the original documents does not affect the enforceability of this Agreement.

****

SIGNATURES AND ATTACHMENT LIST ON NEXT PAGE

EXHIBIT B

IN WITNESS THEREOF, the Parties have executed this Agreement as of the date first written above.

Livermore Valley Opera
a California non-profit corporation
"Grantee"

DocuSigned by:
By: Keith Sawyer
5D7F613A2FF5412...
Dated: 5/17/2024 | 9:44 AM PDT

PRINT NAME: Keith Sawyer
TITLE: President

CITY OF LIVERMORE
a Municipal Corporation
"City"

By:_____ Dated:_____
Brandon Cardwell
Innovation & Economic Development Director

APPROVED AS TO FORM:
DocuSigned by:
Katherine Mirassou
D48B0A0C4F27411...
DS

DEPUTY/ASSISTANT/CITY ATTORNEY

Attachments:

Exhibit A	Application for Project and Program Grant from the City of Livermore
Exhibit B	Insurance Requirements

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EXHIBIT B
EXHIBIT A

Applicant Name: **LIVERMORE VALLEY OPERA**

APPLICATION CHECKLIST - This Checklist is required and must be submitted as part of the completed Application. All Project & Program Grant applicants are required to submit the following:

One original set of the Application, collated in the following order:

- ☒ 1. Application Checklist (this page).
- ☒ 2. Start date: Do(es) the event(s) related to this project begin at least two (2) months after the application deadline?
- ☒ 3. Organizational Summary, signed by the organization's executive director, managing director, president, board chair, or other authorized officer of the organization, or by the applying artist.
- ☒ 4. If you are an organization, submit a list of current officers and Board members with their term of office.
- ☒ 5. If you are a 501(c)(3), submit a copy of your 501(c)(3) determination letter from IRS.
- ☒ 6. Application Form, beginning on page 1, continuing through the Project Budget Summary.
- ☒ 7. Notes to the Project Budget, and a detailed list of In-Kind contributions.
- ☒ 8. List of key project individuals, including principal artists and project managers, with a very brief job description (e.g., a self-explanatory job title) for each.
- ☒ 9. Resumes/biographies of key project individuals, generally one page each.
- ☒ 10. Up to four items in any combination of brochures, catalogues, performance programs, or similar organizational publications/materials; if available.
- ☒ 11. Up to four recent press reviews or articles, or similar independently generated published materials, if available. (*Note*: Calendar listings are not suitable.)
- ☒ 12. NOTE: During the review process you may be requested to submit samples of other work you have produced (work samples). See Chapter 3 – Grants for more information about work samples.

Standards for Preparing Applications

Please read the following carefully. Applicants are responsible for completing and submitting a full application package with all required attachments by the deadline. Incomplete applications will not be accepted for Commission evaluation.

1. Applicants must not modify the format of the application form or exceed the maximum length of any section of the form, except where otherwise noted.
2. All required attachments (except pre-printed ones) must be typed or computer-prepared in a type size that is no smaller than 12 pt. Times/Times New Roman, or 10 pt. Arial/Helvetica.
3. Complete all pages of the application form and all required attachments. (Use "N.A." if a section does not apply to your organization.) Provide information that is current as of the application deadline. Budget pages and budget notes must be complete.

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EXHIBIT B
EXHIBIT A

2.

2. Start Date and End Date

Start Date: **September 1, 2024**

End Date: **June 30, 2025**

EXHIBIT B
EXHIBIT A

3

Certification

If applicant is an organization:

I certify that the by-laws of this organization or a resolution of its governing body authorizes me to enter into legal agreements for the organization and to submit this application. To the best of my knowledge and belief, this organization meets the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Authorized Officer's Signature

2/23/24
Date

KEITH SAWYER
Print Name of Officer signing this form

PRESIDENT
Title of Officer signing this form

Keith R. Sawyer

- or -

If applicant is an individual artist:

To the best of my knowledge and belief, I meet the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Artists Signature

Date

Print name of Artist signing this form

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Application Form - Project & Program Grants

Deadline: Hand delivered or received via US Mail by 5:00 pm on March 1 or September 1

Submission Date: **February 23, 2024**

Amount of Grant Request: **$10,000** Total Project Budget: **$21,500**

Applicant/Organization: **Livermore Valley Opera**

Applicant/Organization's Address: [redacted]

Applicant/Organization's Web site: **www.LivermoreValleyOpera**

Preparer's Name & Title: **Pamela Rigg, Education & Community Engagement Program Director**

Preparer's Phone: [redacted] Preparer's E-mail: [redacted]

Address (for formal notification): [redacted]

Describe the art form of the project or program for which support is requested (i.e., Dance, Theater, Visual Arts, Heritage, Infrastructure, Media/Film/New Media, etc.):

Opera: Reduction performance for elementary schools, master cases for middle & high schools, master class for community college, senior resident & library performances.

Briefly describe the project or program for which support is requested:

Opera reduction performance for elementary schools, master cases for middle & high schools, master class for community college, senior resident & library performances.

Number of people intended to reach: Audience: **7,286** Participants: **N/A**

For the purpose of this application, "audience" means the people who will attend the project or program; "participant" means someone who attends a workshop or class, or else has hands-on involvement in the project or program. If the project or program will have both audiences and participants as defined here, please enter both goals.

Date project or program is scheduled to begin: **August 1, 2024**
Note: Project events may begin no earlier than two (2) months after the application deadline.

Date project or program is scheduled to end: **June 30, 2025**

4. Livermore Valley Opera Board of Directors

- Sonya Sheffield [redacted], Secretary
  Terms of office: 2022 - 2025
- Rosemary Chang [redacted]
  Terms of office: 2021 - 2024
- Raquel Holt [redacted]
  Terms of office: 2021 - 2024
- Hank Huff [redacted]
  Treasurer
  Terms of office: 2022 - 2025
- Alexander Katsman [redacted]
  Ex Officio
- Monica Kulander [redacted]
  Terms of office: 2023 - 2025
- Barbara Lymberis [redacted]
  Terms of office: 2021 - 2024
- Erie Mills [redacted]
  Ex Officio
- Manfred Mundelius [redacted]
  Terms of office: 2022 - 2025
- Pamela Philbert [redacted]
  Terms of office: 2021 - 2024
- Pamela Rigg [redacted]
  Terms of office: 2022 - 2025
- Keith Sawyer [redacted]
  President
  Terms of office: 2022 - 2025
- Jim Schmidt [redacted]

EXHIBIT B
EXHIBIT A

Terms of office: 2021 - 2024

Kathlene Tabet [redacted]

Terms of office: 2023 - 2025

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EXHIBIT B
EXHIBIT A

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: JUL 17 2001

LIVERMORE VALLEY OPERA
[redacted]

Employer Identification Number:
94-3168895
DLN:
17053174741041
Contact Person:
DAVID V SCIAN ID# 31369
Contact Telephone Number:
(877) 829-5500
Our Letter Dated:
March 1994
Addendum Applies:
No

Dear Applicant:

This modifies our letter of the above date in which we stated that you would be treated as an organization that is not a private foundation until the expiration of your advance ruling period.

Your exempt status under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3) is still in effect. Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Code because you are an organization of the type described in section 509(a)(2).

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(2) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(2) organization.

You are required to make your annual information return, Form 990 or Form 990-EZ, available for public inspection for three years after the later of the due date of the return or the date the return is filed. You are also required to make available for public inspection your exemption application, any supporting documents, and your exemption letter. Copies of these documents are also required to be provided to any individual upon written or in person request without charge other than reasonable fees for copying and postage. You may fulfill this requirement by placing these documents on the Internet. Penalties may be imposed for failure to comply with these requirements. Additional information is available in Publication 557, Tax-Exempt Status for Your Organization, or you may call our toll free number shown above.

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Letter 1050 (DO/CG)

EXHIBIT B
EXHIBIT A

6.

Application Form - Project & Program Grants

If needed, please use additional paper for this section.

1. State/describe your organization's mission or provide an artist's statement. Include the kind of arts work the organization or artist has done previously and does now. How does this work relate to the proposed project/program? If yours is not an arts organization, state briefly how the arts relate to its mission. (250 words or less)

   As stated in the Livermore Valley Opera By-Laws:
   "The mission of Livermore Valley Opera (LVO) is to enrich our community by producing world class operas and fostering the careers of professional opera singers. LVO encourage a wider appreciation of opera and the associated arts through community outreach and educational programs for youth in schools."

   Continued - See Attachment 1.

2. Describe the project or program for which you are seeking the grant. Discuss the project's origins. Describe the venue/location, the implementation process, and the timeframe. Discuss the resources — people, money, etc. — you will need to implement the project, whether you already have those resources within your organization or, if not, how you plan to obtain them.

   Livermore Valley Opera's *Education and Community Engagement Program* has served the City of Livermore since the opera company's formation in1992 with in-school opera performances and opera/singing master classes, and library and senior community opera recital engagements. The proposed project is both a continuation and an expansion of our ongoing education and community engagement program for free.

   Continued - See Attachment 2.

3. How will the requested grant be used in the planning and implementation of the project or program? (500 words or less.)

   The requested grant will be used in the implementation of the project with the payment to the performers: opera reduction performance at elementary schools and rehearsal time ($15,000 + $2,250), master classes at middle and high schools ($750), master class at community college ($150.), senior residential facility ($1,200), and library ($750). Performer expenses represent 93% of budget. The remaining $1400. Is for studio rehearsal studio, costumes, props, and printed materials & mailing for teachers.

   See Attachment 2 for financial details.

4. Describe how the program or project specifically addresses one or more of the main strands found in the Cultural Arts Master Plan, arts Alive! (Refer to the Cultural Arts Master Plan Executive Summary in the Public Art Policy Guideline manual.) (250 words or less.)
   See Attachment 4.

5. List the individual(s) or organization(s) you will be partnering with on this project. Be specific regarding the support, both financial and in-kind, they will be providing.
   Organization partners are providing the venues free of charge (elementary school, middle and high school, community college, senior residential, and library.
   See Attachment 5.

Application Form - Project & Program Grants

Project/Program Budget Worksheet *(enter N/A if item does not apply. Attach Budget Notes if necessary.)*

PROJECT SUPPORT *(Do not include in-kind support)*

Earned Revenue	Amount	Notes
Ticket Sales/Admissions	$ 0	
Tuition/Workshop fees	$ 0	
Other:	$ 0	
Subtotal: Earned Revenue	$ 0	

Contributed Income	Amount	In-hand	Pending
Contributions *(Individuals/Businesses)*	$ 8,850	$	$8,850
Grants *(Foundations/Government other than City)*	$ 2,500	$	$2,500
City of Livermore *(other than this grant request)*	$ 0	$	$0
Other:	$ 0	$	$0
Subtotal: Contributed Income	$ 11,350	$	$

Project & Program Grant Amount Requested	$10,000
Total Project Support (Revenue + Income + Grant)	$ 21,350

PROJECT EXPENSE *(Do not include in-kind expense)*

Personnel	Amount	Notes
Artistic	$19,950	Singers & piano accompanist
Production	$ 0	
Administrative	$ 0	
Other: *(describe in Notes)*	$	
Subtotal: Personnel	$19,950	

General	Amount	Notes
Venue Rental	$ 150	Boswell Center rehearsal rental
Materials and Supplies	$1,250	Elementary school production: costumes, props, printed materials for teachers
Marketing and Promotion	$ 0	
Transportation	$ 0	
Insurance	$ 0	Free rider to main LVO insurance policy
Other: *(describe in Notes)*	$ 0	
Subtotal: General	$ 0	

Total Project Expenses (Personnel + General)	$21,350
Project Surplus (Loss) *(Total Support minus Total Expense)*	$ 0

If Project Net is a negative value, explain in the Budget Notes how it will be covered.

EXHIBIT B
EXHIBIT A

6.

Matching Funds

All Project and Program Grant applicants must provide at least a dollar-for-dollar (one-to-one) match for the grant award, no less than 50 percent of which must be a cash match. The cash match must be from sources other than the City of Livermore.

In-kind contributions are allowed as part of the match only on the following limited basis:

1. In-kind contributions cannot be used for more than half of the required match, in other words, they cannot represent more than 50 percent of the value of the grant award; and,
2. The value of in-kind contributions, i.e., goods and services, must offset line item expenditures in the project budget and their value must be documentable with invoices or billing statements.

In-kind contributions must be listed below or on a separate sheet attached to the Budget Notes.

Source	Description	Fair Market Value
Board of Director Donations	**Cash contributions**	**$8,850**
		$
		$
		$
		$
		$

Requested Grant Amount: **$10,000.**

Cash Match Amount: **$11,350**

In-kind Match Amount: **$ 0**

EXHIBIT B
EXHIBIT A

1.
As stated in the Livermore Valley Opera By-Laws:
The mission of Livermore Valley Opera (LVO) is to enrich our community by producing world class operas and fostering the careers of professional opera singers. LVO encourage a wider appreciation of opera and the associated arts through community outreach and educational programs for youth in schools.

Livermore Valley Opera produces two operas with four performances each, during the opera season October through March,at its current residence at the Bankhead Theater. *Opera in the Vineyard* are concerts with four (4) opera singers and piano accompanist singing arias, duets, and quartets of popular opera and musical theater pieces, presented at local wineries once in June and August.

The proposed program, *Education and Community Engagement Program,* extends the main stage opera at the Bankhead Theater to existing community institutions: elementary, middle and high schools, community college, senior resident community, and library.

The Program includes a reduction of a full opera presented at elementary schools once a year with four singers and piano accompanist; master classes for middle and high school choruses once a year with one singer, opera recital at a senior community residence twice a year with three singers and piano accompanist, and an opera recital at the library once a year with four singers and piano accompanist.

EXHIBIT B
EXHIBIT A

6.

2.

Livermore Valley Opera's *Education and Community Engagement Program* has served the City of Livermore since the opera company's formation in1992 with in-school opera performances and opera/singing master classes, and library and senior community opera recital engagements. The proposed project is both a continuation and an expansion of our ongoing education and community engagement **free** program.

1. a reduction of a full opera presented at elementary schools once a year with four singers* and piano accompanist, 5 artists
2. master classes at middle and high school choruses twice a year with one singer and piano accompanist, 2 artists
3. opera recital at a senior community twice a year with two singers and piano accompanist., 3 artists
4. opera recital at the library twice a year with two singers and piano accompanist. 3 artists

*This expansion from 2 singers to 4 singers for elementary school performances allows for major opera productions (though reduced in length) in which major singing roles are performed by the four singers.

Venues:

A.Elementary Schools – 20 performances – Total $18,650

5 artists @ $150/each is $750/performance @ 20 performances:	**$15,000**
5 artists @ $150/each is $750/rehearsal @ 3 rehearsals:	**$2,250**
Rehearsal studio rental @$50/rehearsal @ 3 rehearsals:	**$ 150**
4 artist costumes, student costumes, props & sets	**$ 750**
School support materials and postage	**$ 500**

Altamont Creek Elementary School
586 students – 2 performances

Arroyo Seco Elementary School
592 students – 2 performances

Emma C. Smith Elementary School
652 students – 2 performances

Jackson Avenue Elementary School
549 students – 2 performances

EXHIBIT B
EXHIBIT A

6.

Joe Michell Elementary School
764 students – 2 performances

Junction Avenue Elementary School
863 students – 2 performances

Lawrence Elementary School
368 students – 1 performance

Leo R. Croce Elementary School
700 students – 2 performances

Marylin Avenue Elementary School
379 students – 1 performance

Rancho Las Positas Elementary School
597 students – 2 performances

Sunset Elementary School
756 students – 2 performances

6,806 elementary students

B.Middle and High Schools – 5 Master Classes

1 artist @ $150 is $150/master class Total $750

William Mendenhall Middle School
961 students with 50 students attending – 1 master class

Andrew N. Christensen Middle School
690 students with 50 students attending – 1 master class

East Avenue Middle School
648 students with 50 students attending – 1 master class

Granada High School
2,295 students with 50 students attending – 1 master class

Livermore High School
1,791 students with 50 students attending – 1 master class

250 middle and high school studens seved

EXHIBIT B
EXHIBIT A

6.

C.Community College – 1 Master Class

1 artist @ $150 **Total $150**

50 community college students served

D.Senior Community – 2 recitals

Three (3) singers & one (1) piano accompanist @ $150/each is $600/recital Total $1,200

Heritage Estate Senior Living
100 Residents – 2 recitals

E.Library – 1 Performance

5 artists @ $150/each is $750 **Total $750.00**

Civic Center Library – Meeting Rooms A & B
80 Attendees

Time Frame: August 1, 2024 – June 30, 2025

Funding: Total Program Costs - $21,350

60% Grants ($12,500) & 40% Private Donations ($8,850)

Performers: Bay Area Singers and Pianist on contract by performance

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6.

3.

The requested grant will be used in the implementation of the project with the payment to the performers: opera reduction performance at elementary schools and rehearsal time ($15,000 + $2,250), master classes at middle and high schools ($750), master class at community college ($150.), senior residential facility ($1,200), and library ($750). Performer expenses represent 93% of budget. The remaining $1400. Is for studio rehearsal studio, costumes, props, and printed materials & mailing for teachers.
No administration costs are reflected in the Program budget. The Director of Education and Community Engagement is a volunteer position.
See Attachment 2 for financial details.

4.

Cultural Arts Master Plan **Strand 1** The Livermore Valley Opera performs two operas each season, one in October and one in March with four performances of each opera on Saturday evenings and Sunday afternoons at the beautiful Bankhead Theater in the Livermore Cultural District, for which funding is **not** sought in this grant proposal. ***Cultural Arts Master Plan*** **Strand 1 is met through Bankhead performances.**

Cultural Arts Master Plan **Strand 2.** The Livermore Valley Opera performances at the Bankhead Theater rarely reaches 60% which is generally typical and being addressed by Livermore Commission for the Arts. Opera as a performing arts form reaches into the community and into the schools to make opera more accessible, and engaging the Livermore community. Livermore Valley Opera, in its mission statement, and in its *Education and Community Engagement Program*, insures the visibility and vitality of opera for students in the Livermore elementary, middle and high schools, in senior residents facility, and at the Civic Center Library for all residents, and for which funding is being applied.
Cultural Arts Master Plan **Strand 2 is met through school and community performances and recitals venues located in the community.**

Cultural Arts Master Plan **Strand 3.** The Livermore Valley Opera recitals at the Main Library at Civic Center reaches into the community. Elementary school opera performances make opera more accessible to the youth of the Livermore elementary public schools. Livermore Valley Opera, in its mission statement, and in its *Education and Community Engagement Program*, insures the visibility and vitality of opera for students in the Livermore elementary, middle and high schools, and residents in senior residents facility, and at the Civic Center Library for all residents. LVO creates a sense of community and life-long learning with publicly accessible opportunities for all Livermore residents to attend.
Cultural Arts Master Plan **Strand 3 is met through school and community opera performances and recitals creating a sense of community and life-long learning.**

Cultural Arts Master Plan **Strand 4:** Livermore Valley Opera has provided this education and community engagement program, entirely free, for a decade. As such LVO provides a long-term, sustainable opera performing arts resource that support the City's arts and culture community for all residents.
Cultural Arts Master Plan **Strand 4 is met through school and community opera performances and recitals providing a long-term, sustainable opera experience for students and residents.**

5.

Partnership with community organizations, but with no financial support because the performances and recitals are free, are listed in #1:

Elementary Schools –
Altamont Creek Elementary School
Arroyo Seco Elementary School
Emma C. Smith Elementary School
Jackson Avenue Elementary School
Joe Michell Elementary School
Junction Avenue Elementary School
Lawrence Elementary School
Leo R. Croce Elementary School
Marylin Avenue Elementary School
Rancho Las Positas Elementary School
Sunset Elementary School

Middle and High Schools –
William Mendenhall Middle School
Andrew N. Christensen Middle School
Avenue Middle School
Granada High School
Livermore High School

Community College
Las Positas

Senior Community –
Heritage Estate Senior Living

Library –
Civic Center Library (Main) Rooms A and B

Financial support for the Livermore Valley Opera's *Education and Community Engagement Program* is funded by contributions from all LVO board members in the amount of $7,500, and a $4,500 grant from Tri Valley Nonprofit Alliance.

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7. Notes on the Project Budget

1. Elementary School Performances:
   a reduction of a full opera presented at elementary schools once a year with four singers and piano accompanist, 5 artists

   $150/performance/performer = $750/performance
   20 performances @ $750 = $15,000
   3 rehearsals @ $750 = $. 2,250

   Rehearsal studio rental, costumes, props, printed teacher materials: $1400.

2. Master classes at middle and high school choruses once a year with one singer 1 artists
   $150/master class @ 5 master classes = $750

3. Master classes at community college once a year with one singer 1 artists
   $150/master class @ 1 master classes = $150

4. opera recital at a senior community twice a year with three singers and piano accompanist. 4 artists

5. Library Performance:
   a reduction of a full opera presented at the library once a year with four singers and piano accompanist, 5 artists

   $150/performance/performer = $750/performance

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8. List of Key Project Individuals

Erie Mills, Artistic Director
Select the opera and performance selections, hire the professional singers and piano accompanists, review the opera reduction, and generally review all artistic aspects of the education and community engagement program.

Dr. Pamela Rigg, Director
Education and Community Engagement Program
Contact Elementary, Middle and High Schools for performances and master classes, and Library and Senior Community for scheduling dates.
In co-operation with the Artistic Director to create the opera reduction for the elementary school performances. Organize costumes, sets and props.

Performers:
Andrew Pardini, Baritone
Chester Pidduck, Tenor
Olivia Prendergast, Soprano
Unselected Baritone
Unselected Piano accompanist

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9. Resumes of key project individuals

A. Erie Mills, Artistic Director

B. Pamela Rigg, Director
Education and Community Engagement Program

C. Andrew Thomas Pardini, Baritone

D. Chester Pidduck, Tenor

E. Olivia Prendergast, Soprano

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Erie Mills, Artistic Director, Livermore Valley Opera

2016 - present

Education:

College of Wooster , Wooster, OH
B.A. Music – Vocal Performance

University of Illinois – Urbana-Champaign
M.A. Music – Vocal Performance

College of Wooster , Wooster, OH
Honorary Doctorate in Music

Awards:

Houston Opera Studio Recipient
Richard Tucker Foundation Grant
Distinguished Alumni Award from the College of Wooster

Opera Performance Venues: Metropolitan Opera, New York ; Teatro alla Scala, Milan, Italy ; Vienna Opera, Germany;

Symphony Concert Performance Venues: Chicago Symphony, Philadelphia Symphony, St. Louis Symphony, Cleveland Symphony, Boston Symphony, Los Angeles Symphony, San Francisco Symphony, the St. Paul Chamber Orchestra, and the VARA Radio Orchestra at the Concertgebouw in Amsterdam.

Recitalist: Soloist and Chamber Music

Chamber Music Society of Lincoln Center, Bravo Colorado Music Festival, Music from Angel Fire, and at St. John's Smith Square in London.

Recordings:

RCA's Sondheim's *Follies*, New World Records' Grammy award-winning *Candide*, and her solo CD of American song "Always il's Spring" from VAI.

University and Opera Company Positions:

San José State University, Full Professor of Music.

Principal English Diction Coach for Opera Theatre of St. Louis, Metropolitan Opera, Santa Fe Opera, and Opera Philadelphia.

Adjudicates at the Metropolitan Opera National Council auditions and for the National Association of Teachers of Singing.

Board Positions:

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Opera America Board of Directors
Board Secretary of the William M. Sullivan Foundation.

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Pamela Zell Rigg, Ph.D.

Director, Education and Community Engagement Program

Education:

New York University
English Literature
B.A.

New York University
Education
M.A., 1969

University of Arizona
Educational Psychology
M.A., 1972

University of California, Berkeley
Math, Science and Technology Education
Ph.D.,1990

American Montessori Society Early Childhood Montessori Teacher Credential

American Montessori Society Elementary I Montessori Teacher Credential

American Montessori Society Infant and Toddler Montessori Teacher Credential

State Teaching Credentials: New York, Arizona, California

Publication:

The Magic Flute Reduction for Student Performance

Professional Associations:

Asian Museum of San Francisco, Member
Fine Art Museums of San Francisco, Member
Livermore Valley Opera, Board Member
Merola Opera Program, Board Member
OperaAmerica, Ambassador & Trustee
San Francisco Conservatory of Music, Board Member
San Francisco Opera, Member

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ANDREW THOMAS PARDINI

BARITONE

SELECT COMPLETE ROLES

Bass Soloist	*Mozart Requiem*	Lakeside Concert Series SF	2024
Papageno	*The Magic Flute Outreach*	Livermore Valley Opera	2024
Reporter	*The (R)evolution of Steve Jobs*	San Francisco Opera	2023
The Imperial Commissioner	*Madame Butterfly*	San Francisco Opera	2023
Sciarrone	*Tosca*	Livermore Valley Opera	2023
Flora's Servant	*La traviata*	San Francisco Opera	2022
Regular Chorus	*2022-2023 Centennial Season*	San Francisco Opera	2022-2023
Giuseppe Palmieri	*The Gondoliers*	Winter Opera Saint Louis	2022
Schaunard	*La bohème*	Opera North	2021
Dancaïre/Escamillo ©	*Carmen*	Opera Orlando	2021
Schaunard	*La bohème*	Gulfshore Opera	2021
Dr. Falke	*Die Fledermaus*	Opera Orlando	2020
Nils Krogstad	*A Doll's House*	Voice Afire Opera-Cabaret	2020
Edmund Bertram	*Mansfield Park*	Opera Modesto	2020
The Pirate King	*The Pirates of Penzance*	Winter Opera Saint Louis	2019
Silvio	*Pagliacci*	Salt Marsh Opera	2019
Der dritte Edle/Telramund ©	*Lohengrin*	Opera Southwest	2019
Tobia Mill	*La cambiale di matrimonio*	Opera Southwest	2019
Schaunard	*La bohème*	Salt Marsh Opera	2018
Emperor Overall	*The Emperor of Atlantis*	IN Series	2018
Zurga	*Les pêcheurs de perles*	Winter Opera Saint Louis	2018

AWARDS AND HONORS

Finalist	The Gerda Lissner Foundation Lieder/Song Vocal Competition – NY, NY	2017
Finalist	Partners for the Arts Vocal Awards Competition – Alexandria, VA	2014
Encouragement Award	Metropolitan Opera National Council Auditions – Pittsburgh, PA	2012

YOUNG ARTIST PROGRAMS AND EDUCATION

Resident Artist	Opera North Resident Artist Program – Lebanon, NH	2021
Studio Artist	Opera Orlando Studio Artist Program – Orlando, FL	2020-2021
Apprentice Artist	Opera Southwest Apprentice Artist Program – Albuquerque, NM	2019
Studio Artist	Opera Maine Studio Artist Program – Portland, ME	2017
Studio Baritone	The Atlanta Opera Studio Artist Program – Atlanta, GA	2016-2017
Studio Artist	The Crested Butte Music Festival Opera Studio – Crested Butte, CO	2016
Resident Baritone	Dayton Opera Artists-In-Residence Program – Dayton, OH	2015-2016
Festival Artist	Utah Festival Opera & Musical Theatre Festival Artist Program – Logan, UT	2015

SPECIAL SKILLS Suzuki Method Violin Instruction (14 Years)/Piano Instruction (3 Years)/Dance and Feldenkrais Method Movement Instruction (2 Years)/Acting, Improvisation, and Shakespeare Instruction (2 Years)/Stage Combat Instruction (1 Year)

COACHES	CONDUCTORS	DIRECTORS	TEACHERS
Lynn Baker	Michael Christie	Ken Cazan	Fabrizio Corona
Lisa Hasson	Simon Holt	Shawna Lucey	Dominic Cossa
Brian Holman	Alexander Katsman	Leon Major	Gary Glaze
Rachelle Jonck	John Keene	Kevin Newbury	François Loup
Kevin Korth	Eun Sun Kim	Nick Olcott	Mark Nicolson
Justina Lee	Timothy Long	Miroku Shimada	Ron Raines
E. Loren Meeker	Stephen Lord	Josh Shaw	Alan L. Smith
Rolando Salazar	Ming Luke	John Stephens	Erik Buck Townsend
Dan Franklin Smith	Ryan Murray	Dona D. Vaughn	Joseph Wiggett
Howard Watkins	Jeffrey Thomas	Tomer Zvulun	Don Wiggins

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ANDREW THOMAS PARDINI

BARITONE

Extolled by The Baltimore Sun for his "robust work" and DC Metro Theater Arts for "a heart-stopping, high voltage bass-baritone voice," Andrew Thomas Pardini continues to win audiences with his vibrant tone and thrilling character portrayals. Pardini is a Tenured Member of the Regular Chorus with San Francisco Opera, where he made his company debut as part of its 2022-2023 Centennial Season. Past roles at San Francisco Opera include Flora's Servant/La traviata, The Imperial Commissioner/Madame Butterfly and Reporter/The (R)evolution of Steve Jobs.

Upcoming engagements include company debuts with Livermore Valley Opera as Papageno/The Magic Flute Outreach, a special appearance with Opera Modesto as Baritone Soloist/The Good, The Bad & The Loverly: A Valentine Concert, and company and role debuts with Lakeside Concert Series SF as Bass Soloist/Mozart Requiem, as well as a return to San Francisco Opera for its 2024-2025 Season. Earlier this season, Pardini made his company and role debuts with Livermore Valley Opera as Sciarrone/Tosca, a homecoming appearance with Opera Modesto as Baritone Soloist/40th Anniversary Gala, and company debut with San Francisco Opera Guild's Opera Together as Marcello/La bohème

Pardini made his company and European debuts at Berkeley Community Chorus & Orchestra as part of its 2018-2019 Season, where he performed the Baritone Soloist/Ein deutsches Requiem at such venues as Hertz Hall (Berkeley, USA), Alexela Kontserdimaja (Tallinn, Estonia), Rīgas Doms (Riga, Latvia), and Konserthuset Stockholm (Stockholm, Sweden). Other recent engagements include company debuts as Schaunard/La bohème at Opera North, company and role debuts as Dr. Falke/Die Fledermaus and Dancaïre & Escamillo (Cover)/Carmen at Opera Orlando, company debuts as Schaunard/La bohème at Gulfshore Opera, company and role debuts as Nils Krogstad at Voice Afire Opera-Cabaret in the World Premiere of Raymond Luedeke's A Doll's House, role debut as Edmund Bertram/Mansfield Park at Opera Modesto, role debut as The Pirate King/The Pirates of Penzance at Winter Opera Saint Louis, role debut as Silvio/Pagliacci at Salt Marsh Opera, company debuts as Schaunard/La bohème at The Festival of the Atlantic and Salt Marsh Opera, company and role debuts as Tobia Mill/La cambiale di matrimonio and Der dritte Edle & Telramund (Cover)/Lohengrin at Opera Southwest, company debut as Peter/Hänsel und Gretel at Bar Harbor Music Festival, role debut as Emperor Overall/The Emperor of Atlantis at IN Series, role debuts as Marco/Gianni Schicchi and Buoso's Ghost at OperaDelaware, company and role debuts as Zurga/Les pêcheurs de perles at Winter Opera Saint Louis, company debut as Bass Soloist/Messiah at Bach In Baltimore, company and role debuts as Baritone Soloist/Ein deutsches Requiem at Crescent Choral Society, as well as company and role debuts as Albert/Werther at Baltimore Concert Opera and OperaDelaware.

Priding himself as a champion of contemporary works, Pardini relishes the opportunity to be a part of the creative and developmental process, garnering acclaim for his striking interpretations. Pardini joined good friend and composer, Joshua Rush Barnett, as the Baritone Soloist for the premiere of his epic Civil War masterwork, Valley Echoes. He originated the role of Andreas Baader in The Last Act of Revolution, the inaugural operatic undertaking of composer, Evan Meier, and librettist, Lucas Richmond, and also created the role of Navarro in the Los Angeles debut of David Conte and Oliver Mayer's racially-charged opera, America Tropical. The realm of vocal competition has propelled Pardini's burgeoning career, helping him to capture a loyal following of supporters. Foremost among his many successes, Pardini won Second Place in the 2015 Michael Ballam Concorso Lirico International Vocal Competition, as well as being a Finalist in both the 2017 Gerda Lissner Foundation Lieder/Song Vocal Competition and 2014 Partners for the Arts Vocal Awards Competition, and the recipient of an Encouragement Award in the 2012 Metropolitan Opera National Council Auditions – Pittsburgh District.

Pardini has honed his craft at a number of Young Artist Programs and training institutes throughout the United States, the most notable being Opera North Resident Artist Program, Opera Orlando Studio Artist Program, Opera Southwest Apprentice Artist Program, Opera Maine Studio Artist Program, The Atlanta Opera Studio Artist Program, The Crested Butte Music Festival Opera Studio, Dayton Opera Artists-In-Residence Program, Bay Area Summer Opera Theater Institute, and OperaWorks.

Pardini holds a Master of Music degree in Opera Performance from the University of Maryland – Maryland Opera Studio, under the tutelage of Dominic Cossa and François Loup, and a Bachelor of Music degree in Vocal Performance from the University of Southern California – Thornton School of Music, studying with Gary Glaze. Prior to university, Pardini spent his earliest years as the student of Erik "Buck" Townsend, who reared him from boy soprano to "baby baritone," imbuing him with a passion and reverence for singing and performing. Pardini dedicates his every artistic pursuit, with love and admiration, to his voice teacher and mentor.

A native of Modesto, California, Pardini is based in the San Francisco Bay Area. For more information, please visit www.andrewthomaspardini.com.

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Chester Pidduck, Tenor

Education:

M.A. - Music, Indiana University, 2007
B.A. -I Spanish, Hendrix College, 1997
Il Globo, Florence, Italy. Italian grammar and conversation studies ,2010
L'Atelier9, Paris, France. French grammar and conversation studies, 2007
Middlebury College, German for Singers Program, 2003
Universidad de Salamanca, Spain). Diploma de Estudios Hispánicos, 1996

Opera Performance Venues and Roles:

Livermore Valley Opera

Lucia de Lammermore, Normanno

Tosca, Spoletta

San Francisco Opera – twenty solo roles

It's a Wonderful Life, .Mr. Martini 2008

Arabella, Zimmerkellner

La Boheme, Parpignol

Moby Dick, Nantucket Sailor

Opera San Jose

Barber of Sivialia, Almaviva

Mendocino Music Festival

Barber of Sivialia, Almaviva

West Bay Opera

The Elixir of Love, Nemorino

Opera San Luis Obispo

La Boheme, Rodolfo

San Francisco Symphony Orchestra

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Carmina Burana

St. Louis Symphony Orchestra.

Sacramento Choral Society and Orchestra
San Francisco Opera Guild

Metropolitan Opera

Awards: Young Artist Programs:

Glimmerglass Festival, Cooperstown, NY

Central City Opera, Central City, CO

Nashville Opera, Nashville, TN

Opera Colorado, Denver, CO

Sarasota Opera, Sarasota, FL

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Olivia Prendergast

soprano

oliviaprendergast.com | [redacted]

Opera:

Cleopatra (*cover, upcoming*)	**Giulio Cesare**	Opera Theatre of St. Louis	2024
Marie de'Medici (*cover, upcoming*)	**Galileo Galilei**	Opera Theatre of St. Louis	2024
Pamina *(upcoming)*	**The Magic Flute**	Livermore Valley Opera	2024
Lucia	**The Rape of Lucretia**	Merola Opera Program	2023
Margarita Xirgu	**Ainadamar**	Indiana University Opera Theater	2023
Erste Knabe	**Die Zauberflöte**	Merola Opera Program	2022
Papagena (*cover*)	**Die Zauberflöte**	Merola Opera Program	2022
Lisette	**La Rondine**	Indiana University Opera Theater	2022
Clorinda (*premiere*)	**A Royal Feast** by Michael Ching	Savannah VOICExperience Festival	2021
Romilda	**Xerxes**	Indiana University Opera Theater	2021
Adele	**Die Fledermaus**	Northwestern's MainStage Opera	2020
Lisa	**Dog Days**	Northwestern's MainStage Opera	2019
Bastienna	**Bastien and Bastienna**	Chicago South Loop Symphony	2019
Flora	**Turn of the Screw**	Northwestern's MainStage Opera	2019
The Sandman	**Hansel and Gretel**	Savannah VOICExperience Festival	2018

Concert Work:

poor hymnal *by David Lang (premiere, upcoming)*		The Crossing Choir with Donald Nally	2023
In Her Own Words: Joan of Arc Speaks *(chamber premiere)*	Joan of Arc	Graciela Carriqui (composer) Initiative	2023
Die Donnerode *by Telemann*	Soloist	Indiana's HPI Concentus Ensemble	2023
Nun komm, der Heiden Heiland, *BWV 61* *by J.S. Bach*	Soloist	Bloomington Bach Cantata Project	2023
Vesperae solennes de confessore *by Mozart*	Soloist	Indiana University Conductor's Choir	2022
"The Passion of Joan of Arc" *(new LIVE choral soundtrack for 1928 silent film)*		Bloomington Buskirk Theatre	2022
The Life and Death(s) of Alan Turing *(concert premiere)*	Soloist	Chicago Opera Theatre and Justine F. Chen	2019
Letters Made with Gold *by Shawn Jaeger*	Soloist	Northwestern Contemporary Ensemble	2019
Tehillim *by Steve Reich*	Soloist	Northwestern Contemporary Ensemble	2018

Competitions:

Laffont Competition Midwest Region 2nd Place Winner	2023
Laffont Competition Tennessee District Winner	2022
The American Pops Orchestra **NextGen Competition** Semifinalist	2022
Director's Award for the **James Toland Vocal Arts Competition**	2021
Laffont Competition Encouragement Award Tennessee District	2021
National Society of Arts and Letters Voice Competition Bloomington Chapter Larry Davis Memorial Award	2021

Coaches:	Directors:	Conductors:	Teachers:
Carrie-Ann Matheson	Jan Eßinger, Michael Shell	Kelly Kuo, Judith Yan,	Heidi Grant Murphy,
Kevin Murphy, Alan Darling	Crystal Manich, Gina Lapinski	Patrick Furrer, Dana Marsh	Deborah Birnbaum,
Jonathan Kelly, Howard Watkins	Joachim Schamberger	Donald Nally, Alan Pierson	Tim Noble, Karen Brunssen

Training and Education:

Festival Artist | *Merola Opera Program* (2022, 2023)
Solo Performer's Diploma | *Indiana University* (2023)
Master of Music | *Indiana University* (2022)
Festival Artist | *Savannah VOICExperience Festival* (2021)
B.M. in Vocal Performance and Arts Administration | *Northwestern University* (2020)

Skills:

- belting, mixed belting, straight tone singing; beginner ballet, swing, waltz and salsa
- musical theatre and straight experience (Ariel from *The Little Mermaid,* Eve from *Children of Eden, The Laramie Project, Little Women)*

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EXHIBIT A

LIVERMORE
Project & Program Grant

10. Support Materials for Teachers – See LVO Website – *Education*

A. Animated Synopsis, YouTube links, *The Magic Flute*
The Magic Flute Synopsis
Classroom Discussion Questions

B. *Elementary School Performance – Cover Letter*
Elementary School Performance – Student Parts
Audience Etiquette: Attending the Opera

C. Opera Dictionary / Opera Dictionary Matching Activity

D. Reduction Script, *The Magic Flute*

EXHIBIT B
EXHIBIT A

The Magic Flute (German: Die Zauberflote)
Wolfgang Amadeus Mozart, Composer
Emanuel Schikaneder, Librettist

Animated Synopsis: Three Minutes

https://www.google.com/search?q=magic+flute+synopsis&oq=The+Magic+Flute&aqs=chrome.4.46i131i340i433i512j69i57j0i512l5j69i60.26505j0j7&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:d4d746fc,vid:-laVXO0lYKY,st:0

Synopsis for the Reduced Elementary Student Performance:

Prince Tamino has been sent by this father, the King, to the kingdom of the Queen of the Night. Tamino is chased by a serpent/dragon and collapses in exhaustion. Three Ladies kill the serpent/dragon. They leave to tell the Queen of the Night of Tamino's arrival.

Papageno, the bird catcher, enters as Tamino revives. Prince Tamino assumes that Papageno has saved him from the serpent/dragon, and Papageno agrees! Papageno explains that he is the Queen's bird catcher and trades his birds daily with The Three Ladies who deliver the birds to the Queen. In exchange for the birds Papageno receives food and drink from The Three Ladies.

The Three Ladies return and trade Papageno's birds for water and for a stone as a warning not to lie. They scold Papageno for lying that he has saved Tamino when in truth The Three Ladies saved Tamino! They padlock Papageno's mouth as a reminder not to lie!

The Three Ladies give Tamino a portrait of the Princess Pamina, daughter of the Queen of the Night. Tamino immediate falls in love with Pamina.

The Queen of the Night arrives and tells Tamino of the kidnaping of her daughter, Pamina. Tamino must rescue and return her daughter, and then he can marry her.

The Queen leaves and The Three Ladies release Papageno from the padlock on his mouth, however, do not lie! The Three Ladies give Tamino a golden magic flute to use as defense from danger, to soften the heart of others to be kind, and to remove the pain within each heart. Papageno is given silver bells to play at any time to bring happiness to others.

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EXHIBIT A

There are three tests for Tamino. The first test is "Silence." When Tamino falls silent, Pamina who knows nothing of the test of silence, feels sorrowful. Pamina thinks Tamino no longer loves her. Nonetheless, Pamina is faithful in her heart to Tamino. Tamino passes the first test.

The second test is "Fire," and the third test is "Water." Pamina and Tamino overcome these tests together, and through the power of the magic flute.

Meanwhile, Papageno finds his Papagena, and they are joined together in their commitment to each other.

The Magic Flute celebrates the power of music to bring happiness and joy to the world. People endure trials in life, but an enduring commitment to one another can support us through life's trials of "fire" and "water". At the end we are together, and achieve truth, beauty and wisdom together.

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The Magic Flute

Synopsis

ACT I

Prince Tamino has been sent by this father, the King, to the kingdom of the Queen of the Night. Tamino is chased by a serpent/dragon and collapses in exhaustion. The Three Ladies kill the serpent/dragon. They leave to tell the Queen of the Night of Tamino's arrival.

Papageno, the bird catcher, enters as Tamino regains consciousness. Prince Tamino assumes that Papageno has saved him from the serpent/dragon, and Papageno agrees! Papageno explains that he is the Queen's bird catcher and trades his birds daily with The Three Ladies who deliver the birds to the Queen. In exchange for the birds Papageno receives food and drink from The Three Ladies.

The Three Ladies return and trade Papageno's birds for water and for a stone. They scold Papageno for lying to Tamino about saving him from the serpent/dragon. They padlock his mouth as a reminder not to lie! The Three Ladies give Tamino a portrait of the Princess Pamina, daughter of the Queen of the Night. Tamino immediate falls in love with Pamina.

The Queen of the Night arrives and tells Tamino of the kidnaping of her daughter, Pamina. Tamino must rescue and return her daughter, and then he can marry Pamina.

The Queen leaves and the Three Ladies release Papageno from the padlock on his mouth, however, do not lie! They give Tamino a golden magic flute to use as defense from danger: to soften the heart of others to be kind, and to remove the pain within each heart. Papageno is given silver bells to play at any time to bring happiness to others.

Note: Opera reduction deletes the Monostratos' parts and most of Sarastros" parts.

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ACT II

There are three tests for Tamino. The first test is "Silence." When Tamino falls silent, Pamina who knows nothing of the test of silence, feels sorrowful. Pamina thinks Tamino no longer loves her. Nonetheless, Pamina is faithful in her heart to Tamino. The pass the first test of constancy of commitment to each other. The second test is "Fire," and the third test is "Water." They overcome these tests together through the power of the magic flute.

Meanwhile, Papageno finds his Papagena, and they are joined together in their commitment to each other.

The Magic Flute celebrates the power of music to bring happiness and joy to the world. People endure trials in life, but an enduring commitment to another can support us through life's trials of "fire" and "water". At the end we are together, and achieve truth, beauty and wisdom.

The animated, 3-minute story of *The Magic Flute* is adapted by Kyra Teis on YouTube:

https://www.google.com/search?q=Magic+Flute+on+youtube+for+kids&oq=Magic+Flute+on+youtube+for+kids&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTE5MDY0ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:cc7e6130,vid:AJaau059C7w

With your support in providing the story your students are better prepared to experience *The Magic Flute* performance on a level that will endure years past the LVO school performance.

About the Composer

Wolfgang Amadeus Mozart (1756-1791) is the great composer of operas, symphonies, masses, concertos, sonatas, etc. After more than 230 years Mozart's music continues to be played and enjoyed.

Mozart was a child prodigy with his keyboard skills that brought Mozart early acclaim. Mozart was already compositing music such as *Twinkle, Twinkle Little Star* at the age of 4, and his first opera at 9 years.

Mozart's best- known operas include *The Marriage of Figaro, Don Giovanni, Così fan tutte,* and *The Magic Flute.*

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Classroom Discussion Questions:

Die Zauberflote - *The Magic Flute* - premiered in 1791 and continues in popularity more than 230 years later! The story contains elements that continue to have meaning in our lives today.

The story speaks to our own life experiences:

The serpent/dragon chases and harasses Tamino.

- Do you sometimes feel harassed?
- Do you enjoy action films in which the hero is chased?
- What about the chase is both scary and exhilarating?

Papageno takes credit for something that he has not done: he lies.

- Do you sometimes feel forced into a lie?
- Do you notice in films the hero is deceived by someone in some way?
- What do you think about lying? Do you call it "exaggerating" rather than lying?

Tamino is so happy to meet Papageno after his serpent/dragon escape.

- Do you experience similar happiness when you see a friend?
- Do you predict that at the end of a film that two (or more) people will happily be together at the end?
- Are there times when you find someone is really not a friend? What makes a friend?

A timeless story deals with experiences and feelings that all humans feel at some time or another: harassed/chased; lied to/deceived; happiness with friendships/pain with loss of friendship, and many more feelings in *The Magic Flute* story and other stories.

An opera's story allows us to see and to experience our feelings in another person's situation!

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LIVERMORE VALLEY OPERA
EDUCATION AND COMMUNITY ENGAGEMENT
FOR ELEMENTARY SCHOOL ASSEMBLY PERFORMANCES

Dear Educator,

Thank you for scheduling Livermore Valley Opera's 45-minute reduction performance of *The Magic Flute* at your elementary school! Our performance schedule this 2023-2024 season is Monday through Friday, January 22 – February 2 with both morning and afternoon performances.

The Magic Flute is a magical way for students to experience opera. The lyrical, familiar tunes, the other-worldly setting make *The Magic Flute* an enchanting opera for elementary students.

This Teacher's Tool Box of *The Magic Flute* supports your students' preparation and enjoyment of the performance. Whatever class time you have to devote to the preparation of the performance will be well-worth it.

The Story: YouTube links or written.	5 minutes
Music Selections: YouTube links	5 minutes
Discussion: Topics provided	open

We look forward to visiting your school. Please contact me at (510) 258-2640 with any questions.

Best regards,

Dr. Pamela Rigg
LVO Education and Community Engagement Program

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LIVERMORE VALLEY OPERA
THE MAGIC FLUTE

ELEMENTARY STUDENT PERFORMANCE

Livermore Valley Opera presents Amadeus Wolfgang Mozart's delightful performance of *The Magic Flute,* in reduction of 45 minutes, at your school assembly.

Advanced preparation of the students is highly recommended in order to optimize engagement of all students during the performance:

1. Acquaint the students with the general story of *The Magic Flute*, written or animated links to YouTube.
2. Acquaint the students with the major arias and duets in *The Magic Flute:*
3. Audition students for non-singing, non-verbal roles:

Dragon -	2 students
Three Ladies -	3 students
The Boys -	3 students
Fire -	2 students
Water -	2 students

Read through the script and assign each of the twelve student their parts two weeks before the performance. Roles are assigned to one student each. Do not double cast or share roles, even if you have two performances planned at your school.

Student Parts:

Dragon -	2 students
Three Ladies -	3 students
The Boys -	3 students
Fire -	2 students
Water -	2 students
Chorus -	Student Assembly

Role Assignments:
Hold auditions selecting the students with the strongest stage presence, sense of timing, and speed in moving from scene to scene. *The Magic* Flute has many short-scene change

Student Preparation:
Print a copy of the complete script for each student participant. Highlight the lines and stage directions in the script for each part.

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The student participants memorize the actions in their scenes.

Student participants practice their actions and scene changes in the performance space.

The teacher reads the parts of Tamino, Papageno, Pamina, the Queen of the Night, and Papagena.

Singing Preparation:
Share the libretto (words) of the selected songs for all students to sing at the student assembly performance. Practice the words with the music each day in the two weeks prior to the performance:

Queen of the Night:

Papagena & Papageno

Day of Performance:
The performance space should be cleared and prepared:
Tuned piano off stage to stage right.
Podium and microphone next to piano. No electronic keyboard.
One adult (folding) chair on stage at center.
Three student chairs at stage right.
12 chairs off stage.
Custodian available, if needed.

Dress Rehearsal with Student Performers:

Livermore Valley Opera performers arrive 75 minutes before performance time to conduct a dress rehearsal with student actors (rehearse staging, coaching dialogue and scene changes).

Please ensure the performance starts on time, and the student audience arrives early enough for this to happen.

Costumes:
Livermore Valley Opera provide all costumes for the student performers.

Students should wear plain white shirts and dark pants.

Props/Set Pieces:

- Livermore Valley Opera provides all props and scenic elements for the production.

Docent Assistance:

Audience Etiquette: Attending the Opera

The performers on the stage are aware of the audience, and audience members are aware of each other! Very different than home-viewing performances on a screen! The singers wish to share their art-form with you. For singers to be most effective in their efforts every audience member must give the performance full attention, and avoid behavior that interferes with the performance.

To achieve an optimal operatic experience, please follow these guidelines:

1) Watch and listen to the performance with both your eyes and your ears!

2) Respond enthusiastically by applauding at the conclusion of a song!

   Brava is spoken when a female concludes a song;
   bravo is spoken when a male concludes a song.

3) Keep your reactions appropriate; do not disrupt the performance.

4) Like Papageno, learn to be silent… during *The Magic Flute* performance!

5) Remain seated during the performance.

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About the Magic Flute

The Magic Flute was written in the German language with singing parts and with spoken parts. The German word *Singspiel*'s means sing-speak! *The Magic Flute* is a sing-speak opera: a singspiel opera.

Wolfgang Amadeus Mozart was the composer of the music; Mozart wrote the music part of *The Magic Flute*.

Emanuel Schikaneder was the librettist; Schikaneder wrote the words of *The Magic Flute*. All operas have a composer and a librettist – sometimes it is the same person.

*The Magic Flute was c*omposed in 1791 – over 230 years ago, Mozart scored *The Magic Flute* for fifteen instruments and strings. Opera orchestras are far larger today.

Livermore Valley Opera's performance for elementary schools has been reduced from 2 hours and 15 minutes to 45 minutes. The number of singing roles has been reduced to five singing roles. Rather than a full orchestra there is a single piano accompanist.

The reduction has excluded a sub-plot of Monostratos, and allusions to Masonic rites. Chorus and marches are eliminated. The basic story-line and the major arias and duets remain. Students experience the most recognizable music in *The Magic Flute.* The full-length opera may be experienced later in the students' life with more understanding and appreciation.

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Opera Dictionary

Opera

An **opera** is a musical drama or comedy where the actors sing rather than speak their lines. The word "opera" derives from the Latin word *opus*, which literally means "a work of art." Like a play, an opera is performed on a stage with singing-actors, scenery, make- up and lighting.

Opera is truly a **multi-disciplinary** art, which means it is a combination of many art forms (singing, orchestral music, theater, visual arts, dance, etc.) and subject areas (history, mythology, literature, etc.). Opera combines these disciplines in a very powerful way to tell a story. Opera can be funny, sad, scary, dramatic, mysterious, fantastical, or any combination of feelings and moods.

Libretto (meaning "little book" in Italian) contains all of the words of an opera. A libretto is usually shorter than the script for a play because it takes longer to sing lines than to say them, and because music is also a very important part of telling the story of an opera. The person who writes the words for an opera is often a poet or playwright and is called a **librettist.**

Composer writes the music for the opera. All of the music, both vocal (for singers) and orchestral (for instrumentalists) is written in the **score** which separates lines for each instrument and each singer's vocal part. The score, as a piece of music, reflects the mood, events and emotions of the characters in the story.

Characters are the people in the story. Singers perform the parts of the characters, also called **roles**.

Performers – Voice Types

Soprano- The highest female voice. She is often the heroine of the opera and often in love with the tenor. A star soprano is often referred to as the "Prima Donna."

Mezzo-Soprano- The lower female voice. The mezzo sound is typically darker and warmer than the soprano. The mezzo usually plays the older female character (like the mother), the bad guy (the witch), a seductress, or a boy. When the mezzo plays a male character, it is called a **pants** role.

Tenor- The highest male voice. He usually plays the hero of the opera and is often in love with the soprano.

EXHIBIT B
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Baritone- The lower (or middle) male voice. The baritone is often the villain, but can also be the hero who sacrifices himself for the tenor or soprano. In comedies, the baritone is often a prankster. He is usually in love with the soprano but loses her to the tenor.

Bass- The lowest male voice. He often plays the wise man or comic buffoon.

Orchestra - The group of instrumentalists who accompany the singers. They play under the stage in the orchestra pit where they are less likely to overpower the singers and distract from the action on the stage. However, though they are often not seen, the orchestra is an equal partner in the action of an opera.

Chorus - The group of singers who function as a unit onstage.
Choruses are usually featured in crowd scenes where they represent the townspeople, partiers, soldiers, etc.

Dancers - Dance is often included in opera. They are usually part of big crowd scenes, but can also be featured as soloists in some pieces. Many operas contain short ballet sequences.

Production Team

Conductor - The person in charge of the musical interpretation of the opera. He also guides the orchestra through the opera from the first rehearsal to final performance.

Director - Responsible for the overall look or concept of the production. The director determines how the opera will be interpreted and tells everyone on stage when, where and how to move. Finally, he or she guides the performers on how characters are best presented.

Choreographer - Designs and sets the movement of the dancers.

Costume Designer - Designs and creates the clothes singers wear to reflect aspects of the character played by the singer. Costumes should reveal a lot about a character. How old they are, what kind of person they are, what time period he or she lives in, etc.

Scenic Designer - Creates the visual background and set pieces for the opera. He or she creates small models and detailed blueprints which serve as the "instructions" for building the set.

Lighting Designer - Creates the lighting plan that emphasizes the drama of the moment and allows the audience to focus on the action. Lighting design is an important visual element that contributes to the ambience of the stage setting and affects the appearance of people, costumes and props onstage.

Stage Manager - Coordinates all of the elements of the show during rehearsal and performance. He or she is responsible for calling cues, scene changes, and organizing the backstage area so that the show runs smoothly and consistently.

Crew - This group of professionals is responsible for setting up and running all of the equipment for a performance, including changing the scenery, costumes, and props. They also open and close the curtain, operate trapdoors, run sound effects, and run quick costume changes.

Opera Parts

Opera is a **musical** form.

Orchestra provides the overriding musical texture, while the **singers** sing and act on the stage.

Overture is the piece of music played by the orchestra at the beginning of an opera. It usually, but not always, contains some of the musical themes from the opera and sets the mood for what the audience is about to experience.

Recitative (re-chi-ta-TEEV) is sung dialogue that propels the action forward. The singing is generally faster and is composed to sound more like speech.

Aria - An extended musical passage sung as a solo. It often explores emotions as a character absorbs, reflects, and makes decisions in the drama.

Duet - An extended musical passage for two singers. A **trio** is for three singers and a **quartet** is a piece for four singers.

Ensemble - An extended musical passage for more than four voices. Often each character is singing different words at the same time, and ensembles tend to occur at the most pivotal point in the drama or the end of an act.

Supertitles - Since operas are most often performed in the language in which they were composed, most opera productions have translations above the stage (or on the seat in front of you) where a translation is projected for the audience to understand and better follow the story.

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Bel canto - Literally meaning "beautiful singing," this term describes the specific style of vocal production that opera utilizes. It requires great breath control and ease.

Bravo - Literally, "brave" or "courageous," this Italian word is a form of high praise that is shouted at times when applause is appropriate. **Bravo** is shouted when a man has sung thrillingly, and **brava** when a woman has done the same.

Cadenza - A brilliant passage in an aria—often improvised by the singer—that showcases the specific skills and strengths of that singer. **Cadenzas** are most often sung by women, although men can perform them as well.

Diva - Literally, "goddess," refers to an important female opera star. The masculine form is **divo**.

Motif or Leitmotif (light-mo-teef) - While "leitmotif" is usually used to refer to the musical themes of Wagner, a *motif* is a recurring musical idea that reveals or recalls an earlier plot point, character, emotion, or idea in an opera. Keep an eye out for music that sounds familiar! It probably means something important!

Tempo - This refers to the speed at which music is performed. The conductor is in charge of setting the **tempo** or timing of an opera.

Cover/understudy - This is the person who learns a role, music and staging just in case the lead cannot perform due to sickness or injury… as we say in the theater, "The show must go on!"

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EXHIBIT B 10C
EXHIBIT A

Opera Dictionary Matching Activity

Match the term on the left with the correct definition on the right…

1) **Soprano** _____

2) **Tenor** _____

3) **Choreographer** _____

4) **Orchestra**_____

5) **Recitative** _____

6) **Aria** _____

7) **Overture** _____

8) **Score** _____

9) **Baritone** _____

10) **Mezzo-Soprano** _____

11) **Duet** _____

12) **Director** _____

A) The group of instrumentalists who accompany the singers.

B) The lower male voice.

C) Sung dialogue that propels the action forward.

D) The music that the composer wrote.

E) A piece of music with two singers.

F) The highest male voice.

G) The person who creates the vision of the production, sets staging, and guides designers and singers.

H) The lower female voice.

I) The words that a composer sets to music.

J) The highest female voice.

K) The people who work backstage.

L) An extended musical solo.

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The Magic Flute
Die Zauberflote

Wolfgang Amadeus Mozart, Composer
Emanuel Schikaneder, Librettist

English Translation by Andrew Porter
Reduction by Pamela Zell Rigg / Edited by Erie Mills

Reduction to 45 minutes and to four main singers.
Monostatos and all scenes related to him are removed.
All Marches and Chorus numbers are removed.
Dialogue is reduced.

Cast of Characters (in order of appearance)

Prince Tamino	(tah-ME-no)	A foreign Prince, the hero
Dragon	Students (2)	
The Three Ladies	Students (3)	The Queen's handmaidens
Papageno	(pa-pa-GEH-no)	The Queen's bird catcher
The Queen of the Night		Queen
Three Boys		Guides for Tamno & Pamina
Pamina	(pah-ME-na)	Daughter of the Queen
Papagena	(pa-pa-GEH-na)	Papageno's Wife-to-Be

28.00 minutes singing
15.00 minutes dialogue

43 minute performance

EXHIBIT B 10D
EXHIBIT A

Part 1

Scene 1 – 45 seconds

Tamino runs onstage. He is chased by a serpent/dragon!

Tamino Aria: ***Zu Hilfi! Zu Hilfi!*** **Sonst bin ich verloren…**
Aria 1 ***Oh help me! Oh help me!***
1 minute

Tamino falls in a swoon.

The Three Ladies:

The Three Ladies enter and spear the serpent/dragon.

The Three Ladies gaze at Tamino with admiration at his beauty.
They place their hands to their hearts and breathe deeply with a sigh!
Then they motion to each other to leave, but then hesitantly all leave looking back at Tamino with longing!

Tamino: Tamino comes to, and looks around fearfully.

Tamino: ***Where am I? Is it a dream that I am still alive?***
Or did some mightier power rescue me?

Tamino rises and looks around.

Tamino: ***What! The cruel serpent lies dead at my feet?***

Panpipes are heard.

Tamino: ***What's that I heard? Where am I? What strange place is this?***
Ha! A man of some sort is approach*ing the valley.*

Tamino hides.

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Scene 2 – 60 seconds

Papageno comes down the footpath.
Papageno holds panpipes with both hands, pipes, and sings.

Papageno Aria: ***Der Vogelfanger bin ich ja…***
Aria 2 ***(Oh, catching birds, that is my trade…)***
3 minutes (or 1 or 2 minutes with one or two verses)

Tamino: ***Hey there!...Tell me, merry friend, who are you?...***

Papageno: ***Who are you?***

Tamino: ***My father is a king who rules over many lands and people; so I am called Prince.***
…Who rules over this country?

Papageno: **I can't tell you that.**

Tamino: ***How do you live?...And how do you get your food & drink?***

Papageno: ***I catch all sorts of birds for the Star-blazing Queen and her Ladies; and in exchange I get my daily food and drink from them.***

Tamino: ***…have you ever been fortunate enough to see this Goddess of the Night?***

Papageno: ***What human eye could pierce that veil of hers, woven with inky*** **blackness?**

Tamino: (aside) ***...she is indeed that nocturnal Queen whom my father so often told me about....***

Perhaps he is one of the sprits who serves her.

Papageno: ***Why are you looking at me in that suspicious, villainous way?***
...Stand back, I tell you and beware of me;
for I have the strength of a giant when I get hold of anyone.

Tamino: ***The strength of a giant?*** **(Tamino looks at the serpent.)**
So, it was you who saved me.

Papageno: ***Strangled it.***

Scene 3 – 60 seconds

The Three Ladies enter.

Tamino: ***Who are these ladies?***

Papageno: ***...each day they come to collect my birds and bring me wine, sugar-bread, and sweet figs in exchange.***

The Three Ladies: The Ladies wag their fingers angerly at Papageno.

Papageno: ***They are not pleased with me.***

The Three Ladies: The Ladies wag their fingers angerly at Papageno.

Papageno: ***What have I done wrong today, to make you so angry with me?***

EXHIBIT B
EXHIBIT A

Here, my lovely ones, I deliver you my birds.

First Lady: Hands Papageno a bottle of water.

Papageno: ***Her majesty sends, for the first time, instead of wine, pure, clean water!***

Second Lady: Hands Papageno a stone.

Papageno: ***...instead of sugar-bread, this stone!***

Third Lady: Walks forward to attach a golden padlock to Papageno's lips.

Papageno: ***...in the future I will not tell lies to strangers, and boast of heroic deeds that others have accomplished.***

Third Lady: Attaches the golden padlock.

Tamino: ***So you Three Ladies saved me.***

Third Lady: Hands Tamino a portrait of Pamina, the daughter of the Queen of the Night.

Tamino: Accept the portrait and gazes with dramatic love at Pamina's portrait.

Pamina, daughter of the Queen of the Night.

Scene 4

Tamino Aria:	***Dies Bilnis ist bezaubernd schon***
Aria 3	***(Oh vision of enchanting grace!)***
4 minutes	(one verses: ends: *Ah yes, 'tis love, 'tis love alone.*)

Scene 5 – 15 seconds

The Three Ladies:	The ladies whisper in Tamino's ear.
Tamino:	***Oh, eternal darkness! What do I hear?***
	Then the maiden here pictured has been abducted
	by a powerful, evil fiend - Sarastro.
	Sound of thunder.

Scene 6

The Queen, seated on a throne decked with transparent stars.

The Three Ladies, Tamino and Papageno

Queen Aria:	**O zittre nicht, mein lieber Sohn**
Aria 4	***Oh, have no fear, my noble youth!***
5 minutes	

Scene 7

Tamino & Papageno	**Der Arme kann von Strafe sagen**
Quintet (Duet) 5	***I plainly see that you may suffer***
2 minutes	

EXHIBIT B
EXHIBIT A

Scene 8 - 45 seconds

The Three Ladies, Tamino and Papageno

First Lady: Removes the padlock and hands it to Papageno.

Papageno: ***I'll never tell another lie. His padlock warns me not to try.***
If lying lips could all be fettered,
If such a lock could close them tight,
Then slander, hate, and lies would vanish,
And men would live in love and light.

First Lady: (gives Tamino a golden flute)

Tamino: ***The Queen bestows this magic flute to defend me, and all human souls can be enchanted, and increase man's joy on earth.***

First Lady: (gives Papaggeno a glockenspiel)

Papageno: ***Ai, ai! Whatever can it be!***
It sets my fingertips a-tingling!

Who will be our guide to show the way?

Three Ladies: The ladies whisper to Tamino & Papageno.

Tamino &
Papageno: ***Three charming, wise young boys will guide us,***
Along our road they'll stay beside us.

Tamino and Papageno exit

Scene 9 – Remove – **Three slaves discuss situation.**

Scene 10 – Remove – **Monostros and slaves**

Scene 11 – Remove – **Monostros, slaves & Pamina**

Scene 12 – Remove – **Papageno & Monostros**

Scene 13 – 15 seconds

Pamina: Pamina enters and speaks as if in a dream

Mother – Mother – Mother! (she comes to and looks around)
This heart is sill beating? I'm still alive?

Scene 14 – 90 seconds

Papageno enters

Papageno: ***Ah, what's this! The pretty girl's here.***
Oh daughter of the Queen of the Night.

Pamina: ***Who are you?***

Papageno: ***An ambassador from the Star-blazing Queen.***

Pamina: ***From my mother!*** *(joyfully)* ***Oh joy!***
What's your name?

Papageno: ***Papageno***
(He scutinizes the portrait, the one the Prince was given earlier, which Papageno now carries on a ribbon around his neck.)

EXHIBIT B
EXHIBIT A

Pamina: *Allow me – Yes, that's me!*
How did my portrait get into your hands?

Papageno: *To tell you that would take far too long.*
… Early this morning, as usual I came to your mother's palace with my bird delivery. I saw in front of me someone who called himself Prince. This Prince took your mother's fancy to such an extent that she gave him your picture and ordered him to rescue you.
He made up his mind as quickly as he'd fallen in love with you.

Pamina: *Love?* (joyful) *So he loves me!*

Papageno: *…this great love for you… prompts Prince…to return you… back to your mother's palace.*

Pamina: *If Prince really loves me why is he delaying so long to free me?*

Papageno: *Prince sent me on ahead to announce our arrival.*

Pamino: *Friend, you have dared much! If Sarastro, who abducted me from my mother, sets eyes on you here …*
You would be put to death…

Papageno: *Well, to avoid that, let's leave right away.*

Pamina: *You have a tender heart; I can see that in everything about you.*

Papageno: *And what good does it do me?*
Papageno still does not have a Papagena.

Pamina: *You poor man! So, you have no wife?*

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Papageno:	***Haven't even got a girlfriend.***
Pamino:	***Patience friend.***
Pamina & Papageno Duet 7 2 minutes	***Bei Mannern, welche Liebe fuhlen*** ***(The man who feels love's sweet emotion)*** (reduce) Pamina and Papageno exit.

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EXHIBIT B 10D
EXHIBIT A

Scene 15 – 90 seconds

Three Boys enter guiding Tamino.

Tamino: ***O lovely spirits, shall it be***
That I may set Pamina free?

(Tamino goes to back stage right)

O vile seducer, tremble now!
Pamina's rescue is my vow.

Male voice from backstage:
Voice: ***Go back!*** (Pagageno covers as "Voice")

Tamino (Tamino goes to back stage left)
Go Back! ***I'll try my fortune here!***

Male voice from backstage:
Voice: ***Go back!*** (Pagageno covers as "Voice")

Tamino: ***Again the cry? "Go back!"***

(Tamino goes to back stage center)
Perhaps I'll find an entrance here.

Male voice from backstage:
Priest Voice: ***What seek you in this sanctuary?***
(Pagageno covers as "Priest Voice")

Tamino: ***I seek a realm of love and truth.***

Male voice from backstage:

EXHIBIT B
EXHIBIT A

Priest Voice: ***Not love nor truth has led you here,***
But death and vengeance have impelled you.
(Pagageno covers as "Priest Voice")

Tamino: ***Revenge upon an evil fiend!***
Sarastro rules within these temples?

Male voice from backstage:
Priest Voice: ***Ah, yes! Sarastro rules us here!***
You hate Sorastro so?
(Pagageno covers as "Priest Voice")

Tamino: ***I'll hate Sorastro ever, yes!***
Did not that robber seize Pamina
And steal her from her grieving mother – Queen of the Night?

Male voice from backstage:
Priest Voice: ***But yet in time you'll learn the truth.***
When you are led by friendship's hand.
(Pagageno covers as "Priest Voice")

Tamino: ***Is Pamina still alive?***

Male voice from backstage:
Priest Voice: ***Pamina is still alive.***
(Pagageno covers as "Priest Voice")

Tamino: ***She lives! Thank you for those words.***
(He takes up his flute.)

But, but Pamina does not hear.
Pamina! Hear me, hear me!

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EXHIBIT B
EXHIBIT A

10D

(Pagageno answers on his panpipes)

Ah, I hear Papageno's pipe!

(Tamino plays. Papageno answers.)

Perhaps Pamina has been found,
Perhaps Pamina's at his side,
Perhaps the flute will be my guide.

(Tamino hurries off stage)

Scene 16 – 20 seconds

Pamina and Papageno tiptoe on stage saying:

Pamina & Papageno: ***Walk on tiptoes! Hold our breathe!***

Pamina calls out:

Pamina: ***Ah, Tamino!***

Papageno: ***Quiet, quiet! I've a better way to call him.***
(He pipes, Tamino answers on his flute.)

Pamina & Papageno: ***A delightful sound to greet us!***
So Tamino hears the cry;
With the flute he makes reply.
Here's an end to all our worry.
Let us hurry! Let us hurry!

Pamina and Papageno exit and immediately reenter the stage.

Scene 17 – Remove – **Monostatos, Pamina, Papageno**

Scene 18 – Remove – **Chorus, Pamina, Sarasto**

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EXHIBIT B
EXHIBIT A

Scene 19 – 20 seconds

Pamina and Papageno on stage,
Tamino enters.

Pamina	***'Tis he!***
Tamino	***'Tis she!***
Pamina	***Or do I dream?***
Tamino	***'Tis she!***
Pamina	***'Tis he!***
Tamino	***This is no dream.***
Pamina	***Within your arms you hold me fast,***
Tamino	***Within my arms I hold you fast,***
Both	***Though this embrace should prove my last.***

They embrace.

They exit. Papageno follows.

Part 2

Scene 1 – Remove – **March, Sarastro, Priests, Chorus**

Scene 2 – 15 seconds

Tamino and Papageno walk to stage center

Tamino: ***A fearful night! Papageno, are you still with me?***

Papageno: ***Sure, I'm with you.***

Tamino: ***Where do you think we are now?***

Papageno: ***Where?*** (thunderclap)
Oh dear! This sort of thing really does not agree with me.

Tamino: ***Shame, Papageno!***

Scene 3 – 30 seconds

Spokesman Voice: Male voice from back stage.
What do you seek or request?

Tamino: ***Friendship and love.***

Spokesman Voice: Male voice from back stage.
Are you prepared to strive for them with your life?

Tamino: ***Yes! May the attainment of wisdom be my***

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EXHIBIT B
EXHIBIT A

goal, and Pamina, that fair maiden, be my reward!

Spokesman Male voice from back stage.
Question directed to Papageno.

Voice: ***Do you also want to strive for the love of wisdom?***

Pagageno: **Sleeping, eating and drinking are enough for me; -**
and, if possible, to catch a pretty little wife

–

Tamino leaves urging Papageno to come.

Scene 4 – Remove

Scene 5 - Remove

Scene 6 – Remove – **Spokesman, Priest, Papageno**

Scene 7 – Remove - **Monostatos**

Scene 8 – 75 seconds

Pamina enters stage.

Queen enters.
(Thunder)

Queen: ***Stand back!***

Pamina: ***Oh gods! Mother! Mother! my mother!***
(Pamina falls into her mother's arms.)

Queen: *Where is the young man whom I sent to you?*

Pamina: *He has dedicated himself to the Initiates – seekers of love of wisdom.*

Queen: *Unhappy daughter, now you have been torn from me forever!*

Pamina: *Oh, dear mother, let us flee!*

Queen: *When your father died, my power died with him.*

Pamina: *My father –*

Queen: *He relinquished the seven-fold Circle of the Sun, the all-consuming Circle of the Sun.*

Pamina: *Dear mother, does this mean that the young man is lost to me forever?*

Queen: *Lost, unless before sunrise, you can persuade him to escape.*

Parmina: *Dear mother, could I not love the young man as an Initiate – seeker of love of wisdom – just as tenderly as I love him now?*

Queen: *What do I hear? You, my daughter, defend these shameful principles?*

Do you see this dagger?

EXHIBIT B
EXHIBIT A

It has been sharpened for Sarastro.

You will kill him, and deliver the mighty Circle of the Sun's power to me.

Pamina: ***But, dearest mother!***

Queen: ***No more!***

Aria 14 **Der Holle Rache kocht in meinem Herzen**
3 minutes **You'll avenge me, daughter**

Queen departs dramatically.

Scene 9 – 15 seconds

Pamina: ***I must commit a murder?***

O ye gods, I cannot! I cannot!

Scene 10 – Remove – **Pamina and Monostratos**

Scene 11 – Remove – **Pamina, Monostratos, Sarastos**

Scene 12 – Remove – **Pamina and Sarastos**

Scene 13 – Remove – **Spokesman and Second Priest**

Pamina exits.

Scene 14 – 15 seconds

Tamino and Papageno enter.

Papageno: ***Tamino!***

Tamino: ***Sh!***

Papageno: ***This is a merry life! I'd much rather be in my straw hut,***

or out in the woods, so that at least I could hear a bird chirrup from time to time.

Tamino: ***Sh!***

Papageno: ***La la la - la la la*** (sings)

Tamino and Papageno remain on stage.

Scene 15 – Remove - **Papageno and Old Woman**

Scene 16 – Remove – **The Three Boys**

Scene 17- Remove – **Tamino and Papageno**

Scene 18 – 60 seconds

Pamina enters.

Tamino: (play flute)

Pamina: (joyful). ***You here?***

Gracious gods, I thank you that you have led me here.

I heard your flute and swift as an arrow I followed its tones.

But you are sad? You say no word to your Pamina?

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Tamino: (signs.) ***Ah!*** (He signs that she should leave.)

Pamina: ***What! I must leave you?***
Do you love me no longer?

Tamino: (signs.) ***Ah!*** (He repeats his gesture.)

Pamina: ***I must leave you without knowing why?***
Tamino! Dear Tamino!
Have I offended you? –
Oh, do not wound my heart still further!
I come to you for comfort, for help,
and you inflict new wounds on my loving heart?
Do you love me no longer?

Tamino: Sighs.

Pamina: ***Papageno, you tell me, tell me what troubles my friend?***

Papageno: Papageno claps his hands over his mouth, and Gestures she should leave.

Pamina: ***What? You too? At least explain to me the reason you are silent.***

Papageno: *Ssh!* Papageno indicates that she should leave.

Pamina: ***Oh, this is worse than wounds – worse than death!*** (Pause)
My dearest, my only Tamino!

Aria 17	***Ach, ich fuhl's, es ist verschwunden***
1.5 minutes	***Ah! I feel my life is over!***
	Pamina and Papageno exit in opposite directions..
Scene 19 – Remove -	**Papagano and Tamino**
Scene 20 – Remove -	**Priests' Chorus**
Scene 21 – 30 seconds	
	Tamino is center stage facing backstage.
	Male voice backstage.
Sarastro:	***Prince, your conduct has so far been resolute – you have kept silent;***
	now you have two more perilous paths to tread.
	Let Pamina be brought here!
	Pamina enters with a sack over her head.
Pamina:	***Where am I? What a dreadful silence.***
	Say where is my Tamino?
Sarastro:	Male voice backstage.
	He awaits you to say a final farewell.

EXHIBIT B
EXHIBIT A

Pamina:	***A final farewell! Oh, where is he?***
	Lead me to him!
	Tamino turns from center back and removes Pamina's sack.
	Tamino!
	Pamina moves toward Tamino.
Tamino:	***Stand back!***
Remove - Trio 19	***Soll ich dich, Teurer! nicht mehr sehn***
	Pamina and Tamino exit in opposite directions
Scene 22 – Remove -	**Papageno and A Voice**
Scene 23 – 15 seconds	Papageno enters
Papageno:	***I've a very strange feeling around my heart.***
	I want – I'd like – well, what?
Aria 20	***Ein Madchen oder Weibchen Wunscht Papageno sich!***
1.5 minutes	
	Oh, maiden come to join me, be Papageno's wife.
	One verse
	Papageno remains on stage.

Scene 24 – 30 seconds

Woman enters. (Queen of the Night covers)

Woman: ***Here I am, my angel.***

Papageno: ***So you took pity on me? I am lucky!***

Woman: ***And you swear to me that you will always be true?***
Give me your hand, to promise our marriage.

Papageno: ***Well, there you have my hand,***
and I promise that I will always be true to you.

Woman transforms to Papagena.

Pa – Pa – Papagena!

He embraces her. They stroll off stage together.

Scene 25 – Remove - **Spokesman and Papageno**

Scene 26 – Remove - **Three Boys**

Scene 27 – 30 seconds

Pamina enters distraught.

Pamina: ***I am your bride, beloved knife;***
In your embrace I'll end my life.

I shall perish, for the man,
Who I thought would never hurt me,
Chose to spurn me, and desert me.

No! So cold when I implored him!
Though he knew that I adored him,
Yet he turned away his eye!
Why no answer, no reply?

....I long to see him.

Exits in a searching manner.

Scene 28 – 90 seconds

Tamino enters resolutely.

Tamino: ***By threat of death I am unshaken;***
The path of virtue I have taken.
So throw the gates of terror wide,
I mean to brave what lies inside.
He is about to set forth.

Pamina: *From off stage:*
Tamino, wait! Oh wait for me!

Tamino: ***Pamina? Pamina calling?***

What joy, if she is at my side!

But say, am I released from silence?
Yes! Released from silence!

Pamina: Rushes onto the stage.
Tamino mine! Joy fills my heart!

Tamino: ***Pamina mine! Joy fills my heart!***

	Pamina and Tamino embrace.
	Behold the test of flames and flood.
Pamina:	**I'll gladly brave all danger**
	When I am by your side;
	And I shall lead you on,
	For love will be my guide;
	Yes, take that magic flute and play,
	And it will guard us on our way.
	Tamino plays the flute & they wander through the flames.
Pamina & Tamino:	***We wandered through the fire unshaken;***
	The peril bravely we withstood.
	O flute, that tamed the fiery furnace,
	Now guard our passage through the flood.
	Tamino plays the flute and they wander through the flood.
Duet:	***Ihr Gotter! Welch ein Augenblick!***
30 seconds	***Gewahret ist uns Isis Gluck.***
	Stand triumphantly together.
	Then exit
Scene 29 –	Papagena and Papageno enter.
	Pa – Pa- Pa – Pa – Pa – Pa – Papagena!
Duet	**2.5 minutes**

EXHIBIT B
EXHIBIT A

Singing time: 27.5 minutes

Tamino Aria:	***Zu Hilfi! Zu Hilfi!* Sonst bin ich verloren…**
Aria 1	***Oh help me! Oh help me!***
1 minute	
Scene 1	
Papageno Aria:	***Der Vogelfanger bin ich ja…***
Aria 2	***Oh, catching birds, that is my trade…***
3 minutes	
Scene 2	
Tamino Aria:	***Dies Bilnis ist bezaubernd schon***
***Aria* 3**	***Oh vision of enchanting grace!***
4 minutes	
Scene 4	
Queen Aria:	**O zittre nicht, mein lieber Sohn**
Aria 4	***Oh, have no fear, my noble youth!***
5 minutes	
Scene 6	
Tamino & Papageno	**Der Arme kann von Strafe sagen**
Quintet (Duet) 5	***I plainly see that you may suffer***
2 minutes	
Scene 7	
Pamina & Papageno	**Bei Mannern, welche Liebe fuhlen**
Duet 7	***(The man who feels love's sweet emotion)***
2 minutes	

Scene 14

Queen:
Aria 14 **Der Holle Rache kocht in meinem Herzen**
3 minutes
Scene 8

Pamina: ***Ach, ich fuhl's, es ist verschwunden***
Aria 17 ***My dearest, my only Tamino!***

1.5 minutes
Scene 17

Aria 20 ***Ein Madchen oder Weibchen Wunscht***
Papageno sich!
1.5 minutes ***Oh, maiden come to join me, be***
Papageno's wife.
Scene 23 One verse

Duet: ***Ihr Gotter! Welch ein Augenblick!***
30 seconds ***Gewahret ist uns Isis Gluck.***
Scene 28

Duet ***Pa – Pa- Pa – Pa – Pa – Pa – Papageno!***
2.5 minutes
Scene 29

EXHIBIT B
EXHIBIT A

Dialogue:
Act 1 – 7.5 minutes
Scene 1 - 45 seconds
Scene 2 - 60 seconds
Scene 3 - 50 seconds
Scene 4 - 0 seconds
Scene 5 – 15 seconds
Scene 6 – 0
Scene 7 – 0
Scene 8 – 45 seconds
Scene 9 – 0 seconds
Scene 10 – 0 seconds
Scene 11 – 0 seconds
Scene 12 - 0 seconds
Scene 13 - 15 seconds
Scene 14 - 90 seconds
Scene 15 - 90 seconds
Scene 16 - 20 seconds
Scene 17 - 0 seconds
Scene 18 - 0 seconds
Scene 19 - 20 seconds
Scene 20 - 0 seconds

Act 2 – 7.5 minutes
Scene 1 - 0 seconds
Scene 2 - 15 seconds
Scene 3 - 30 seconds
Scene 4 - 0 seconds
Scene 5 – 0 seconds
Scene 6 – 0
Scene 7 – 0
Scene 8 – 75 seconds
Scene 9 – 15 seconds
Scene 10 – 0 seconds
Scene 11 – 0 seconds
Scene 12 - 0 seconds
Scene 13 - 0 seconds
Scene 14 - 15 seconds
Scene 15 - 0 seconds
Scene 16 - 0 seconds
Scene 17 - 0 seconds
Scene 18 - 60 seconds
Scene 19 - 0 seconds
Scene 20 - 0 seconds
Scene 21 - 30 seconds
Scene 22 - 0 seconds

Scene 23 - 10 seconds
Scene 24 - 30 seconds
Scene 25 - 0 seconds
Scene 26 - 0 seconds
Scene 27 - 30 seconds
Scene 28 - 90 seconds
Scene 27 - 0 seconds

Total: 42.5 minutes

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EXHIBIT B
EXHIBIT A

LIVERMORE
Project & Program Grant

11. News Article Publications

A.*The Independent,*
"The Magic Flute Opera Is Coming to Tri-Valley Schools"
January 6, 2024

B.Altamont Creek Elementary School
January 30, 2024

C.Pleasanton Weekly
"A fairy tale for the ages:
Livermore Valley Opera brings Mozart to Bankhead stage"
February 20, 2024

D.Stroll Publication
"Hitting the High Notes"
February 2024

https://www.independentnews.com/culture/the-magic-flute-opera-is-coming-to-tri-valley-schools/article_e9ce3d00-a9ed-11ee-85f0-c7b5fa7a2cff.html

The Magic Flute Opera Is Coming to Tri-Valley Schools

By Pamela Rigg and Leslie Silberman Livermore Valley Opera
Jan 6, 2024



During the last two weeks of January 2024, Livermore Valley Opera will present a reduced 45-minute version of Mozart's The Magic Flute to Tri-Valley elementary schools, including Altamont, Croce, Mitchell, Smith, and Sunset in Livermore, and Amador, Frederiksen, Green, and Kolb in Dublin and Sunol Glen in Sunol.

Livermore Valley Opera (LVO) is committed to increasing student access to world-class opera experiences while deepening students' engagement with the art form. LVO's Education Engagement Program initiatives aim to foster new ope
ensure the longevity of opera and the perf

LVO reaches over 10,000 Tri-Valley elementary school students annually, by offering performances presented free of charge. The Education Engagement Program provides free resources to support performances for elementary school students and educators, which are made available on LVOpera's website.

Action-packed drama will captivate these young audiences in a truly unforgettable performance. For each school, five students will be selected to perform the opening parts, namely the Dragon who chases the exotic Prince Tamino into a magical world, as well as The Three Ladies who rescue the Prince. The final scenes of the story also include student roles when The Three Boys lead the Prince, who finds his true love with Princess Pamina, through the trials of water and flames played by even more students. All five principal roles in this performance are played by local professional artists.

Olivia Prendergast, who has just completed the San Francisco Opera's Merola Opera Program's Young Arts training, will be singing the role of Pamina, an honest and faithful Princess who rejects the emotion of revenge suggested by the Queen of the Night to choose love instead. The role of Prince Tamino, to be played by Chester Pidduck, who has performed lead roles in major American opera houses, represents a transformation from a faint-hearted boy to a mature man of resolve, determination, self-discipline and high moral integrity.

The role of Papageno, a half-man, half-bird creature who helps the Prince find his true love, will be played by Andrew Pardini who performs with the San Francisco Opera's Chorus, and who brings an element of comedy to this winsome role. The role of Papagena, the perfect match in simplicity for Papageno, will be played by Leisl McPherrin, who performs regularly with the San Francisco Opera's Chorus and many other musical theater venues. The Papageno-Papagena duet is echoed by students in the audience, who have been prepared in advance to participate. Leisl McPherrin will play a double bill, by taking on the opposite role of Queen of the Night and masterfully singing an aria that contains one of the most difficult two octave ranges in opera.

There are several available opportunities for elementary schools still interested in scheduling a performance. For more details, or to schedule a performance at your school, visit LVO's website at www.LVOpera.com.

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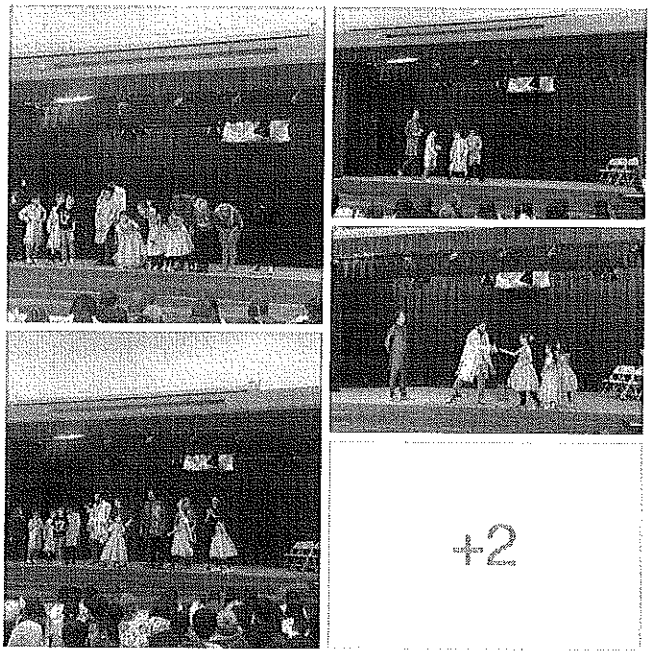
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Altamont Creek Elementary School
January 30 at 6:37 PM ·

Thank you to the Livermore Valley Opera for the amazing performance of the Magic Flute this morning. Our 3rd and 4th graders loved it!

#WeAreWildcats



Livermore Valley Opera
Thank you for your message and sharing the photos!! Always nice to hear such positive feedback!!

2 wks **Report**

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EXHIBIT B
EXHIBIT A
11C

Pleasanton Weekly

A&E

A fairy tale for the ages: Livermore Valley Opera brings Mozart to Bankhead stage

Director and artistic leader reflect on production process



by **Nicole Gonzales**
February 20, 2024 Updated February 21, 2024

"The Magic Flute" by famed composer Wolfgang Amadeus Mozart is one of the most well-known and performed operatic pieces of all time. Local audiences will have the chance to catch a live rendition of the show produced by a familiar Tri-Valley performing arts group next month.

Taking place in a magical fairy tale land, the story follows the gallant Prince Tamino and his companion Papageno on their comical yet arduous rescue mission. The prince and his companion must embark on the quest to prove their worthiness and save Princess Pamina, daughter of the Queen of the Night.

Livermore Valley Opera will perform "The Magic Flute" from March 2-10 at the Bankhead Theater as part of its 32nd season.

LVO has performed "The Magic Flute" twice before at Livermore High School but never at the Bankhead Theater, according to artistic director Erie Mills.

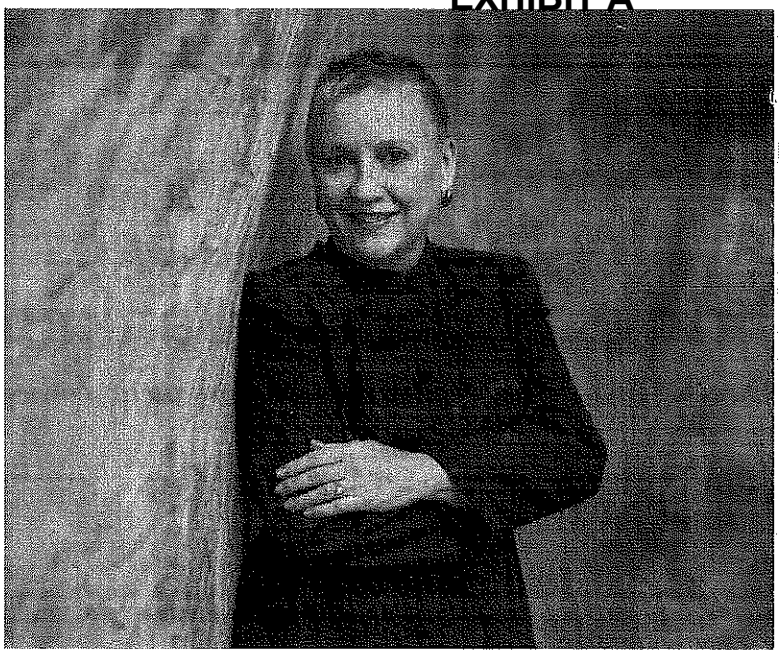
"'The Magic Flute' is among the most frequently performed of all operas," Mills told the Weekly. "It is a 'singspiel', a popular form of its time having both singing and spoken dialogue, rather like American musical theater."

"LVO has chosen to perform the opera in English so the story is more immediate to our audience. We also hope to encourage families to attend. It's a fairy tale for all ages," Mills added.

Mills shared that she enjoys the show's ensemble pieces and teased who of the cast is likely to be the audience's most beloved character.

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In my own singing career, I've performed as both Pamina and the Queen of the Night. While I love their arias, I think I love the ensembles the most," she said. "Papageno is probably everyone's favorite character, because he is the most real. He's funny and charming, and he gets his Papagena by the end of the opera."



LVO artistic director Erie Mills. (Photo courtesy LVO)

Yefim Maizel returns to LVO to offer his directorial skills to the production. Maizel retains over 30 years of operatic experience.

"'The Magic Flute' is not only one of Mozart's greatest works, but perhaps one of the greatest operatic pieces of all time," Maizel said. "When LVO got in touch with me about directing this show, I was happy to work with them and take on this project.

The opera has been described as Mozart's crowning achievement, according to the director.

"We wanted to stay true to the major themes of "The Magic Flute", our characters show courage, wisdom and of course perseverance," Maizel said. "(Most of all) it's relatable. Despite them living in a fairyland, the characters come across as exceptionally real. They go through many twists and turns, they have faults, comedy, desires and needs like we all do."

"Both Alex Katsman and I knew Yefim from his directing career and from his Opera Academy of CA, which he established in 2005," Mills said. "He has directed all over the world and we are very fortunate that he was available to direct."

Founded in 1992, LVO often calls on regional and local talent for its various shows. Both Mills and Maizel expressed there is a great amount of talent from "The Magic Flute" cast.

Soprano Phoebe Chee stars as Pamina, tenor Victor Cardamone as Tamino, soprano Shawnetter Sulker as Queen of the Night, tenor Alex DeSocio as Papageno and bass Kirck Eichelberger as Sarastro.

Each of the stars have received notable recognition for their musical talents. Chee has been described as "one of Singapore's most promising young sopranos" by Spot Pocket Opera Theater. The New York Times called

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photo credit: Barbara Mallon



Alex Kalaman

Hitting the High Notes

Livermore Valley Opera is presenting Mozart's "The Magic Flute".

Right in the backyard of Ruby Hill is Livermore Valley Opera, a professional opera company that presents wonderful performances for the Bay area. Beginning in March, the show will be Mozart's *The Magic Flute* and it promises to be not only visually stunning but also a phenomenal auditory experience. "*The Magic Flute* is a family-oriented and delightful experience any of the Ruby Hill residents would have if they attended this show," stated Barbara Lymberis, Stroll/LVO liaison.

LVO was founded in 1992 when the opera-loving community used the Livermore High School to produce their shows. In 2007, the Bankhead Theater opened with *La Boheme*, and LVO transitioned to the world-class professional opera company that it is today. Magnificent, fully staged operas attract talented singers and stage directors. For its audiences, the Bankhead Theater is an excellent venue for sight and sound, creating the most memorable experiences. All audience members are "up close" and involved in the performances.

Combining the talents of professional musicians, stage directors, singers, and designers with the dedication of volunteers for the chorus, stage crew, set builders, and board members brings the whole show together. Two of the many important people at LVO are Eric Mills, and Alex Kaleman, the heart and soul of the organization.



Eric Mills

Eric has been working in the field of opera since 1977. She absolutely loves it and hopes to get others to love it, too. In the past, Eric was very much in demand as a coloratura soprano with a stellar career. Now she loves hearing others sing. She admitted that the opera experience in Livermore is new for her, and she has been working as the Artistic Director since 2016.

Alex conducted his first show for LVO, "The Merry Widow", in 1997. He became LVO's Resident Music Director and Conductor in 2007, starting with "La Boheme" and has conducted numerous productions for the company. Alex has also conducted an impressive number of operas, operettas, and musicals at various musical organizations. He is looking forward to LVO's next production of "The Magic Flute" which has some of his favorite music.

Together, Eric and Alex create a magical experience for the audience every show. "There are many moving parts that contribute to making stellar performances that are becoming recognized and respected throughout the Bay Area," Eric explained. Opera takes a bit of homework, and Eric believes it's the one art form that encompasses all the other performing arts elements: music, singing, drama, scenery, lighting, costumes, hair, and makeup. "All this for one ticket!"

For your entertainment, the Livermore Valley Opera performs two mainstage operas at the Bankhead Theater, one in the fall and one in the spring. "We also have an extensive Educational and Community Engagement program," Eric shared, and added that each summer LVO presents two "Opera in the Vineyard" events at Garré Vineyard & Winery.

Mark your calendar now for *The Magic Flute* performances! It's a wonderful opportunity to see one of the great art forms for a reasonable price and it's practically right in your backyard.



Garré Vineyard

THE MAGIC FLUTE by WA Mozart
March 2, 3, 9 10 at the Bankhead Theater
2400 First Street, Livermore
Phone: 925-373-6800
Tickets available at www.LVOpera.com or at
Bankhead Theater Box Office, Wed-Sat 12-6 pm



11 of

EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance
Grantee shall maintain limits no less than:

Commercial General Liability, including operations, products and completed operations, as applicable: **$1,000,000/$2,000,000** aggregate per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

Deductibles and Self-Insured Retention
All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers
Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions
The general liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Grantee. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.
2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy,

including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.

4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550.

Verification of Coverage

Grantee shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

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AGREEMENT BETWEEN CITY OF LIVERMORE AND THOMASIN DEWHURST FINE ART FOR FISCAL YEAR 2024-25 PROJECT AND PROGRAM GRANT AGREEMENT

This AGREEMENT, entered into this ____ day of _____, 2024, between the City of Livermore, a municipal corporation ("City"), and Thomasin Dewhurst, and Thomasin Dewhurst Fine Art, a sole proprietorship ("Grantee").

RECITALS

A. City created Project and Program Grants for the purpose of encouraging programs for the cultural enrichment in the City of Livermore.

B. The primary goal of the Project and Program Grant Program is to serve one or more of the main strands found in the Cultural Arts Master Plan, artsALIVE!, adopted by City Council Resolution number 2007-109 on June 11, 2007.

C. The Commission for the Arts reviews all Project and Program Grant applications and provides City Council with recommendations for funding. Funding is not authorized until City Council approves the Commission for the Arts' funding recommendations evidenced by City's signature on this agreement.

D. Grantee has applied to City for funding for a project or program to support a visual arts collaboration between Arts and Science in the form of a mural project and event ("Project").

E. City wishes to engage Grantee to assist City in utilizing Public Art Fee fund money to provide art projects and programs to Livermore residents.

F. City and Grantee understand that the Project and Program Grant shall be administered consistent with the procedures, standards, regulations, and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

AGREEMENT

NOW THEREFORE, City and Grantee hereby agree that the aforementioned recitals are true and correct, and in recognition of the mutual consideration provided herein, further agree as follows:

I. SCOPE OF SERVICE

A. Activities

Grantee is responsible for administering the Project and Program Grant in a manner satisfactory to City, and consistent with the standards, terms and conditions imposed by the 2008 Art in Public Places Program Policy and Procedures Manual,

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Cultural Arts Master Plan, and herein. The Project will include the following activities eligible under the Project and Program Grant Program: A visual arts collaboration between Arts and Science in the form of a mural project and event that celebrates Livermore, clean air transportation innovations and brings work to Livermore artists.

1. *Project and Program Delivery*: Grantee agrees to the goals and performance standards as defined below and outlined in the Grantee's Project and Program Grant application attached as Exhibit "A".

2. *Service Objective:* provide funds for a collaboration of adult and youth artists in creating an educative mural celebrating clean fuel innovations which will be located on a Livermore Airport hangar wall facing the Gillig Campus, at the corner of West Jack London Blvd and Discovery Dr. and a Clean-air Innovation event expected to be no later than June 30, 2025 ("Activities").

3. *General Administration:* The Funds for the Activities are to be administered under the direction of the Grantee's Executive Director and shall comply with the procedures, standards, regulations and guidelines for Project and Program Grants, including the 2008 Art in Public Places Program Policy and Procedures Manual and the Cultural Arts Master Plan.

B. Budget

City will grant, and Grantee will use, funds in the amount of $10,000 ("Funds") to perform the Activities consistent with the terms and conditions of this Agreement, the 2008 Art in Public Places Program Policy and Procedures Manual, and the Cultural Arts Master Plan.

C. Performance Monitoring

City will monitor Grantee's performance against the project or program description outlined in the Grantee's Project and Program Grant application attached as Exhibit "A". Substandard performance as determined by City will constitute non-compliance with this Agreement.

II. TIME OF PERFORMANCE

Grantee shall complete its Activities within one year of the date of execution of this Agreement. If Grantee requires an extension of time for full performance, it may request an extension from the Commission for the Arts. The decision of the Commission for the Arts shall be final.

III. PAYMENT

It is expressly agreed and understood that the total amount of the Funds available from City to Grantee for the Activities under this Agreement shall not exceed $10,000.

The City shall disburse the Project & Program Grant in three installments: 30 percent in

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advance, 40 percent once material progress can be shown and evidence of the matching grant cash requirement has been submitted, and the final 30 percent after a satisfactory Final Report has been filed. The Project & Program subcommittee of the Commission for the Arts has sole discretion to decide whether each of these milestones has been reached.

IV. NOTICES

Any notice required or permitted under the terms of this Agreement shall be effective upon receipt in writing either by personal service upon the authorized agent for the party, or by mailing the notice via U.S. Mail to the party as follows:

City: City of Livermore
Attn: Theresa De La Vega
Commission for the Arts Staff Liaison
1052 S. Livermore Avenue
Livermore, California 94550

Grantee: Thomasin Dewhurst Fine Art
[redacted]

V. GENERAL CONDITIONS

A. General Compliance

Grantee agrees to comply with the requirements of state and local laws and regulations governing the Funds available under this Agreement. Grantee also agrees to comply with all additional regulations and policies issued pursuant to these regulations. Grantee further agrees to utilize the Funds available under this Agreement to supplement, rather than supplant, funds otherwise available. Furthermore, with respect to the performance of Activities under this Agreement, Grantee agrees to comply with all federal, state, and local laws, statutes, rules, and regulations pertaining to the performance of those Activities.

B. Independent Contractor

Nothing contained in this Agreement is intended to, nor shall be construed in any manner to, create or establish the relationship of employer/employee between the parties. Grantee shall at all times remain an Independent Contractor with respect to the services to be performed under this Agreement. City shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as Grantee is an Independent Contractor.

C. Hold Harmless

Grantee agrees to defend, indemnify, and hold City, its elected officials, officers, directors, employees, agents, and designated volunteers harmless from and against any and all loss, liability, damage, including reasonable attorney's and expert fees and/or court costs,

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arising out of the performance of the Activities under this Agreement, except for the gross negligence and willful misconduct of City, its elected officials, officers, directors, employees, agents, and designated volunteers.

D. Insurance

Grantee shall procure and maintain insurance for the duration of the contract in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Project. Upon reasonable written notice, Grantee shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by the City of Livermore Risk Manager.

E. City Recognition

Grantee shall acknowledge City's financial support in all appropriate materials and media. The acknowledgment shall read, "Supported in part by a grant from the City of Livermore" or similar language, unless the City of Livermore is a part of a list of supporters. In the latter case, the acknowledgement may say only "City of Livermore." Grantee shall display the City of Livermore's logo whenever other sponsor logos are displayed, and in accordance with the City of Livermore's logo use guidelines.

F. Amendments

City or Grantee may amend this Agreement at any time provided such amendments make specific reference to this Agreement, and are executed in writing, signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release City or Grantee from its obligations under this Agreement.

City may, in its discretion, amend this Agreement to conform with state or local laws, regulations, guidelines, or policies related to the use of the Funds for the Activities. However, if such amendments result in a change in the funding, the scope of services, or the Activities, such modifications shall be incorporated only by written amendment signed by both City and Grantee.

G. Suspension, Termination, Return of Funds

1. *Termination for Cause.* City may suspend or terminate this Agreement if Grantee materially fails to comply with any term or condition of this Agreement, including but not limited to, the following:

a. Failure to comply with any of the rules, regulations or provisions referred to herein, or such statues, regulations, policies, or directives as may become applicable at any time;
b. Failure, for any reason, of Grantee to fulfill in a timely and proper manner its obligation under this Agreement;
c. Ineffective or improper use of Funds provided under this Agreement; or
d. Submission by Grantee to City reports that are incorrect or incomplete in any material respect.

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City shall give Grantee written notice of any failure to comply with the Agreement. If Grantee does not remedy the deficiency or non-compliance within fifteen (15) calendar days after the date the notice is sent, City may exercise any of the remedies available under law and equity, including but not limited to the termination of this Agreement.

Pending correction of any compliance, City shall withhold fifteen percent (15%) of the remaining Agreement Funds until Grantee corrects the deficiency, Grantee is otherwise found to be in compliance by City, or Grantee is otherwise adjudicated to be in compliance with the Agreement.

2. *Termination for Convenience:* This Agreement may also be terminated for convenience by either City or Grantee, in whole or in part, by giving notice of such termination, the effective date of the termination, and in the case of partial termination, the portion to be terminated. However, if in the case of a partial termination, if City determines that the remaining portion of the Funds or Activities will not accomplish the purpose for which the award was made, City may terminate the Agreement in its entirety.

Written notice of termination must be provided at least thirty (30) calendar days before the effective date of such termination.

3. *Effect of Termination:* In the event of termination, all finished or unfinished documents, data, studies, photographs, reports, or other materials prepared by Grantee under this Agreement shall, at City r's option, become the property of City, and Grantee shall only be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination. Any remaining Funds shall be returned to the City's Public Art Fund for reallocation.

Termination for failure to comply with any term or condition of this Agreement may result in Grantee becoming ineligible to participate in future Commission for the Arts grant programs.

Termination for any reason shall immediately suspend the Funds available under this Agreement, terminate any claim Grantee has to such Funds, and result in Funds being immediately refunded to City for use and reallocation by City.

VI. **ADMINISTRATIVE REQUIREMENTS**

A. Documentation and Recordkeeping

1. *Records to be Maintained*: Grantee shall maintain the following records including, but not limited to:

   a. Records providing a full description of each activity undertaken and the date(s) on which the activity occurred;

   b. Records demonstrating that each activity undertaken meets one of the objectives of the Program & Program Grant; and

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c. Quarterly and annual revenue and expense reports for Activities funded by this Agreement.

2. *Retention*: Grantee shall retain all records pertinent to expenditures incurred in the performance of the Activities under this Agreement for a period of two (2) years after the termination of all activities funded under this Agreement.

3. *Objectives*: Grantee agrees to maintain documentation that demonstrates that the Activities meet one or more of the objectives of the strands identified in the Cultural Arts Master Plan.

4. *Audits and Inspections*: All Grantee records with respect to any matters covered by this Agreement shall be made available to City at any time during normal business hours, as often as City deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data.

Any deficiencies noted in audit reports must be corrected by Grantee within thirty (30) calendar days after receipt of notice of deficiency by Grantee. Failure of Grantee to comply with the above audit requirements will constitute a violation of this Agreement and constitute cause for termination pursuant to Paragraph V.

B. Reporting and Payment Procedures

1. *Payment Procedures*: City will pay to Grantee Funds available under this Agreement based upon information submitted by Grantee, and consistent with the 2008 Art in Public Places Program Policy and Procedures Manual. City reserves the right to liquidate Funds available under this Agreement for costs incurred by City on behalf of Grantee.

2. *Progress Reports*: Grantee shall submit a Material Progress Report to the Commission for the Arts when it feels the Project has made material progress. Grantee shall also submit a Final Report when its Project Activities are complete. These reports are prerequisites to receiving the second and third grant installment payments, in accordance with Section III. The Grantee shall determine the form and content of the Progress Reports.

3. *Quarterly Revenue and Expense Reports*: Grantee shall submit Quarterly Revenue and Expense Reports for grant activities to the Community Development Director.

VII. PERSONNEL AND PARTICIPANT CONDITIONS

A. Assignability

Grantee shall not assign or transfer any interest in this Agreement without the prior written consent of City. However, claims for money due or to become due to Grantee from City under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to Grantee.

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B. Conflict of Interest

Grantee agrees to abide by the provisions of the California Political Reform Act (Gov. Code §§ 81000 *et seq.*) and related regulations (2 Cal. Code Regs. §§ 18109 *et seq.*) with respect to conflicts of interest, and covenants that it presently has no financial interest, and shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the Activities under this Agreement.

Grantee further covenants that in the performance of this Agreement, no persons who exercise or have exercised any functions or responsibilities with respect to the Activities, or who are in a position to participate in a decision-making process or gain inside information with regard to such Activities, have a financial interest in any contract, subcontract or agreement with respect to the Activities or with respect to the proceeds from the Activities, either for themselves or those with whom they have a business or immediate family ties, during their tenure or for a period of one (1) year thereafter.

These conflict of interest provisions apply to any person who is an employee, agent, Grantee, officer, or elected or appointed official of Grantee.

C. Subcontracts

1. *Approvals*: Grantee shall not enter into any subcontracts with an agency or individual in the performance of this Agreement without the prior written consent of City.

2. *Monitoring*: Grantee will monitor all subcontracted services to assure Agreement compliance. Results of monitoring efforts must be summarized in written reports, and supported with documented evidence, of follow-up actions taken to correct areas of noncompliance.

3. *Content*: Grantee shall cause all of the provisions of this Agreement in its entirety to be included in, and made a part of, any subcontract executed in the performance of this Agreement.

D. Copyright

If this Agreement results in any copyrightable material, City reserves the right to royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use, the work for government purposes.

E. Religious Organization

Grantee agrees that funds provided under this Agreement will not be utilized for religious activities, to promote religious interests, or for the benefit of a religious organization.

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VIII. SEVERABILITY

If any provision of this Agreement is held invalid, the remainder of the Agreement shall not be affected thereby and all other parts of this Agreement shall nevertheless be in full force and effect.

IX. WAIVER

City's failure to act with respect to a breach by Grantee does not waive its right to act with respect to subsequent or similar breaches. The failure of City to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

X. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between City and Grantee for the use of Funds received under this Agreement and it supersedes all prior or contemporaneous communications and proposals, whether electronic, oral, or written between City and Grantee with respect to this Agreement.

XI. BINDING EFFECT

All the terms, covenants, and conditions of this Agreement shall inure to the benefits of and be binding upon successors and assigns of the parties to this Agreement.

XII. COUNTERPARTS

This Agreement may be executed in counterparts by delivering a facsimile or secure electronic copy of the signed agreement to the other party, followed by delivery of the original documents bearing the original signatures. However, failure to deliver the original documents does not affect the enforceability of this Agreement.

****

SIGNATURES AND ATTACHMENT LIST ON NEXT PAGE

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IN WITNESS THEREOF, the Parties have executed this Agreement as of the date first written above.

Thomasin Dewhurst Fine Art
a sole proprietorship
"Grantee"

DocuSigned by:
By: Thomasin Dewhurst
6C8C6644138640A...
PRINT NAME: Thomasin Dewhurst
TITLE: Owner

Dated: 6/20/2024 | 10:03 AM PDT

CITY OF LIVERMORE
a Municipal Corporation
"City"

By: _____
Brandon Cardwell
Innovation & Economic Development Director

Dated: _____

APPROVED AS TO FORM:

DocuSigned by:
Katherine Mirassou
B4B86A8C4F27414...
Deputy/Assistant/City Attorney

DS

Attachments:

Exhibit A	Application for Project and Program Grant from the City of Livermore
Exhibit B	Insurance Requirements

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LIVERMORE
CALIFORNIA

Project & Program Grant

City of Livermore
Office of Innovation & Economic Development
Commission for the Arts

Application Form, Instructions, and Checklist

Applications are due on March 1 and September 1 each year

Completed grant applications must be:

- Delivered (in person or by commercial service such as FedEx, UPS, etc.) to the Office of Innovation & Economic Development c/o Commission for the Arts by 5 p.m. on March 1 and September 1, or
- Sent First Class or Priority Mail by the US Postal Service to be received at the City no later than March 1 and September 1.

Send or deliver applications to:

City of Livermore
Office of Innovation & Economic Development
Staff Liaison for the Commission for the Arts
1052 S. Livermore Avenue
Livermore, CA 94550

This packet contains the Application Checklist and instructions for completing the application.

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EXHIBIT A

Application Form - Project & Program Grants

Deadline: Hand delivered or received via US Mail by 5:00 pm on March 1 or September 1

Submission Date: 1 March 2024

Amount of Grant Request: $10 000 Total Project Budget: $20 000

Applicant/Organization: Thomasin Dewhurst

Applicant/Organization's Address: [redacted]

Applicant/Organization's Web site: www.thomasindewhurst.com

Preparer's Name and Title: Thomasin Dewhurst - artist/educator

Preparer's Phone: [redacted] Preparer's E-mail: [redacted]

Address (for formal notification): [redacted]

Describe the art form of the project or program for which support is requested (i.e., Dance, Theater, Visual Arts, Heritage, Infrastructure, Media/Film/New Media, etc.):

Visual Arts

Briefly describe the project or program for which support is requested:
A collaboration between Arts and Science (a STEAM project) in the form of a mural project and event that celebrates Livermore clean air transportation innovations and that brings work to Livermore artists.

Number of people intended to reach: Audience: GENERAL PUBLIC Participants: AROUND 80 to 100 artists, Transportation companies, workshop students and clean-air organizations

For the purpose of this application, "audience" means the people who will attend the project or program; "participant" means someone who attends a workshop or class, or else has hands-on involvement in the project or program. If the project or program will have both audiences and participants as defined here, please enter both goals.

Date project or program is scheduled to begin: JUNE 1, 2024
Note: Project events may begin no earlier than two (2) months after the application deadline.

Date project or program is scheduled to end: JUNE 31, 2025

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Certification

If applicant is an organization:

I certify that the by-laws of this organization or a resolution of its governing body authorizes me to enter into legal agreements for the organization and to submit this application. To the best of my knowledge and belief, this organization meets the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Authorized Officer's Signature

Date

Print Name of Officer signing this form

Title of Officer signing this form

- or -

If applicant is an individual artist:

To the best of my knowledge and belief, I meet the appropriate eligibility requirements. I have reviewed the information in this application and all attachments, and I certify that they are true and correct.

Artists Signature

1 March 2024

Date

Thomasin Dewhurst

Print name of Artist signing this form

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Applicant Name: THOMASIN DEWHURST

APPLICATION CHECKLIST - This Checklist is required and must be submitted as part of the completed Application. All Project & Program Grant applicants are required to submit the following:

One original set of the Application, collated in the following order:

- ☑ 1. Application Checklist (this page).
- ☑ 2. Start date: Do(es) the event(s) related to this project begin at least two (2) months after the application deadline?
- ☑ 3. Organizational Summary, signed by the organization's executive director, managing director, president, board chair, or other authorized officer of the organization, or by the applying artist.
- N/A 4. If you are an organization, submit a list of current officers and Board members with their term of office.
- N/A 5. If you are a 501(c)(3), submit a copy of your 501(c)(3) determination letter from IRS.
- ☑ 6. Application Form, beginning on page 1, continuing through the Project Budget Summary.
- ☑ 7. Notes to the Project Budget, and a detailed list of In-Kind contributions.
- ☑ 8. List of key project individuals, including principal artists and project managers, with a very brief job description (e.g., a self-explanatory job title) for each.
- ☑ 9. Resumes/biographies of key project individuals, generally one page each.
- ☑ 10. Up to four items in any combination of brochures, catalogues, performance programs, or similar organizational publications/materials; if available.
- ☑ 11. Up to four recent press reviews or articles, or similar independently generated published materials, if available. (*Note*: Calendar listings are not suitable.)
- ☑ 12. NOTE: During the review process you may be requested to submit samples of other work you have produced (work samples). See Chapter 3 – Grants for more information about work samples.

Standards for Preparing Applications

Please read the following carefully. Applicants are responsible for completing and submitting a full application package with all required attachments by the deadline. Incomplete applications will not be accepted for Commission evaluation.

1. Applicants must not modify the format of the application form or exceed the maximum length of any section of the form, except where otherwise noted.
2. All required attachments (except pre-printed ones) must be typed or computer-prepared in a type size that is no smaller than 12 pt. Times/Times New Roman, or 10 pt. Arial/Helvetica.
3. Complete all pages of the application form and all required attachments. (Use "N.A." if a section does not apply to your organization.) Provide information that is current as of the application deadline. Budget pages and budget notes must be complete.

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Application Form - Project & Program Grants

If needed, please use additional paper for this section.

1. State/describe your organization's mission or provide an artist's statement. Include the kind of arts work the organization or artist has done previously and does now. How does this work relate to the proposed project/program? If yours is not an arts organization, state briefly how the arts relate to its mission. (250 words or less)

2. Describe the project or program for which you are seeking the grant. Discuss the project's origins. Describe the venue/location, the implementation process, and the timeframe. Discuss the resources — people, money, etc. — you will need to implement the project, whether you already have those resources within your organization or, if not, how you plan to obtain them.

3. How will the requested grant be used in the planning and implementation of the project or program? (500 words or less.)

4. Describe how the program or project specifically addresses one or more of the main strands found in the Cultural Arts Master Plan, artsAlive! (Refer to the Cultural Arts Master Plan Executive Summary in the Public Art Policy Guideline manual.) (250 words or less.)

5. List the individual(s) or organization(s) you will be partnering with on this project. Be specific regarding the support, both financial and in-kind, they will be providing.

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Clean Air Transportation Innovation Mural

Leading artist/Project Leader: Thomasin Dewhurst
Main Participating Artists:
Anne Giancola
Vera Lowdermilk
Lawrence Lagin
Matt Finders
Jen Huber
Thom See
(Other Participating Artists from mural workshops created for this project: Bothwell Arts Center adult and youth artists)

1.

Thomasin Dewhurst (artist and owner/educator at Thomasin Dewhurst Fine Art) provides art, art history and music instruction to Tri-Valley students. With the support of grants from the cities of Livermore, Pleasanton, Dublin, the Wente Foundation for Arts Education, Livermore Rotarian Foundation, the Pedrozzi Foundation, Community Health and Education Foundation (CHEF), and private donations, Ms. Dewhurst brings public art opportunities to youth of the Tri-Valley community.

A significant contribution to this has been the Livermore **Conversation Pieces** banner art project with over 100 young participants: members of The Pedrozzi Foundation, Quest Science Center, JazzLabb/Element 116, Tri-Valley Writers, Del Arroyo 4-H Club, and Thomasin Dewhurst Fine Art. A **city of Pleasanton Conversation Pieces project** funded by the Pleasanton Cultural Arts Council was completed in 2023.

Ms. Dewhurst was one of 4 selected artists commissioned to create temporary public artwork for Dublin's 40th Anniversary celebrations. The public art project was a sculpture that at night became a shadow puppet theater. Thomasin was part of the team that painted the Dream Big mural on L Street in Livermore. She recently completed the L Street/Railroad 1910 Western Pacific Rail Depot mural as the sole artist, and was the main artist on the S Livermore Ave. Vineyard Homeless Shelter mural.

(Fig. 1 - 6)

2.

- The proposed project is a collaborative endeavor between Livermore artists, both adult and youth, who work at the Bothwell Center, and Livermore transportation organizations with vehicles and agendas that are actively involved in clean fuel innovations.
- The project plans to create an educative mural which describes and celebrates these current clean fuel innovations as well as future clean fuel vehicle prototypes. In addition, mural-painting workshops will be

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created for this project that teach adult and youth artists about creating public art. Their work will make up a small section of the completed mural.

- **The project incorporates two events / programs:**

1. The collaboration of Livermore Bothwell Arts Center adult and youth artists in creating the mural, and
2. a Clean-air Innovation event in collaboration with Livermore's Climate Action Plan (CAP) following the completion of the mural.

- The proposed Clean Air Innovation organization **participants** in this project are:

1. The Livermore Airport (confirmed participant)
2. Gillig Buses (confirmed participant)
3. Monarch Tractors (confirmed participant)
4. Tesla (pending participant)
5. ZeroAvia (pending participant)
6. Tri-Valley Air (pending participant)
7. Other participants and supporting organizations yet to be determined

- The confirmed **location** of the mural will be on a Livermore Airport hangar wall facing the Gillig campus, at the corner of West Jack London Blvd and Discovery Dr. ***(Fig. 7)***
- The mural will be painted on exterior-grade panels with high quality exterior-grade paint by the artists and attached to the hangar wall by the Livermore Airport staff.
- The official **start date** of the mural-painting part of the project is June 1st 2024. Preparation for the project (getting supplies, priming panels, sketching ideas) will, out of necessity, begin sooner.
- The anticipated end-date of the mural's creation and installation is June 1st 2025.
- The date of the Clean-air Innovation event is expected to be no later than June 30th 2025.
- The **subject matter of the mural** incorporates a group of airplanes flying towards the viewer with dramatic perspective. Below the planes is a birds-eye view of a landscape that covers three-quarters of the mural, with sky showing in the fourth quarter (top section) of the mural. Gillig buses, Monarch Tractors, Tesla vehicles and other selected clean-air vehicles will traverse various sections of the landscape. The mural design will include an historic timeline of each of the organizations' vehicles as part of the mural's educative aspect. The timeline will go from right to left across the mural, with historic ground and air vehicles on the right and current and future clean-fuel vehicles on the left ***(Fig. 8)***

- The resources that we will need to have financial support for for this project comprise:

1. *Livermore Bothwell Center Artists to create and paint the artwork (Main participating adult artists will be paid. Youth and adult workshop artists will not be paid).*
2. *Installation of completed mural on hangar wall (To be handled by Livermore Airport staff)*
3. *Supplies for constructing and painting the mural.*
4. *Transportation costs of mural panels to display site.*
5. *Possible rental of workspace for some art-making, construction needs, meetings or student workshops (rental fees).*
6. *Event-planning and hosting costs (for Clean-air Innovation event)*
7. *Insurance during mural painting, workshops, transportation of mural, event planning and hosting.*
8. *Resources are anticipated to be covered by financial support from the participating organizations, workshop fees and the City of Livermore Project and Program Grant. We have confirmation of part financial support from some of the organizations, while others are pending.*

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3.

The requested grant from the City of Livermore will be used to cover up to 50% of the artists' fees, supply costs, transportation of mural to site costs, any workspace rental costs, Clean-air Innovation event planning and hosting costs, and insurance costs. The remainder of the resource costs will be covered by the financial support of the participating organizations.

4.

Strand 1: Promote the unique sense of place in Livermore, including the creation of a Cultural Arts District.

The Clean Air Transportation Innovation Mural addresses this strand because it will focus specifically on Livermore Transportation organizations that are actively involved in clean fuel innovations. This project will support and give an arts opportunity to a large group of Livermore artists, both adult and youth, and promote and showcase Livermore Fine Arts. The project aims to partner with Livermore's Climate Action Plan (talks have already begun) to celebrate and educate the public about current and future clean air efforts in Livemore.

Strand 2: Ensure the visibility and vitality of cultural arts organizations, artists and arts educators for all residents and visitors to the City through facilitation of partnerships and support for organizational strengthening within the arts, culture and heritage communities.

The Clean Air Transportation Innovation Mural promotes the visibility and vitality of Livermore's cultural arts by creating a new and original public artwork, involving the work of a large group of Livermore artists, adult and youth. The resulting mural, being a public artwork, will be visible to all members of Livermore's public and to visitors to the City. Partnering with Livermore clean fuel transportation organizations, this projects strengthens ties between the fields of arts and science, making it an important STEAM project, and highlights the importance of art as an educative (in the fields of Art, Science and Innovation, and the History of Livemore) and powerful vehicle for community-building.

Strand 3: Leverage the innate ability of arts engagement to create a sense of community and life-long learning by supporting a diverse range of publicly accessible opportunities for all residents, businesses and visitors to participate, with a special focus on youth.

(As above in Strand 2). In addition, this project involves youth artists in the creation of the mural, and has a tentative plan of creating youth field trips viewing and learning about the subject-matter and making of the mural, and following with possible visits to Gillig and the Airport in the same day. This could be for Livermore youth as well as youth from outside Livermore.

Strand 4: Provide long-term, sustainable resources that enable the City to support the arts and culture community as a resource for all residents, visitors and businesses.

The mural will be and educative art structure, and the information it will bring to the public will have a lasting effect on public awareness of environmental efforts. Mural art can demonstrate that art is a powerful means of

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communication, that will hopefully encourage further public art to be created. As well as a means of communication, this mural will add to the beautification of the city of Livermore. In addition, this project hopes to encourage continuing financial support to the arts and to arts education from local businesses and the public of Livermore and the wider Tri-Valley area.

5.

Lead Artist and Project leader:

- Thomasin Dewhurst

Main Participating Artists:

- Anne Giancola
- Vera Lowdermilk
- Lawrence Lagin
- Matt Finders
- Jen Huber
- Thom See

Secondary Participating artists from mural workshops created for this project :

- Other selected adult and youth artists who work at the Bothwell Center, Livermore

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Confirmed Participating Organizations:

- Livermore Airport
- Gillig Buses
- Monarch Tractors

Selected Potential Participating Organizations (yet to be confirmed/contacted):

- Tesla Motors
- ZeroAvia
- Tri-Valley Air
- Livermore's Climate Action Plan group

Anticipated financial contributions from participating organizations and workshop fees:

- $10000

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Application Form - Project & Program Grants

Project/Program Budget Worksheet *(enter N/A if item does not apply. Attach Budget Notes if necessary.)*

PROJECT SUPPORT *(Do not include in-kind support)*

Earned Revenue	Amount	Notes
Ticket Sales/Admissions	$	
Tuition/Workshop fees	$ 1000	Anticipated, not confirmed
Other:	$	
Subtotal: Earned Revenue	$1000	

Contributed Income	Amount	In-hand	Pending
Contributions *(Individuals/Businesses)*	$9000	$ 4000	$5000
Grants *(Foundations/Government other than City)*	$	$	$
City of Livermore *(other than this grant request)*	$	$	$
Other:	$	$	$
Subtotal: Contributed Income	$9000	$ 4000	$5000

Project & Program Grant Amount Requested	$10000
Total Project Support (Revenue + Income + Grant)	$20 000

PROJECT EXPENSE *(Do not include in-kind expense)*

Personnel	Amount	Notes
Artistic	$12,200	ARTIST FEES FOR 8 ARTISTS
Production	$ 2000	ARTWORK, EVENT, MUSICIANS, CATERERS. EVENT SET UP
Administrative	$ Ø	INCL. IN ARTIST FEES
Other: *(describe in Notes)*	$ Ø	
Subtotal: Personnel	$ 14200	

General	Amount	Notes
Venue Rental	$ 300	WORKSHOP SPACES
Materials and Supplies	$ 4000	
Marketing and Promotion	$ Ø	INCL. IN ARTIST FEES
Transportation	$ 500	OF ARTWORK/EVENT SUPPLIES/TRUCK HIRE
Insurance	$ 1000	ART PROJECT/WKSHOP/EVENT
Other: *(describe in Notes)*	$	
Subtotal: General	$ 5800	

Total Project Expenses (Personnel + General)	$20 000
Project Surplus (Loss) *(Total Support minus Total Expense)*	$ Ø

If Project Net is a negative value, explain in the Budget Notes how it will be covered.

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Matching Funds

All Project and Program Grant applicants must provide at least a dollar-for-dollar (one-to-one) match for the grant award, no less than 50 percent of which must be a cash match. The cash match must be from sources other than the City of Livermore.

In-kind contributions are allowed as part of the match only on the following limited basis:

1. In-kind contributions cannot be used for more than half of the required match, in other words, they cannot represent more than 50 percent of the value of the grant award; and,
2. The value of in-kind contributions, i.e., goods and services, must offset line item expenditures in the project budget and their value must be documentable with invoices or billing statements.

In-kind contributions must be listed below or on a separate sheet attached to the Budget Notes.

Source	Description	Fair Market Value
STUDENT WORKSHOPS	WORKSHOPS TO TEACH ADULTS / YOUTH ABOUT THE MURAL AND THEIR ART TO BE INCLUDED	$ 1 000
ORGANIZATIONS & FINANCIAL CONTRIBUTIONS	VARYING CONTRIBUTIONS FROM ORGANIZATIONS TO BE INCLUDED IN MURAL	$ 9000
		$
		$
		$
		$

Requested Grant Amount: $ 10 000

Cash Match Amount: $ 10 000

In-kind Match Amount: $ Ø

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Thomasin Dewhurst - Resume/Curriculum Vitae

www.thomasindewhurst.com

[redacted]

EDUCATION

1997 - 1999 University of the Witwatersrand, South Africa M.A.F.A by research (double first class pass)

1991 - 1994 Rhodes University, South Africa B.A.F.A (with distinction)

CREATED/CURATED EXHIBITIONS and PUBLIC ARTWORKS

2024 Tri-Valley Haven donor-wall mural: project and workshop created by Thomasin Dewhurst for Livermore Youth Artists

2024 Repainting L Street Heritage Mural (Principal artist) (pending project)

2024 Vineyard 2.0. Livermore Homeless Shelter mural (Principal artist)

2024 CHEF (Community Health and Education Foundation) - Youth Workshop 1910 WP Rail mural Livermore CA

2024 "Western Pacific Depot Livermore 1910 Railroad Mural" Artist and Youth Workshop creator/instructor Livermore, CA

2022 "L Street Astronaut Mural" (astronauts Leroy Chiao, Ellen Ochoa, Jeff Wisoff, Tamara Jernigan and Jose Hernandez) Livermore CA

2022 "Light Work / Shadow Play" project, Dublin, California DUBLIN HERITAGE AND CULTURAL ARTS COMMISSION

2022/23 "Conversation Pieces" project, Pleasanton, California PLEASANTON CIVIC ARTS COMMISSION

2022-2023 Cheza Nami: Taste of Africa - Community collaboration art project for 10-foot stage art banner

2021 "Conversation Pieces" project, Livermore, California LIVERMORE COMMISSION FOR THE ARTS

2021 PIANO IN THE PLAZA Thomasin Dewhurst and Students - Art project Persimmon Place, Dublin CA

2020 Big Bay Ray Youth Community project mural

PUBLIC AWARDS AND GRANTS

2023/2024 CHEF grant for Tri-Valley Haven donor-wall Youth mural project and Western Pacific Rail mural

2022 DUBLIN HERITAGE AND CULTURAL ARTS COMMISSION 40th Anniversary Public Art project "Light Work / Shadow Play"

2022 DELTA KAPPA GAMMA Public Service Award for being an outstanding volunteer serving youth in the community

2022 PLEASANTON CIVIC ARTS COMMISSION grant for Pleasanton Conversation Pieces project

2022 ROTARIAN FOUNDATION OF LIVERMORE grant for the Marylin Avenue Elementary School Little Free Library Art project

2022 WENTE FOUNDATION FOR THE ARTS grant for Marylin Avenue Elementary School Little Free Library Art project

2022 WENTE FOUNDATION FOR THE ARTS grant for the Conversation Pieces (Livermore) project

2021 PEDROZZI FOUNDATION grant for the Conversation Pieces (Livermore) project

2021 LIVERMORE COMMISSION FOR THE ARTS mini-grant for the Conversation Pieces (Livermore) project

2009 Above & Beyond Award for outstanding contribution to Art, Music & Performing Arts Enrichment in Livermore school district, California

SELECTED ART AND ACADEMIC ACHIEVEMENTS

Postgraduate Merit Scholarship (University of the Witwatersrand) x 2

Kempton Park/Tembisa Fine Art Award (Johannesburg)

Postgraduate Merit Award (University of the Witwatersrand) x 3

Postgraduate Scholarship (merit) (Centre for Scientific Development)

Postgraduate Merit Scholarship (offered by Rhodes University)

Rowney Prize (Best Fourth-Year Painting Student) (Rhodes University)

Half Colours (academic) (Rhodes University)

Tuition Scholarship (double first-class pass 1993) (Rhodes University)

Award Best Second-Year Painting Student (Rhodes University); Award Best First-Year Painting Student (Rhodes University); Award Best First-Year Student (Rhodes University); Award Most Promising First-Year Fine Art Student (Rhodes University); Award Most Outstanding Art Pupil (Matric, Mondeor High School)

Award Outstanding Art Pupil (Standard 9, Mondeor High School)

SOLO & GROUP EXHIBITIONS – Various 1991 to present (please see www.thomasindewhurst.com)

TEACHING & INSTRUCTION – Various; Own business 2009 to present (please see www.thomasindewhurst.com)

SELECTED PUBLICATIONS AND REVIEWS – Various 1999 to present (please see www.thomasindewhurst.com)

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ANNE GIANCOLA

[redacted]

Summary of Qualifications

Communications and art expert with a rich history of bridging community and culture. Exemplary background in utilizing imagination and talent, taking projects from concept to completion.

Professional Experience

Visual Arts and Education Manager, 2014-present

Livermore Valley Arts (LVA), Livermore, CA

• Curate art exhibitions at the Bankhead Art Gallery, crossing diverse multiple disciplines of the arts to create vibrant contemporary art exhibits.

• Developed and produced all aspects of the visual arts operations including exhibit opportunities, receptions, art fairs, open studio events and visual art aspects for the Theater.

• Manage all aspects the education department for LVA including art camps and art classes, student shows at the theater, community cultural events.

• Produce ArtWalk Livermore, a highly successful art festival.

• Design and produce collateral materials such as brochures, signage, event logos, exhibit and event postcards, social media notices, website design and website updating.

• Collaboration with multiple community cultural groups.

• Develop and implement program budgets.

Studio Director and co-Founder Rolistone Studios, Fitchburg, MA 2008 – 2013

• Managed all communications including website, social media initiatives, e-mail marketing, advertising, press releases, print media, liaison with community organizations.

• Plan and implement all events and exhibitions.

• Resource development and grant writing for project and operational support.

• Working relationship with government agencies, cultural arts groups, and the public.

ArtWorks Owner/Artist 1994 — present.

A creative business for commercial and residential design services.

• Design and production of murals, illustration, art commissions and art classes

Software Skills

Software skills include Mac-based Adobe Creative Suite: Photoshop, InDesign, Illustrator;

MS Office Suite; Squarespace, Word Press, Google Analytics

Instructor/Presenter and Community Involvement

• Alameda Country Arts Leadership awardee 2022

• City of Pleasanton Civic Arts Commissioner

• Professional presentations to business and arts groups

• Board Member, Pleasanton Cultural Arts Council

• Member, Women's Caucus for Arts, national organization

• Panelist, Berkeley Civic Arts Grants Commission, 2021

Education

M.S. Applied Communications, Fitchburg State University, 2013, Graduate Student of the Year

B.A. History, U.C. Santa Barbara, Honors

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Jen Huber
[redacted] www.JenHuberArtist.com

PUBLIC ART

2024 Storm Drain Project, City of Dublin, Dublin,, CA
Commissioned to paint "Rainbow School" at Dublin Sports Park..
2020, 2021 Bankhead Theater Windows, Livermore, CA
Painted a copy of Marc Chagall's "Le Cheval Rouge " and a copy of Utagawa Hiroshige
woodcut print onto windows of the Bankhead Theater.
2018, 2019, 2021 "Kite Day", "July 4th", and "1953" Utility Box Art for the City of Dublin, Dublin, CA
Designed, prepped, painted, and finished the utility boxes on three locations.
2020, June From the Class of 2020, John Green Elementary, Dublin, CA
Painted underwater scene of sea turtles, jellyfish, and bat rays on shed donated by
parents and students from the Class of 2020.

AWARDS

Merit Award, "Old Oak on Alamo Creek Bike Trail", acrylic painting. Dublin Paint Out! 2023 by the Dublin Arts Collective. Best in Show, "Enchanted", acrylic painting. Joyous, Livermore Art Association, 2023. Honorable Mention, "Red Sky Aviation", acrylic painting. Paint Livermore! Plein Air Competition. Best in Show, "Iron Horse and Alamo Creek Trail Crossing", acrylic painting. Paint Dublin Plein Air Competition, May 2022. Best Acrylic in Show, "Sirens", acrylic painting. City of Livermore, June 2021. Honorable Mention, "Mobile Home", acrylic painting. Pleasanton Plein Air Competition. Honorable Mention, For color and texture,, "Iceberg", Pleasanton Art League Member Show

ART SHOWS

Jen Huber has exhibited her paintings and drawings in over twenty shows in the past eight years, mostly with local venues, galleries, and museums but also in San Francisco, Pacific Grove, and Yakima, Washington.

INSTRUCTION

2021-Present Bothwell Art Center, Instructor, Summer & Spring Art Camps, After School Art and Beginning/Intermediate Art for Teens and Adults.

EDUCATION

University of California, Santa Cruz
Bachelors of Fine Art, Emphasis on printmaking

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Thomas See

[redacted] Instagram@seeartstudio

Education

- Indiana University of Pennsylvania, BS in Computer Science.
- University of California at Berkeley, Post-baccalaureate Certification in Visual Arts with emphasis in Painting.
- The Art Students League of New York, Completion of in-person and online Workshops in Figure Painting, Portraiture, Abstract Painting, and Art History.
- Oakdale Studio, San Francisco, Ongoing participant in term-based Acrylic/Oil Painting and Art Criticism Workshops.

Career Highlights

Before retiring from high tech in 2020, I spent several decades doing software development for both well known and not so well known firms in and around Silicon Valley. The variety of software development roles I had include Software Engineer, Project Manager, Product Manager and People Manager.

One of the better known firms at which I spent many years working was Silicon Graphics Incorporated (SGI). At SGI I was introduced to leading edge approaches to Digital Art. As my interest in Digital Art (and art in general) grew, I went on to 1) learn traditional art skills such as acrylic and oil painting, and 2) write my own Windows and iPad based art software (which I currently use for creating digital art).

Current Activities

I maintain an art studio at Bothwell Art Center in Livermore, CA, where I spend most weekdays either painting in acrylic or oil, creating digital art or writing art software.

I enjoy participating in the many local art shows. Shows that I most like are the ones that focus on the human form.

Some of my favorite artists come from the Bay Area Figurative tradition. Much of my art reflects that interest.

Art sales do come my way from time to time. Aside from the occasional commission, the main focus for me right now is to improve my technical and compositional skills.

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Matt Finders
[redacted]

Matt Finders is a professional musician and educator living in Livermore. After enrolling his grand daughter in art classes with Thomasin Dewhurst, he began studying art with Thomasin as well. Matt's work has been shown in two exhibitions in the UNCLE art gallery at the Bankhead. Matt has two pieces in the Double Take book published by LVPAC.

Professional artistic work

- 2024 Prepared and assisted with painting the "Western Pacific Depot" Livermore 1910 railroad mural.
- 2023 One of four artists to work on the "Dream Big" astronaut mural in downtown Livermore.
- 2023 Constructed and installed the "Wind Power Interactive Art Structure" for Livermore's Climate Action Plan and other environmentally-focused events.
- 2022 Constructed and installed the structure for the 2022 "Light Work / Shadow Play" project for the Dublin 40th anniversary celebrations.
- 2022 Project leader and artist for the LazzLabb banner in the 2021 "Conversation Pieces" project, Livermore, CA.
- 2021 Assisted with painting the 2021 PIANO IN THE PLAZA Art project Dublin, CA

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Larry Lagin, San Francisco bay area artist (and scientist)

[redacted]

Larry Lagin is a retired scientist and project manager who worked on two of the world's nuclear largest largest nuclear fusion research projects -Tokamak Fusion Test Reactor (TFTR) at Princeton Plasma Physics and the National Ignition Facility (NIF) at Lawrence Livermore National Laboratory). While at Princeton, Larry ran PPPL's "Science on Saturday" science outreach program for high school students for several years while working on TFTR. Shortly after moving to Livermore in 1995, Larry founded LLNL's "Science on Saturday" program while working on NIF. Since retiring in 2014, Larry has taken drawing and painting classes in a Specialized Drawing certificate program at UC Berkeley Extension, and completed the Post Baccalaureate certificate program in Visual Arts, specializing in painting in June 2018. As part of that program, Larry developed a series of paintings based on archived photographs from the US Holocaust Memorial Museum in Washington, D.C.

Larry lives in the East Bay of San Francisco in Livermore, CA. He is a resident artist at the Bothwell Arts Center in Livermore, and has a studio there. Larry is also on the Board of Directors of Livermore Shakespeare Festival (LSF) and recently helped create the LSF's Science@Play program. Larry will be helping to create the East Bay Holocaust Education Center, which will be launched in 2021.

"I devoted most of my scientific career trying to recreate the energy of the stars – essentially trying to tame nature by creating order out of chaos. And so, I also do it with my art – with the energy and untamed chaos I use in many strokes of the brush, seeking and eventually searching for order. There's nothing like the pursuit of creative exploration and discovery that I find from both."

Larry Lagin

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Vera Lowdermilk

Vera Lowdermilk was four years old when she realized she loved art. She grew up surrounded and inspired by beautiful paintings created by her father, an award winning artist.'I grew up surrounded by my father's art; his work was always an inspiration.' A few years later, Vera received her first paid commission to create a mural, all in pencil, of John Lennon for a Connecticut boutique. Since those early years, Vera's reputation has spread throughout the Bay Area.

In fact, Vera's public murals grace buildings and walls from San Francisco to Livermore. Her private murals and portraits are in homes throughout the Bay Area. Vera is known for her beautiful and magnificent murals and portraits, sculptures in bronze, and botanical watercolors.

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Links to selected articles about the artists:

https://www.independentnews.com/news/livermore_news/livermore-teacher-thomasin-dewhurst-the-heart-of-art/article_f6aea054-cf64-11e9-8a57-ef0cc7cc3dd7.html

https://www.pleasantonweekly.com/ac/2023/10/14/conversation-banners-for-youth-engagement/

https://pleasantonarts.org/mural-joy/

https://www.pleasantonweekly.com/ac/2023/04/04/new-murals-unveiled-behind-pleasanton-cultural-arts-building/

https://www.independentnews.com/culture/new-mural-offers-view-of-the-areas-past/article_0891ced2-4b9f-11ec-8884-834647042337.html

https://www.pleasantonweekly.com/news/2022/10/13/what-a-week-impacting-the-arts-in-alameda-county/

https://www.llnl.gov/article/49001/livermore-astronaut-mural-encourages-people-dream-big

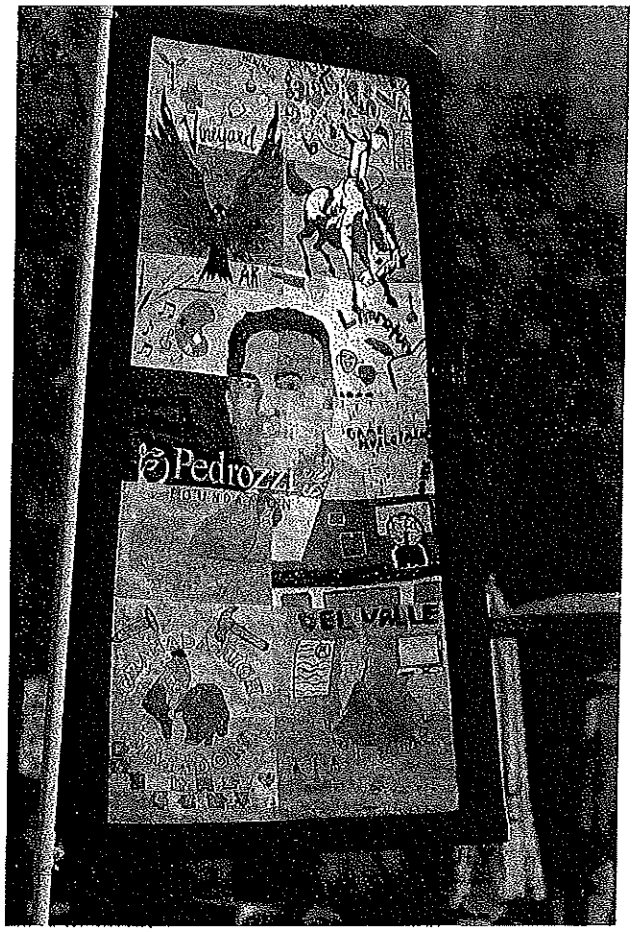
https://www.livermorevine.com/local-news/2022/04/09/firehouse-hosts-holocaust-memorial-exhibit/

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IMAGES : www.thomasindewhurst.com



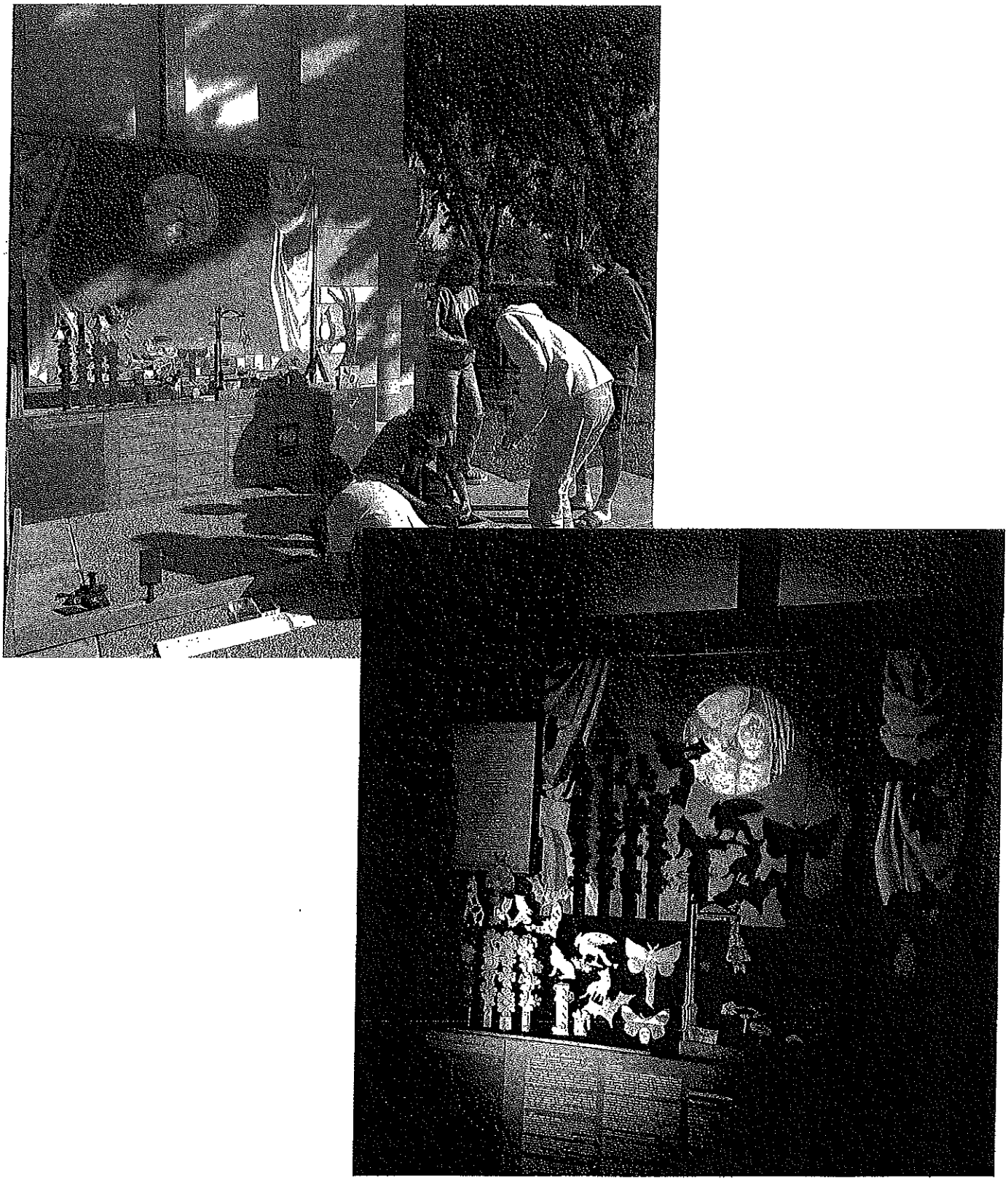




Images from the Livermore Conversation Pieces banner project opening on the Bankhead Plaza

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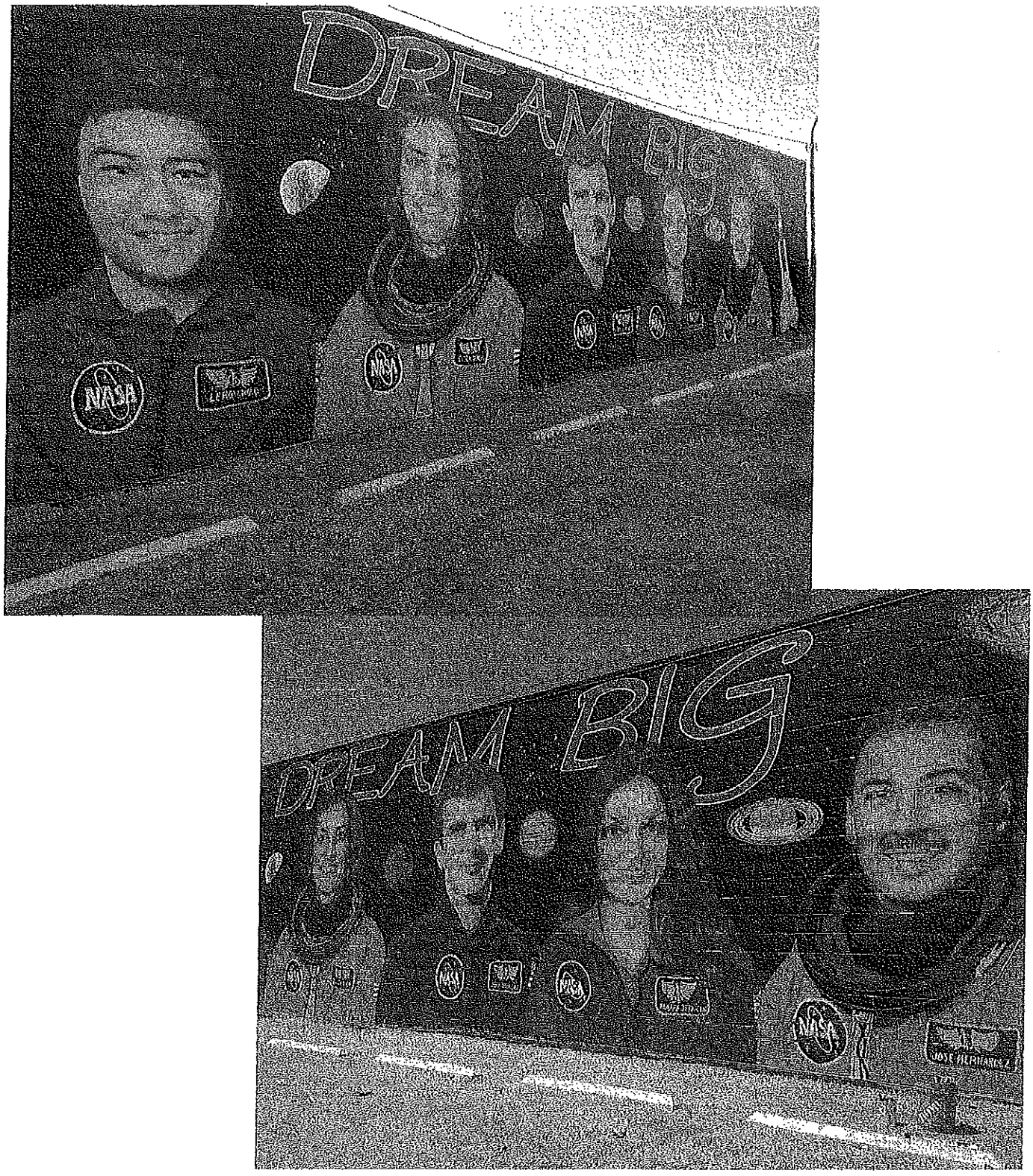
EXHIBIT A



Images from the Dublin 40th Anniversary art project (*Thomasin Dewhurst and youth artists*)

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EXHIBIT A

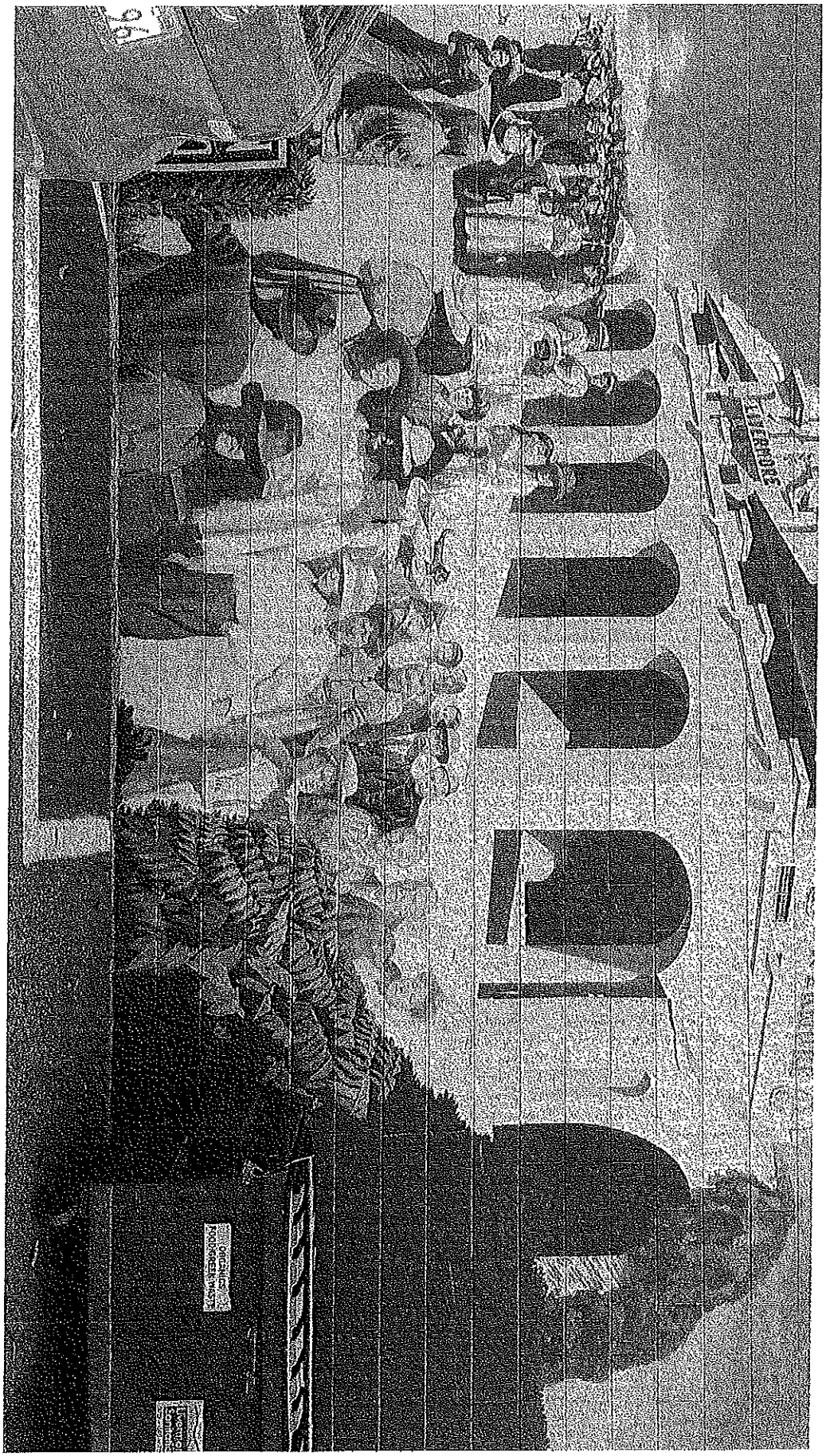


Images from the L Street Astronaut mural (*Anne Giancola, Thomasin Dewhurst and two other artists*)

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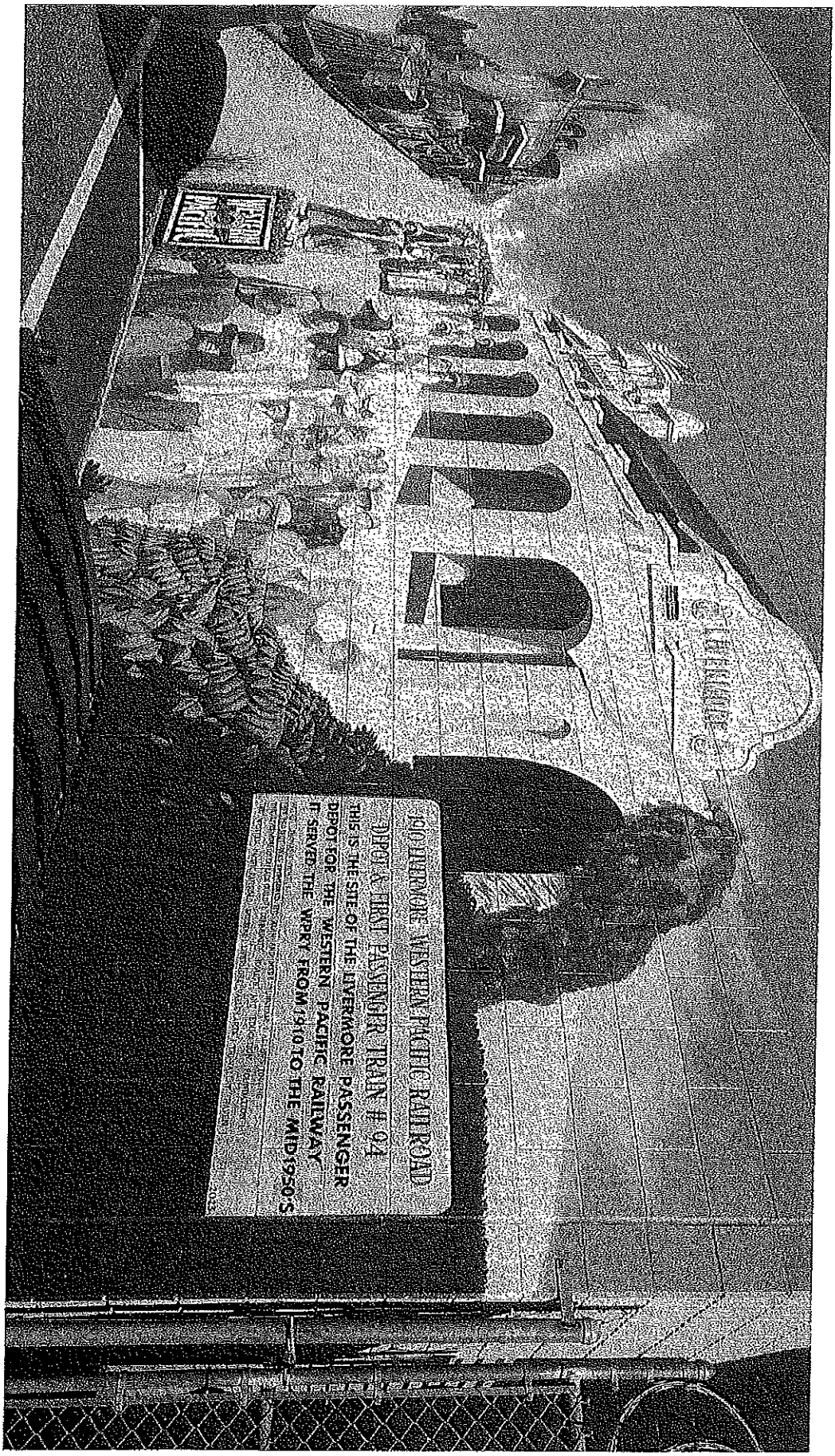
1910 WESTERN PACIFIC RAILDEPOT MURAL

EXHIBIT A



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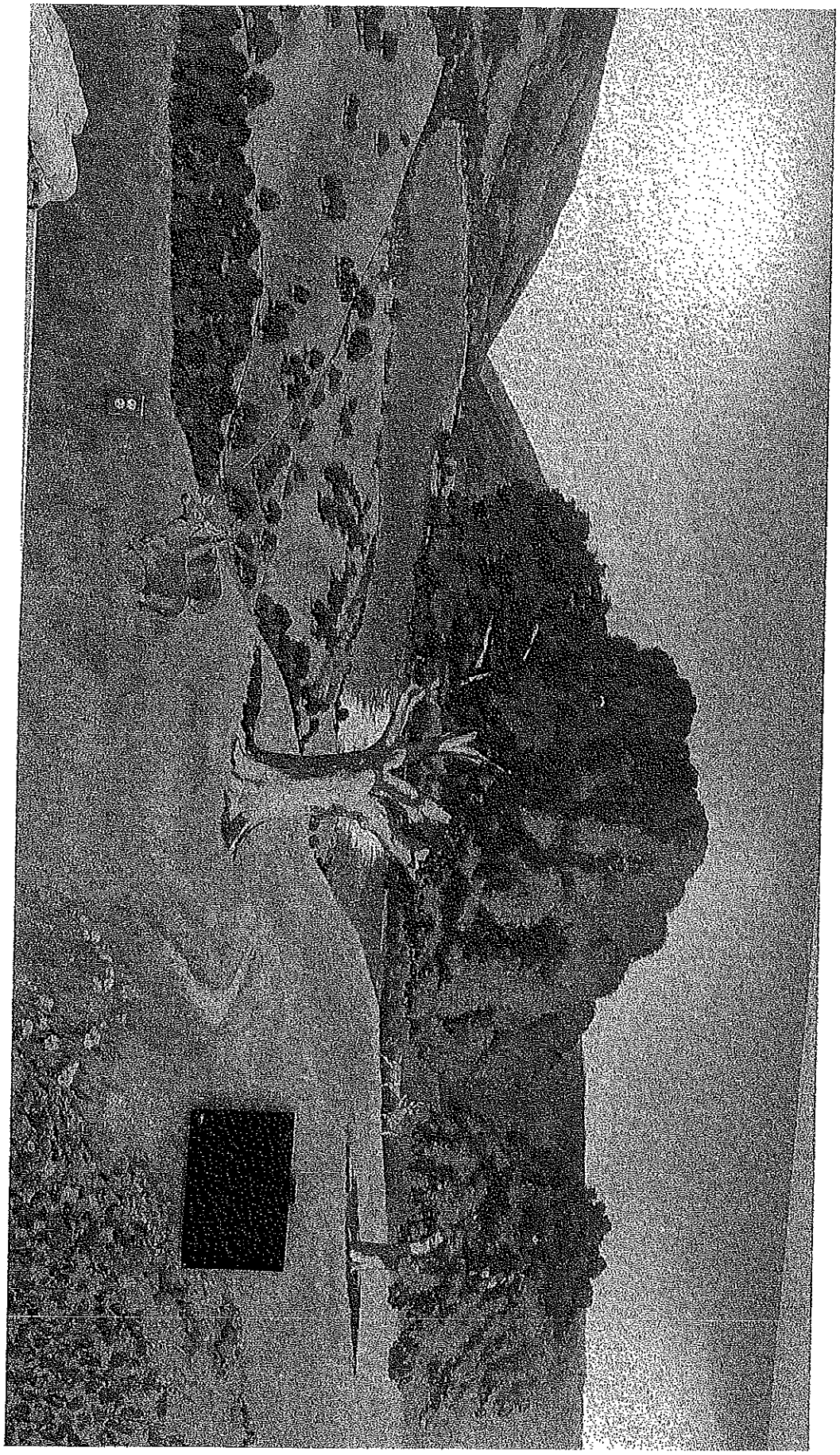
EXHIBIT A



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VINEYARD 2.0 HOMELESS SHELTER ANIMAL

EXHIBIT A



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CHEZA NAMI Community collaborative art banner mural project

This community banner was painted and sewn by Thomasin Dewhurst (the portrait, portrait background, headdress design and painting, beading on necklace, and writing - calligraphy, design and painting, and the sewn fabric borders) as well as the community (youth and adults painting squares of their own design on the lower portion of the banner) during the Cheza Nami 10th Annual Taste of Africa event at the Bankhead Plaza in Livermore, CA. It is a collaborative project, bringing the community together in a creative art activity. The 10 foot x 3 foot banner will be displayed at future Cheza Nami events as part of their stage backdrop.

http://www.chezanami.org/





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EXHIBIT A

WALL ON WHICH THE MURAL WILL BE DISPLAYED (GILLIG CAMPUS FACES WALL)

(FIG. 7-8)

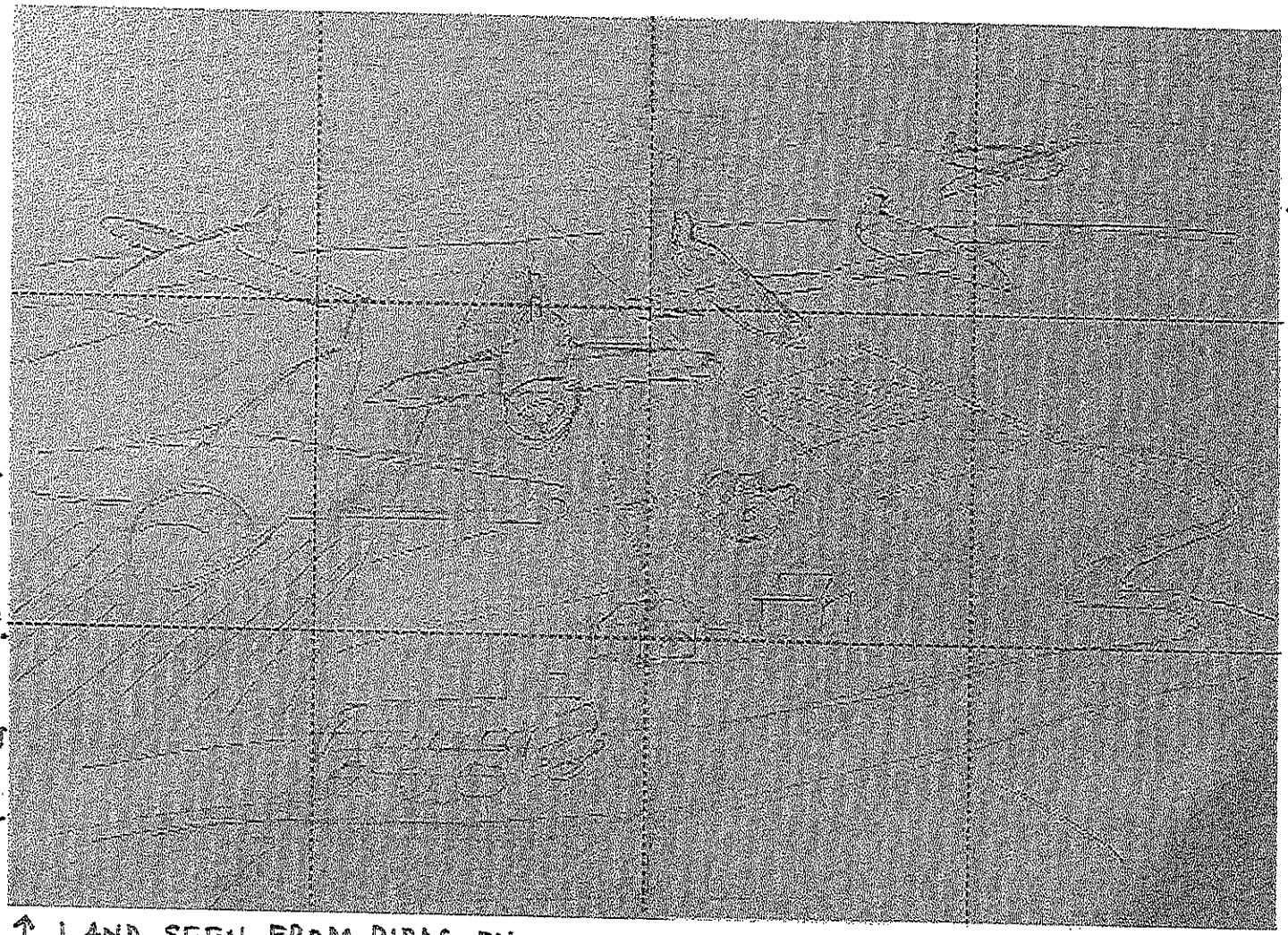
EXHIBIT C

EXHIBIT A

SKETCH IDEA FOR CLEAN AIR TRANSPORTATION MURAL

← MURAL TO BE PAINTED ON 12 PANELS BY VARIOUS ARTISTS

AIRPLANES → FLYING SHOWING DRAMATIC PERSPECTIVE. RIGHT SIDE HISTORIC PLANES. LEFT SIDE CLEAN-AIR CURRENT-DAY AND FUTURE PLANES.



← BRIGHT, EYE-CATCHING COLORS. SOME GOLD AND SILVER-LEAF ELEMENT TO CATCH SUN. TRADITIONAL ART STYLES ON LEFT. IMPRESSIONIST, MODERN AND ABSTRACT DESIGNS ON RIGHT.

↑ LAND SEEN FROM BIRDS-EYE VIEW. DRAMATIC PERSPECTIVE. SHOWING VARIOUS CLEAN-AIR AND HISTORIC VEHICLES

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance
Grantee shall maintain limits no less than:

Commercial General Liability, including operations, products and completed operations, as applicable: **$1,000,000/$2,000,000** aggregate per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

Deductibles and Self-Insured Retention
All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers
Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions
The general liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Grantee. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.
2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy,

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including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.

4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550.

Verification of Coverage

Grantee shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.16**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Jeramy Young, Police Chief

SUBJECT: Resolution authorizing the execution of an agreement with All City Management Services, Inc. to provide crossing guard services for a five-year term, in an amount not-to-exceed $1,516,644.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute an agreement with All City Management Services, Inc. to provide crossing guard services in an amount not-to-exceed $1,516,644 for a five-year term for the period July 1, 2024, through June 20, 2029.

SUMMARY

On August 8, 2005, the City Council adopted Resolution 2005-172 authorizing the City to contract with a vendor to provide crossing guard services for the Livermore Valley Joint Unified School District. This eliminated the function from being performed by the Police Department staff as well as making the vendor responsible for all aspects of the program, including hiring, training, deployment, supervision and management of the guards, purchasing and maintaining all associated equipment as well as monitoring the sites and providing alternate guards in case of absences. The current agreement with our vendor All City Management Services, Inc. expired on June 30, 2024.

DISCUSSION

Crossing Guards are supplied for both the regular school year and for the summer school program for a total estimated 8,100 hours of guard service per year. The City Council re-affirmed the City's commitment to the Crossing Guard Program in a June 2002 policy decision.

On June 3, 2024, public notice for Request for Proposal and Qualifications (RFP & Q) 24-353515 was issued for Crossing Guard Services and closed on June 17, 2024. Two vendors submitted proposals Cross Safe and All City Management Services, Inc.. Proposed hourly rates were as follows:

All City Management Services, Inc.	Everything Parking, Inc. (dba Park Inc.)

Fiscal Year	Hourly Rate	Annual Rate	Fiscal Year	Hourly Rate	Annual Rate
FY 2024-25	$34.59	$280,179	FY 2024-25	$50.15	$306,918
FY 2025-26	$35.86	$290,466	FY 2025-26	$50.15	$306,918
FY 2026-27	$37.56	$304,236	FY 2026-27	$50.15	$306,918
FY 2027-28	$38.84	$314,604	FY 2027-28	$50.15	$306,918
FY 2028-29	$40.39	$327,159	FY 2028-29	$50.15	$306,918
Total Agreement Value		$1,516,644	Total Agreement Value		$1,534,590

During the term of the agreement, All City Management Services, Inc. proposal reflects a savings of $17,946.

All City Management Services (ACMS), Inc. provided five municipality references where they currently perform crossing guard services in the area. Staff is familiar with ACMS customer service and responsiveness due to the prior five-year agreement with them.

ACMS is the vendor with the lowest cost for services and has the highest qualifications for crossing guard services.

The recommended agreement, which is for a five-year period from July 1, 2024, through June 30, 2029, includes the following provisions:

- ACMS to provide crossing guard services at 15 locations
- ACMS to assume complete responsibility for all agreement functions including recruitment, background checks, training, payroll, supervision, and insurance
- ACMS to maintain alternate guards, cellular and paging options, and a 24-hour toll-free phone number top ensure adequate and immediate back-up for any crossing guard absent from duty for any reason

FISCAL AND ADMINISTRATIVE IMPACTS

The total value of the proposal submitted by the vendor is $1,516,644 over five years. The current Police Department budget has sufficient funding available for the program through FY 2024-25. Costs in subsequent years will be budgeted in the Police Department General Fund budget.

COMMUNITY PILLAR

1: A Safe Community That Thrives

GOAL

2: Public Safety

ATTACHMENTS

1. Resolution

2. Exhibit A - Agreement

Prepared by: Deirdre Ramsey
Business Manager

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT WITH ALL CITY MANAGEMENT SERVICES, INC., FOR CROSSING GUARD SERVICES IN AN AMOUNT NOT-TO-EXCEED $1,516,644, FOR A FIVE-YEAR TERM

On August 8, 2005, the City Council adopted Resolution 2005-172 authorizing the City of Livermore ("City") to contract with a vendor to provide crossing guard services for the Livermore Valley Joint Unified School District, to free up Livermore Police Department staff and resources previously used to manage the crossing guard services. The current contract for crossing guard services expired on June 30, 2024. Crossing guards are supplied for both the regular school year and for the summer school program for a total estimated 8,100 hours of guard service per year.

On June 3, 2024, the City issued a Request for Proposals for crossing guard services. Two proposals were submitted, and after careful consideration and review of all submittals, All City Management Services, Inc. was selected as the best value for the award of a services agreement for crossing guard services due to their high qualifications and lower costs.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager, or her designee, to execute the Agreement for Services with All City Management Services, Inc., attached hereto as Exhibit A, in an amount not-to-exceed $1,516,644, for crossing guard services for the term of July 1, 2024, through June 30, 2029.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – All City Management Services Agreement

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AGREEMENT FOR SERVICES

THIS AGREEMENT is made and entered into this day of , 2024, by and between the City of Livermore ("City"), a municipal corporation, and All-City Management Services, Inc. ("Contractor"), a California corporation.

RECITALS

City requires services to provide crossing guard services at designated locations in the City of Livermore.

Contractor warrants it possesses the distinct skills, qualifications, experience, and resources necessary to timely perform the services described in this Agreement. Contractor acknowledges City has relied upon these warranties to retain Contractor.

AGREEMENT

NOW, THEREFORE, City and Contractor hereby agree that the aforementioned recitals are true and correct and further agree as follows:

1. Retention as Contractor. City hereby retains Contractor, and Contractor hereby accepts such engagement, to perform the services described in Section 3 below subject to the terms and conditions in this Agreement.

2. Relationship of Parties – Independent Contractors. The relationship of the parties shall be that of independent contractors. Contractor and its employees are not City officers or employees. Contractor is responsible for the supervision and management of its employees, including any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the delivery of the services contemplated by this Agreement.

3. Description of Services. Contractor shall provide services to provide professional crossing-guards at designated locations within the City of Livermore as more particularly set forth in Exhibit "A" (collectively "the Services").

4. Contractor's Responsibilities. Contractor shall:

(a) Diligently perform the Services in a manner commensurate with industry, professional, and community standards;

(b) Provide the resources necessary to complete the Services in a timely manner;

(c) Obtain a business license from the City of Livermore, and keep it in effect for the term of this Agreement;

(d) Obtain and keep in effect all necessary licenses, permits, qualifications, insurance, and approvals legally and professionally required for Contractor to practice its profession and to provide the Services;

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(e) Comply with all laws in effect that are related to Contractor and the Services;

(f) Coordinate the Services with the Chief of Police ("Project Manager"), or such other person designated as the Project Manager by City;

(g) Be available to the Project Manager, and other parties referred to Contractor by the Project Manager, to answer questions or inquiries related to the Services;

(h) Only invoice City for the Services rendered. Contractor's invoice shall be in writing and describe the Services performed for the payment requested. Contractor shall not submit an invoice to City more frequently than once a calendar month;

(i) Keep and maintain invoices and records related to the Services in an organized manner. At a minimum, the records must be kept for at least 3 years from the date of final payment to Contractor and must include time sheets, work progress reports, and other documentation to adequately explain all the Services invoiced for payment. Contractor shall make the invoices and records immediately available to City upon delivery of a written request to examine, audit, or copy them at City's place of business during normal business hours. Contractor shall give City 30 calendar-days' written notice prior to destroying the invoices and records and allow City an opportunity to take possession. If City wants them, Contractor and City shall coordinate their delivery to City in the most efficient manner possible;

(j) Prepare and submit a written report to the Project Manager, within 3 business-days of the Project Manager's written request, that identifies the Services completed and in progress, the charges incurred to date, and the anticipated cost to complete the remaining Services;

(k) Contractor shall correct, at its own expense, all errors in the Services. Should Contractor fail to make such correction in a timely manner, City may make the correction and charge the cost thereof to Contractor;

(l) If applicable, Contractor shall ensure that all work for compensation is taken in compliance with the requirements of the California Labor Code including but not limited to hours of labor, nondiscrimination, payroll records, apprentices, worker's compensation and prevailing wages. If applicable, Contractor shall comply with all prevailing wage laws, such as sections 1773, 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the California Labor Code and any other applicable wage and hour law. If any violation of prevailing wage law associated with this Agreement is deemed to have occurred by any court or administrative authority, Contractor shall forfeit to the City, as a penalty, the sum of fifty dollars ($50.00) for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the applicable prevailing rates for any work done to accomplish the purposes of this Agreement; and,

(m) Contractor's services provided pursuant to this Agreement shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as applicable regulations and guidelines issued pursuant to the ADA.

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5. Compensation and Payment.

(a) The total compensation payable by City to Contractor for the Services **SHALL NOT EXCEED** the sum of $1,516,644 ("not-to-exceed amount"). City shall compensate Contractor for the Services rendered at the hourly rates or task amounts set forth in Exhibit "A" up to the not-to-exceed amount. Except as provided in the body of this Agreement, the hourly rates or task amounts are intended to be Contractor's only compensation for the Services and is inclusive of all costs of labor, licensing, permitting, travel expenses, overhead and administrative costs, and any-and-all other costs, expenses, and charges incurred by Contractor, its agents, and employees to provide the Services.

(b) City shall pay Contractor no later than 30 days after City receives a written invoice from Contractor and verifies the Services were performed for the payment requested.

(c) Contractor may request a price increase during the term as a result of any legally-mandated increases in wages or benefits imposed in the state or municipality in which the Services are to be performed and to which Contractor's employees would be subject. The Contractor shall provide City with 60 days-notice of its request to increase pricing. City agrees to review and respond to said notice within 30 days of receipt.

6. Term. The term of this Agreement commences on July 1, 2024, and terminates upon the completion of the Services or June 30, 2029, whichever occurs first.

7. Termination by City. City may terminate any portion or all of the Services by giving Contractor at least 30 calendar days written notice. Upon receipt of a termination notice, Contractor shall immediately stop all work in progress on the Services except where necessary to preserve the benefit of the work, and assemble the work on the Services for delivery to City on the termination date. All compensation for Services performed prior to the termination date shall be payable to Contractor in accordance with Section 5.

8. Ownership of Documents. All drawings, designs, data, photographs, reports and other items prepared or obtained by Contractor in the performance of the Services are City's property and Contractor shall deliver them to City upon demand.

9. Copyright and Right of Use. All items created by Contractor for City under this Agreement are works made for hire, and Contractor shall give City the copyright and all intellectual property rights to all items developed, prepared, and delivered as part of the Services. Contractor agrees that all aspects of the Services and items created thereby will be original works of creation and will not use, in whole or in part, any work created by any other party, except when expressly disclosed by Contractor to City and Contractor obtains a license to such items for the benefit of City. All licenses must be perpetual, world-wide, non-exclusive, and royalty free sufficient in scope to permit City's full use and enjoyment of its ownership rights in the items created by the Services.

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10. Confidentiality. Contractor shall not disclose any confidential or proprietary information received from City to anyone except Contractor's employees who require access to the information to perform the Services. This obligation shall survive termination and remain in full force and effect until the information, and any copies thereof, are destroyed or returned to City.

11. Defense, Indemnity, and Hold Harmless. To the fullest extent permitted by law, Contractor shall hold harmless, indemnify, and defend with counsel selected by the City or otherwise acceptable to the City, the City and its elected and appointed officials, officers, directors, employees, agents and designated volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including reasonable, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the services contemplated by this Agreement, or in connection with Contractor's failure to comply with any of its obligations contained in this Agreement, except for such Liability caused by the sole active negligence or willful misconduct of City. Contractor's obligations to hold harmless, indemnify, and defend shall not be excused because of Contractor's inability to evaluate Liability or because Contractor evaluates Liability and determines that Contractor is not liable to the claimant. These obligations are independent of, and shall not in any way be limited by, the minimum insurance obligations contained in this Agreement. These obligations shall survive the completion or termination of this Agreement. Contractor must respond within 30 days to the tender of any claim for defense and indemnity by the City.

(a) Modification for Construction Contracts. To the extent this Agreement is a "construction contract" covered by California Civil Code section 2782, then Contractor's duty to indemnify shall not apply in a manner prohibited by California Civil Code section 2782.

(b) Modification for Design Professional Services. To the extent this Agreement is for "design professional services" defined in California Civil Code section 2782.8, then Contractor's duties to defend and indemnify shall only apply to the extent provided for in California Civil Code section 2782.8(a), unless section 2782.8(a) is not applicable for one of the reasons set forth in 2782.8(e).

12. Insurance. Contractor shall procure and maintain insurance during the term of this Agreement in the amounts and under the terms set forth in Exhibit "B" against claims that may arise from or in connection with this Agreement and performance of the Services. Upon reasonable written notice, Contractor shall comply with any changes in the amounts and terms of insurance as may be required from time-to-time by City's Risk Manager.

13. Acceptance of Final Payment. Contractor's acceptance of final payment will release City from any and all claims and liabilities for compensation under this Agreement.

14. Acceptance of Work. City's acceptance of, or payment to Contractor for, the Services does not release Contractor from its responsibility for the accuracy, completeness, or competency of the Services, nor do the actions constitute an assumption of Contractor's responsibility or liability by City for any defect or error in the Services.

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15. Conflict of Interest. Contractor represents that no City employee or official has a financial interest in Contractor. Contractor shall not offer, encourage, or accept any financial interest in any part of Contractor's business by or from a City employee or official during the term of this Agreement or as a result of being awarded this Agreement. If any of the Services are paid by reimbursement from an agreement between City and a private party, Contractor represents that it has not performed any work for that private party during the 12-month period prior to the execution of this Agreement, and that it shall not negotiate, offer or accept any contract for services from that party during the term of this Agreement.

16. Economic Disclosure. Contractor shall comply with City's local conflict of interest code and the Political Reform Act, and prepare and file an economic disclosure statement if the Services involve making, or participation in making, decisions which may have a material effect on the Contractors' financial interest. While it is Contractor's sole responsibility to evaluate its conflicts of interest, the Contractor nevertheless agrees to prepare and file an economic disclosure statement if requested by City.

17. Non-Exclusive Agreement. This is a non-exclusive agreement. City reserves the right to provide, and to retain other Contractors to provide, services that are the same or similar to the Services described in this Agreement.

18. No Assignment. Contractor shall not assign or subcontract any of the Services without City's prior written consent. For the purposes of this section, a change of fifty percent or more in the ownership or control of Contractor constitutes an assignment.

19. Remedies. All remedies permitted or available under this Agreement, or at law or in equity, are cumulative and alternative, and the invocation of a right or remedy will not be construed to waive or elect a remedy with respect to any other available right or remedy. As a condition precedent to commencing legal action involving a claim or dispute against City arising from this Agreement, the Contractor must present a written claim to City in accordance with Chapter 3.42 of the Livermore Municipal Code.

20. Construction of Language. The terms and conditions in this Agreement have been arrived at through negotiation and each party had a full and fair opportunity to review and revise this Agreement with legal counsel. Any ambiguity in this Agreement will not be resolved against either party as the drafting party. In the event of an inconsistency or conflict between the language in the body of the Agreement and an attachment hereto, the language in the body of the Agreement controls.

21. Entire Agreement; Modification. This Agreement supersedes all other agreements, whether oral or written, between the parties with respect to the Services. Any modification to this Agreement must be in writing and signed by both parties. In the event the original of this Agreement is lost or destroyed, an archival copy maintained by City can be used in place of the original for all purposes with the same effect as if it was the original.

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22. Notice. Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation:

TO CITY: Attention: Deirdre Ramsey
Livermore Police Department
1052 S Livermore Avenue
Livermore, California 94550

TO CONTRACTOR: Attention: Demetra Farwell
All-City Management Services, Inc.
10440 Pioneer Blvd, Suite #5
Santa Fe Springs, CA 90670

23. Waiver. Failure to insist upon the strict performance of any term or conditions in this Agreement, no matter how long the failure continues, is not a waiver of the term or condition and does not bar the right to subsequently demand strict performance. To be effective, a waiver must be in writing and signed by the non-breaching party.

24. Severability. If a court of competent jurisdiction determines a provision in this Agreement is invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force and effect without being impaired in any way.

25. Survival. The terms, conditions, and obligations in Sections 8, 9, 10, and 11 shall survive the completion or termination of this Agreement.

26. Electronic Signatures. By signing this document, you are agreeing that you have reviewed this disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

27. Counterparts. This Agreement may be executed and delivered in one or more counterparts, each of which will be deemed to be an original copy of this Agreement, and all of which, when taken together, will be deemed to constitute one and the same agreement. The facsimile, email, or other electronically delivered signatures of the Parties shall be deemed to constitute original signatures, and facsimile or electronic copies hereof shall be deemed to constitute duplicate originals and shall be valid and effective for all purposes.

****

Signatures and Attachment List on the Next Page

Docusign Envelope ID: D875E1CD-776B-43B5-A6B2-D1FD843860A2

In concurrence and witness whereof, and in recognition of the mutual consideration provided therefore, the parties have executed this Agreement, effective on the date first written above.

CONTRACTOR: **Dated:**

DocuSigned by:
Baron Farwell
4862F7364A514AD...

7/16/2024 | 12:45 PM PDT

By: Baron Farwell
Title: CEO, CFO

CITY OF LIVERMORE: **Dated:**

Marianna Marysheva
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Katherine Mirassou
D48B6A0C4F27411...

Deputy/Assistant/City Attorney

APPROVED AS TO INSURANCE:

DocuSigned by:
Amber Hatfield
12BC7F4B88224F8...

Risk Manager/Analyst

Attachments:

Exhibit A – Scope of Work
Exhibit B – Insurance Requirements

Docusign Envelope ID: D875E1CD-776B-43B5-A6B2-D1FD843860A2

EXHIBIT A

ALL CITY MANAGEMENT SERVICES

"The Crossing Guard Company"

A Proposal for
City of Livermore
RFP #23-353515
Crossing Guard Services

June 17, 2024

Presented by



David Mecusker; Marketing & Contracts Manager
10440 Pioneer Boulevard, Suite 5, Santa Fe Springs, CA 90670
OFFICE PHONE: 800.540.9290 FAX: 310.202.8325
EMERGENCY DISPATCH: 877.512.2267
www.thecrossingguardcompany.com

Docusign Envelope ID: D875E1CD-776B-43B5-A6B2-D1FD843860A2

ALL CITY MANAGEMENT SERVICES

June 11, 2024

City of Livermore
Olivia Mahedy, Administrator
Request for Proposal #24-353515
1110 S. Livermore Avenue, Livermore, CA 94550

Dear Ms. Mahedy:

On behalf of All City Management Services, Inc. **(ACMS)**, I would like to express our sincere appreciation for the potential opportunity to continue to serve the community of Livermore. We are proud to have managed the School Crossing Guard program for the City of Livermore for nineteen (19) years.

We have received the Bid Proposal with services to begin on or around July 1, 2024. We have reviewed the Scope of Work, General Conditions and General Services Agreement. We acknowledge the City has requested the awarded vendor to sign the GSA without modification. Based upon a comprehensive review of the Bid Proposal with Exhibits, we agree with the terms and conditions set forth with the following exceptions to Exhibit A and Exhibit C.

Exhibit A: General Services Agreement; Section 5 – Compensation and Payment A, we would like to request a slight revision to this section. GSA; Section 7; Termination by City, we would like both parties to have the option for early termination, if needed. GSA; Section 11 – Defense, Indemnity, and Hold Harmless, we would like to have this section include shared liability.

Exhibit C: Insurance Requirements, we would like to discuss a revision to the General Liability per occurrence and Auto Liability per occurrence limits. Please see our exceptions pages included in our bid response for additional information.

Our goal is simple, to continue to relieve the City of Livermore of the day-to-day responsibilities of managing a Crossing Guard Program. As your full services contractor, we assume complete responsibility for the day to day operations of the Crossing Guard programs we manage. This includes recruitment, background clearance, hiring, training, equipment, payroll, supervision, and management of the program.

We maintain local supervision, alternate guards, a paging system, and a 24-hour 800 number to ensure adequate response and immediate back-up for any Crossing Guard absent from duty for any reason. We also will continue to establish communication with each school in the City of Livermore program to ensure proper scheduling.

10440 Pioneer Blvd Suite 5 • Santa Fe Springs, Ca 90670 • 310-202-8284 • 800-540-9290 • FAX 310-202-8325

Docusign Envelope ID: D875E1CD-776B-43B5-A6B2-D1FD843860A2

We have become the nation's largest provider of private crossing guards as a result of our singular focus to this industry as well as the development of benchmark training. This includes our **"Employee Handbook for School Crossing Guards"** which details our Job Requirements, the initial and ongoing Training we provide, including our Site Evaluations, our Rules of Conduct, Crossing Guard of the Year recognition and the Certification Requirements for all ACMS Crossing Guards.

We are certainly excited about the possibility of continuing to provide Crossing Guard services for the City of Livermore. If you have any questions, please feel free to contact me at 800 540-9290.

Sincerely,

David Mecusker
Marketing & Contracts Manager
david@thecrossingguardcompany.com

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ALL CITY MANAGEMENT SERVICES

COMPANY PROFILE

All City Management Services, Inc. (ACMS), is a California based Corporation founded in 1985. We are the largest provider of School Crossing Guard services, managing both large and small Crossing Guard Programs. We currently have over 8,500 employees dedicated to safety, serving cities, towns, communities, schools, and school districts nationwide.

One defining issue that distinguishes **ACMS** is that we are the only company that *exclusively* provides School Crossing Guard Services. It is our commitment to limiting the scope and focus of the company to School Crossing Guards that has helped us emerge as ***"The Crossing Guard Company"***. We have successfully privatized the Crossing Guard programs for over 310+ agencies. Ultimately our clients become the beneficiaries of our single-minded approach toward this industry.

The heart of our business is in assuming responsibility for the task and challenges of conducting a successful Crossing Guard Program. Toward that end, in our typical contractual arrangement we assume responsibility for; recruitment, local hiring, background clearance compliant with Department of Justice standards, initial and ongoing training, payroll and administrative support functions, coordination of assigning qualified substitutes during absences, local supervision, complaint investigation and resolution, communicating with schools and site safety inspections.

One of the benefits we bring to any agency is our expertise in overseeing a seamless transition from public to private management of the program. The continuity of the Crossing Guards' employment is a key component of a seamless transition. We value the experience and understanding of the Crossing Guards currently working in each program we manage. Much of our success with individual programs is a result of the experience and knowledge these Crossing Guards bring to our management.

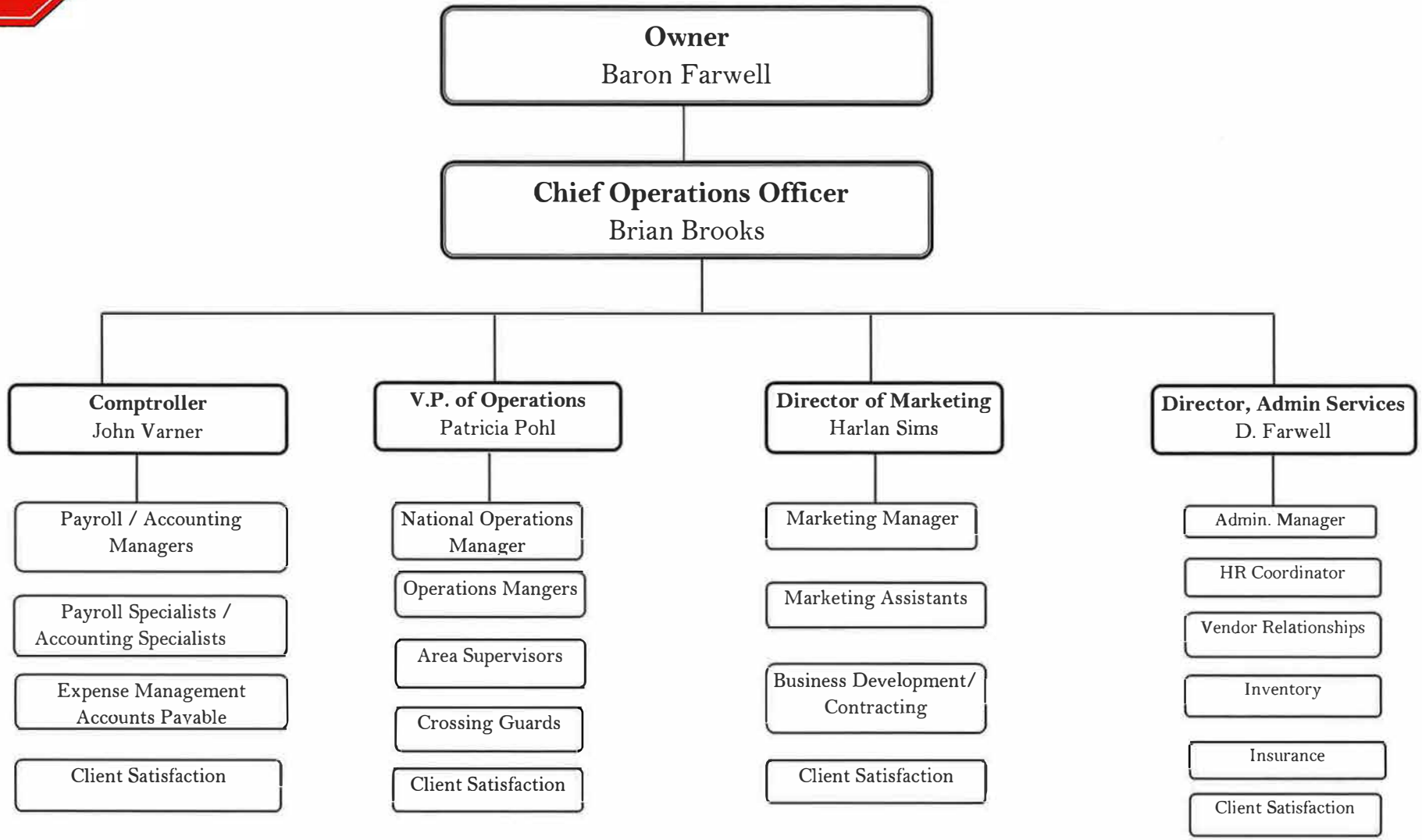
With over 36 years of experience, **ACMS** leads the Crossing Guard Industry in the development of Crossing Guard standards for training, supervision, and safety. Each program we have taken on has brought a unique set of issues and challenges. The heart of our success has been our ability to articulate these challenges and experiences into our training, policies, and procedures to benefit all Crossing Guards in all the cities, towns, and communities we service.

All City Management Services, Inc. has not lost a client agency due to failure or refusals to complete a contract and has not lost a client agency due to the level of service provided.

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EXHIBIT A

ALL CITY MANAGEMENT SERVICES



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EXHIBIT A

ALL CITY MANAGEMENT SERVICES

City of Livermore

Vice President of Operations
Patricia Pohl
310 877 7045 cell
pat@thecrossingguardcompany.com

National Operations Manager
Kim Brooks
913 333 2563 cell
kim@thecrossingguardcompany.com

Operations/Program Manager
Alan Stone
415 844 0223 cell
alan@thecrossingguardcompany.com

Area Supervisor
Yuan Zhou
925 436 9977 cell
yuan@thecrossingguardcompany.com

Up to 15 Crossing Guards

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Field Management Personnel

The most significant resources ACMS brings to any Crossing Guard program is the depth and scope of **management** provided by the years of experience brought by our operational management team. The community serviced by the City of Livermore will continue to benefit from a team concept which consists of Area Supervisor, Program Manager, National Operations Manager and Vice President of Operations. Each Member of our management team is available 24 hours a day via cellular telephone. The following is a brief synopsis of the respective duties of each.

Area Supervisor (Yuan Zhou): Yuan will continue to serve as **Area Supervisor,** he will handle all aspects of the daily supervision of the program of fifteen (15) Crossing Guards and alternate pool. With support from the Regional Manager, he will typically recruit, hire, train and provide personnel management for all the sites he oversees and interfaces with school staff as needed. In addition to communicating with the School staff, he is responsible for ensuring each employee receives the proper number of Site Performance Evaluations and completes the Certification mandates. Yuan will be available by telephone on all occasions for discussion with staff and will be locally available for meetings in person upon 24-hour written or telephonic notice. Yuan Zhou reports directly to the Regional Manager.

Regional Manager (Alan Stone): Alan will continue to serve as **Regional Manager** and directly manage your Area Supervisor and provide training and support. He will also interface with the City representatives and School staff as needed. He will continue to assist in the hiring of the Area Supervisor and Crossing Guards as well as the development and implementation of training programs and certification standards. Alan has considerable experience as a Regional Manager including programs in City of Benicia, City of Los Altos, County of Alameda, Antioch Unified School District, and Marin County Transportation Authority. He will ensure compliance with Company standards and the City's expectations. Alan Stone reports directly to the National Operations Manager.

National Operations Manager (Kim Brooks): Kim has over 6 years in the industry providing field management and support for ACMS. She is responsible for the development and implementation of operational standards, training programs, safety instruction and compliance with all legal requirements and restrictions. Works directly with Vice President of Operations to ensure all program standards are being met. Kim has extensive experience implementing and managing comparable and larger programs. She is responsible for initial training and orientation for all new client programs. Kim Brooks reports directly to Vice President of Operations.

Vice President of Operations (Pat Pohl): Pat has over 27 years of industry experience. She is responsible for overall contract compliance. Works with the National Operations Manager on the development of training programs and implementation of safety standards. Coordinates the flow of information between operations and administrative staff.

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Approach and Management Plan

ACMS employs a Team Concept of management which results in efficient field operations as well as providing a multifaceted response to potential problems. The Vice President of Operations and National Operations Manager will continue to work together with input from the City of Livermore to establish specific program objectives and expectations. These Senior Managers then work directly with your Regional Manager and Area Supervisor to implement the management plan.

The Regional Manager along with your local Area Supervisor has responsibility for the direct management of the Crossing Guards and together they will ensure the City's operational expectations are met. Standards and expectations are communicated to Crossing Guards personally by their local supervisor so as to allow the employee a better understanding of the decision-making process. This helps reduce confrontational attitudes by establishing and enhancing the common goal of providing for the safety of school children.

Crossing Guard performance and compliance with safety standards will continue to be accomplished through regular site visits by the local Area Supervisor and Regional Manager. In addition to verbal training and counseling, these managers are supported by the use of **Field Training Check Lists, Field Training Cards, Site Performance Evaluations,** and independent Field Observations. Reports of satisfactory completion of all levels of training and ongoing safety reviews will be summarized and available to the City representative.

Background checks will be completed on all potential employees as allowed by California state law. Successful completion of the live-scan fingerprint based criminal background check, former employer reference check, and Security verification via E-Verify is required prior to the employee being hired. ACMS will comply within the Equal Employment Opportunity Commission guidelines when making hiring decisions based on criminal records.

After pre hire screening ACMS may conduct random field testing for drugs and or alcohol when use is suspected or at the discretion of management. ACMS has a strict policy on Drug and Alcohol abuse. This policy is included in our School Crossing Guard Employee Manual.

Internal minimum passing standards along with the City's established standards would prevent any person from working as a Crossing Guard for the program who has been convicted of any crime of moral turpitude or a crime against children, including, but not limited to:

- Conduct in violation of California Penal Code or which requires registration under California Penal Code
- Conduct which requires registration under the California Health and Safety Code.
- Any offense involving the use of force or violence upon another person.

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- Any offense involving theft, fraud, dishonesty, or deceit.
- Any offense involving the manufacture, sales, possession, or use of a controlled substance.
- Conspiracy or attempt to commit any of the aforementioned offenses.
- Any registered sex offender or narcotics offender.

ACMS will investigate all public complaints concerning crossing guard services. All incidents shall be reported to the City within two (2) hours to advise them of the nature of the complaint. ACMS shall furnish a written report within five (5) business days after the date of the incident, which includes the course of action/remedy/resolution of said complaint.

Communications with individual school sites is facilitated by the Field Supervisor. Personal visits are made regularly (minimum quarterly) to each school site in an effort to develop relationships with staff and establish a collaborative environment for information exchange. Calendars and bell schedules are obtained for each school both at the beginning of the school year and periodically throughout the year. Key school personnel are supplied with appropriate contact information (business cards) and reminded to inform ACMS of any changes. Additionally, schools are provided with large magnets which can be easily displayed, making contact information effectively available to all staff. The email address of the Office Manager is also obtained which enables ACMS administrative support staff to regularly contact each school and proactively solicit information regarding potential schedule changes.

The establishment of accurate and responsive shift times is critical to the effectiveness of Crossing Guard services. Sites further from the school would be expected to start earlier in the morning and finish later in the afternoon. These staggered shifts effectively address the time it takes for students to walk from a remote location to the school site (or vice versa in the afternoon) and optimize the protected periods. Additionally, locations are continually monitored for actual pedestrian traffic patterns enabling a better understanding of site needs and any potential deviation from established guidelines.

ACMS Area Supervisors are in the field daily when crossings are covered by the guards, and they ensure all guards arrive on time and are ready for duties as scheduled. ACMS has developed a Crossing Guard "App" that is geo-fenced, which only allows guards to clock in once they are actually on site. This "App" will indicate when a crossing guard is on site and more importantly, allows ACMS to quickly identify when a guard is not on site. This "App" will allow ACMS to not only quickly determine where staffing efforts are needed most but will also improve our billing and invoicing accuracy. Our billing/invoicing is tied to our payroll and by having a more efficient process for timekeeping, should eliminate potential billing inaccuracies.

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Recruitment and Staffing

ACMS Managers would assess additional **staffing** needs of the program after meeting with your agency and again following our initial orientation and training meeting. We would then focus further recruitment efforts in the geographical areas where additional Crossing Guards will be needed.

We have developed a comprehensive plan for **the recruitment** of new Crossing Guards. As a part of our Staffing strategy, we encourage a very aggressive recruitment program. We utilize soft advertising, local media advertising, targeted flyers, on-site solicitation, school flyers and employee referral bonuses as parts of our overall recruitment strategy. We often work closely with school districts in some of our recruitment drives.

Our ability to effectively staff a Crossing Guard Program remains a fundamental benefit that ACMS brings to most Crossing Guard Programs. Staffing sites is one of the primary responsibilities of the Area Supervisors. They are trained to continuously recruit and train prospective Crossing Guards. New recruits are first processed and submitted to the Department of Justice for background clearance.

Supervisors are also responsible for coordinating the staffing for all sites under their supervision. As part of our staffing strategy Area Supervisors aggressively enforce the following policies and procedures for Crossing Guards.

- Supervisors must maintain an adequate alternate or substitute guard roster. We encourage at least a 5 to 1 ratio of sites versus alternate guards.

- We require any guard not reporting for duty to notify the Area Supervisor as early as possible utilizing our 24/7 Guard Hotline or directly notifying their Area Supervisor. Notifications less than 1 hour prior to shift starts are considered unexcused absences.

- Our employee policy is "No call, No show, No Job" Throughout our training we emphasize the importance of ensuring the safety of children with our presence. As such, we cannot allow the children's safety to be compromised by failing to call or no show for duty.

Supervisor Teams – The Livermore crossing guard program would continue to benefit from our presence in nearby cities such as: City Pleasanton, City of Dublin, and City of Fremont, and City of Tracy. Area Supervisors are grouped together by their geographic location. These Teams meet every quarter and team members are encouraged to work together. This cooperative effort allows them to share alternate guards with each other. This has resulted in alternates guards getting more hours as they are “shared” with other Supervisors. Consequently, we are able to retain a more stable group of alternate guards.

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Employee Retention: To enhance employee satisfaction and support our retention efforts, ACMS reviews guards wage rates annually in an effort to continually remain competitive in the local labor market. If contractual and budget requirements allow; we plan to offer a small wage increase annually based upon performance and tenure.

We also provide publicized employee recognition through our Crossing Guard of the Year programs and Length of Service Awards. Additionally, we provide local Area Supervisors with a small budget for employee socials.

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Training

Effective initial and ongoing training is essential in a profession dedicated to the safety of children. With over 38 years of experience and a commitment to working cooperatively with other public safety professionals, ACMS is recognized as an industry leader in the development and implementation of School Crossing Guard training and standards of excellence.

The process begins during the first contact with a potential employee when our phone interview process outlines job expectations and our zero-tolerance policy for failure to report for a scheduled shift. Throughout the application process prospective employees are reminded about the critical nature of our assignments and the work ethic and integrity required of our employees.

Once hired, the training process starts in the classroom where employees review sections of the ***"Employee Handbook for School Crossing Guards"***. The process then moves to a field practicum where the trainer demonstrates proper procedures and allows the employee to practice correct techniques. The employee's progress is closely noted on the detailed steps outlined on the **Field Training Check List** to ensure the employees' field competence. This cross-modality approach not only exposes the employee to the necessary training components but also addresses the needs of the visual, auditory, and kinesthetic learner. While the classroom setting is expected to require approximately one hour and the field training approximately two hours, it's important to note that the low ratio of students to trainer allows for accurate assessments of the employees readiness to move forward.

The new employee is typically assigned to alternate work and closely supervised during their early assignments. They benefit from their trainer completing a written assessment of their work which better allows them to understand their strengths and weakness and make improvements where necessary (the **Site Performance Evaluation**). Additionally, all new employees are required to carry and regularly refer to the **Field Training Cards**. This pocket-sized card (listing all steps for a safe cross) allows the employee to self-evaluate their performance prior to the time they have all steps of the procedures memorized.

Throughout their employment, employees are subjected to the same Site Performance Evaluation as an ongoing training and assessment tool. These evaluations happen in both side-by-side sessions as well as unannounced observations without the knowledge of the employee.

The standard issue equipment and clothing includes:

- ANSI II compliant high-visibility retro-reflective vest marked with the required insignia of a Crossing Guard
- MUTCD compliant 18" STOP/STOP paddle
- Picture Identification Card with emergency contact information
- Company-issued cap or visor with corporate logo
- Whistle for emergency alert to vehicles and pedestrians
- High-visibility ANSI II compliant wind-breaker jacket

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ALL CITY MANAGEMENT SERVICES

Proposed Hourly Rate

As a full service contractor, the hourly rate quoted is a fully loaded rate, meaning all of our costs are included in the proposed hourly billing rate. This would include but be not limited to; recruitment, background clearance, training, equipment, insurance, supervision and management of the City of Livermore, CA Crossing Guard Program.

Proposed Hourly Rate 2024/2025: Thirty-four Dollars and Fifty-nine Cents ($34.59) per hour, per guard. This pricing is based upon 15 crossing guards compensated an average of 3.0 hours per day, for 180 school days annually. Local field supervision and substitute guards are also included in the rate, as are all other costs except as noted below. Based upon 8,100 hours, we project a Not to Exceed Price of $280,179.

Proposed Hourly Rate 2025/2026: Thirty-five Dollars and Eighty-six Cents ($35.86) per hour, per guard. Based upon 8,100 hours, we project a Not to Exceed Price of $290,466.

Proposed Hourly Rate 2026/2027: Thirty-seven Dollars and Fifty-six Cents ($37.56) per hour, per guard. Based upon 8,100 hours, we project a Not to Exceed Price of $304,236.

Proposed Hourly Rate 2027/2028: Thirty-eight Dollars and eighty-four Cents ($38.84) per hour, per guard. Based upon 8,100 hours, we project a Not to Exceed Price of $314,604.

Proposed Hourly Rate 2028/2029: Forty Dollars and Thirty-nine Cents ($40.39) per hour, per guard. Based upon 8,100 hours, we project a Not to Exceed Price of $327,159.

Invoices for services are mailed every two weeks. Included with each invoice is a Work Summary, which details each site, each day and the hours worked at that site. City of Livermore would only be billed for Crossing Guard services rendered on designated "school days" unless otherwise requested by the City.

The hourly rate does not include additional safety equipment, crosswalk delineators, cones or safety devices. If the City should desire any such additional equipment the additional cost would be billed to the City.

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Crossing Guard Locations

Provide one Crossing-Guard at each location listed below to assist pedestrians in safely crossing City streets:

1. East Avenue at Estates Street
2. Livermore Avenue at Junction Avenue/Elm Street
3. Portola Avenue at Enos Way
4. El Caminito at Wagoner Drive
5. Garaventa Ranch Road at Hawk Street
6. Olivina Avenue at Albatross Avenue
7. Jack London Boulevard at Arlington Road
8. Concannon Boulevard at El Padro Drive
9. Frankfurt Way at Warsaw Avenue
10. Murdell Lane at mid-block crosswalk
11. El Caminito at El Padro Drive
12. Irene Way at Diane Lane
13. Junction Avenue at Chestnut Street
14. Scenic Avenue at Mount Diablo Way
15. North Vasco at Garaventa Ranch Road

Each site shall be staffed every school day for 1.5 hours each morning prior to school start times and 1 hour each afternoon at school release times, including selected summer school sites. The City will notify the contractor in advance of selected summer school locations.

The City reserves the right to add, delete, or revise the schedule or locations at any time with a 30-day notification.

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EXHIBIT B

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Consultant/Contractor shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $5,000,000 per occurrence/**$10,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $2,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Consultant/Contractor is a sole proprietor, then they must sign "Contractor Release of Liability."

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Consultant/Contractor; or automobiles owned, leased, hired or borrowed by the Consultant/Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or volunteers.

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2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Consultant's/Contractor's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or volunteers.
4. The Consultant's/Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Consultant/Contractor shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before work commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.17**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Jeramy Young, Police Chief

SUBJECT: Resolution authorizing acceptance of funds in the amount of $64,074, for a State of California Department of Alcoholic Beverage Control grant in Fiscal Year 2024-25 and authorizing the City Manager to execute the grant agreement.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution:

1. Authorizing acceptance of funds, in the amount of $64,074, for a State of California Department of Alcoholic Beverage Control grant in Fiscal Year 2024-25;
2. Authorizing the City Manager to execute the grant agreement; and
3. Approving a supplemental appropriation of $64,074 in the Police Department's budget to support the execution of the grant.

SUMMARY

The Police Department applied for, and was awarded, a grant from the State of California Department of Alcoholic Beverage Control in the amount of $64,074. Authorized expenditures are categorized in the following areas:

1. Identify and target problematic ABC licensed establishments. Conduct IMPACT Inspections and Operations, Minor Decoy Operations, and General Enforcement) - Measure efforts, impact, and outcome through data-based tracking.
2. Staff ABC specific overtime positions for Special Events. Officers to conduct General Enforcement Operations, Inspections, LEAD Training before major events. - Measure efforts, impact, and outcome through data-based tracking.
3. Press Releases, Public Service Announcements, Social Media Communications and Promotions, Community and Business Outreach Meetings, through the use of Livermore PD's Public Information Officials and Community Outreach Unit. - Monitor, document, and report upon engagement analytics through varying platforms.
4. LEAD Training hosted through our Training Unit and host site amenities.
5. Provide briefing trainings to general patrol staff for better knowledge and implementation on ABC

laws. This would be done at least twice through the grant period. Training will focus on applicable laws and investigative steps required for successful prosecution.

DISCUSSION

The Livermore Police Department is fully committed to education and enforcement efforts related to the responsible sale and consumption of alcoholic beverages. The requirements of the grant will be met through ABC licensee premise inspections, minor decoy operations, staff training/development, public awareness efforts, community communication, and general enforcement activities.

FISCAL AND ADMINISTRATIVE IMPACT

Funding for this grant was not included in the FY 2024-25 budget because the grant opportunity was not present during the budget planning period. A $64,074 appropriation to the Police Department's FY 2024-25 budget will be required; however, the grant will be received on a reimbursement basis from the State of California. There is no City required match and no financial obligation beyond the grant period. Administrative reporting to the Department of Alcoholic Beverage Control will be handled by the Downtown Area Officer, under the supervision of the Crime Prevention Unit Sergeant and Lieutenant.

COMMUNITY PILLAR

1: A Safe Community that Thrives

GOAL

2: Provide proactive and effective public safety and crime prevention through direct enforcement, education, and partnerships.

ATTACHMENTS

1. Resolution
2. Exhibit A - Grant Agreement

Prepared by: Deirdre Ramsey
Business Manager

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING RECEIPT OF FUNDS IN THEAMOUNT OF $64,074 FOR THE STATE OF CALIFORNIA DEPARTMENT OF ALCOHOLIC BEVERAGE CONTROL GRANT AWARD AND AUTHORIZING EXECUTION OF THE GRANT AGREEMENT

The City of Livermore has been awarded $64,074 in grant funds from the State of California Department of Alcoholic Beverage Control (ABC) to further its commitment to education and enforcement efforts related to the responsible sale and consumption of alcoholic beverages.

The City of Livermore Police Department intends to utilize the grant funds to conduct minor decoy operations, raise public awareness regarding ABC laws, conduct ABC law-related general and holiday-specific enforcement efforts, and inspect ABC licensed establishments.

Funding for this grant must be appropriated in the FY 2024-25 budget and will be received on a reimbursement basis from the State of California.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby authorizes the receipt of State of California Department of Alcoholic Beverage Control grant funds, in the amount of $64,074 for Fiscal Year 2024-25, consistent with the terms and conditions of the grant and authorizes a supplemental appropriation in the amount of $64,074 for FY 2024-25.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager, on behalf of the City of Livermore, to execute the grant agreement, attached hereto as Exhibit A, for receipt of grant funds from the State of California Department of Alcoholic Beverage Control.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A - Department of Alcoholic Beverage Control Grant Agreement

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SCO ID: 2100-24APP19

EXHIBIT A

STATE OF CALIFORNIA - DEPARTMENT OF GENERAL SERVICES

STANDARD AGREEMENT

STD 213 (Rev. 04/2020)

AGREEMENT NUMBER	PURCHASING AUTHORITY NUMBER (If Applicable)
24-APP19	ABC-2100

1. This Agreement is entered into between the Contracting Agency and the Contractor named below:

CONTRACTING AGENCY NAME
Department of Alcoholic Beverage Control

CONTRACTOR NAME
City of Livermore through the Livermore Police Department

2. The term of this Agreement is:

START DATE
July 1, 2024

THROUGH END DATE
June 30, 2025

3. The maximum amount of this Agreement is:
$64,074.00 Sixty four thousand seventy four dollars and no cents

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

Exhibits	Title	Pages
Exhibit A	Scope of Work	2
Exhibit B	Budget Detail and Payment Provisions	3
Exhibit C *	General Terms and Conditions	4
Exhibit D	Special Terms and Conditions	1

Items shown with an asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto.
These documents can be viewed at https://www.dgs.ca.gov/OLS/Resources

IN WITNESS WHEREOF, THIS AGREEMENT HAS BEEN EXECUTED BY THE PARTIES HERETO.

CONTRACTOR

CONTRACTOR NAME (if other than an individual, state whether a corporation, partnership, etc.)
City of Livermore through the Livermore Police Department

CONTRACTOR BUSINESS ADDRESS	CITY	STATE	ZIP
1110 S. Livermore Avenue	Livermore	CA	94550

PRINTED NAME OF PERSON SIGNING	TITLE
Maryanna Marysheva	City Manager

CONTRACTOR AUTHORIZED SIGNATURE	DATE SIGNED

STATE OF CALIFORNIA

CONTRACTING AGENCY NAME
Department of Alcoholic Beverage Control

CONTRACTING AGENCY ADDRESS	CITY	STATE	ZIP
3927 Lennane Drive	Sacramento	CA	95834

PRINTED NAME OF PERSON SIGNING	TITLE
Pattye Baker	Chief, Business Management Branch

CONTRACTING AGENCY AUTHORIZED SIGNATURE	DATE SIGNED

CALIFORNIA DEPARTMENT OF GENERAL SERVICES APPROVAL	EXEMPTION (If Applicable)

APPROVED AS TO FORM

DocuSigned by:
Katherine Mirassou
D48B6A0C4F27411...

APPROVED AS TO INSURANCE

DocuSigned by:
Amber Hatfield
12BC7F4D88224F6...

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EXHIBIT A
SCOPE OF WORK

I. SCOPE OF WORK

- Contractor agrees to implement the Department of Alcoholic Beverage Control (ABC), Alcohol Policing Partnership program. This program is intended to work with law enforcement agencies to develop an effective, comprehensive and strategic approach to eliminate the crime and public nuisance problems associated with problem alcoholic beverage outlets.

- Contractor agrees to implement ABC's Minor Decoy, Shoulder Tap Programs and conduct Informed Merchants Preventing Alcohol-Related Crime Tendencies (IMPACT) Inspections. These programs target both ABC licensed premises and individuals who furnish alcoholic beverages to the underage operators. The project is targeted to reduce underage drinking and the resultant DUI driving injuries and fatalities, and/or property damages, reduce youth access to alcoholic beverages through the education of licensee(s), enforcement intervention and the impressions of omnipresence of law enforcement. In addition, Contractor agrees to the following goals:

  1. The operation period of the grant is July 1, 2024 through June 30, 2025.

  2. Contractor agrees to raise public awareness that selling, serving and/or furnishing alcoholic beverages to individuals under twenty-one years old is a criminal violation that will be prosecuted by local city and district attorneys.

  3. Minor Decoy operations are designed to educate and deter licensed locations from selling/furnishing alcohol to minors. Contractor agrees to conduct Minor Decoy Operations at both "On-Sale" and "Off-Sale" licensed establishments within the operation period of the grant.

  4. Shoulder Tap operations are used to detect and deter adult furnishers outside of a licensed business. Contractor agrees to conduct Shoulder Tap Operations at "Off-Sale" licensed locations to apprehend adults that are unaffiliated with the licensed businesses and who are purchasing alcohol for minors outside of the stores within the operation period of the grant.

  5. Informed Merchants Preventing Alcohol-Related Crime Tendencies (IMPACT) primary goal is to educate licensee's on alcohol related laws to help reduce alcohol-related crime in and around licensed premises. Contractor agrees to conduct visits and inspections of licensed premises identifying areas of non-compliance at "On-Sale" and "Off-Sale" licensed locations within the operation period of the grant.

II. GOALS AND OBJECTIVES

1. Conduct at least four (4) Minor Decoy operations.

2. Conduct at least four (4) IMPACT operations.

3. Conduct at least four (4) General Enforcement operations.

4. Conduct at least four (4) Special Event operations (Rodeo/Half marathon, Beerfest, car show)

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5. Conduct at least two (2) Community Outreach meetings.

6. Conduct at least eight (8) Briefing trainings.

7. Host at least one (1) LEAD training.

8. Provide at least two (2) press/social media releases on grant enforcement activities.

    A. To announce the start of the program;
    B. At the conclusion of each Minor Decoy Operation has been held (to announce the number of licensed premises who sold to the minor decoy)
    C. At the conclusion of each Shoulder Tap Operation has been held (to announce the number of adults arrested for purchasing alcoholic beverages for the decoy).

8. Contractor will fax (916) 419-2599 or email each press release to the Department's Public Information Officer (pio@abc.ca.gov) as soon as it is released.

9. Contractor agrees in all press releases, in addition to any credits the agency wishes to give, will include the following statement: "This project is part of the Department of Alcoholic Beverage Control's Alcohol Policing Partnership."

Contractor agrees to complete and submit monthly reports, on a format designed and provided by the Department of Alcoholic Beverage Control due no later than 15th of the following month.

III. PROJECT REPRESENTATIVES

The project representatives during the term of this agreement will be:

Livermore Police Department
Matt Williams, Sergeant
1110 S. Livermore Avenue
Livermore, CA 94550
(925) 371-4973
mwilliams@livermoreca.gov

Department of Alcoholic Beverage Control
Brandon Shotwell, Supervising Agent in Charge
3927 Lennane Drive, Suite 100
Sacramento, CA 95834
(916) 419-2329
Brandon.shotwell@abc.ca.gov

Direct all fiscal inquiries to:

Livermore Police Department
John Reynolds, Captain
1110 S. Livermore Avenue
Livermore, CA 94550
(925) 371-4715
jreynolds@livermoreca.gov

Department of Alcoholic Beverage Control
Kristine Okino, Grant Coordinator
3927 Lennane Drive, Suite 100
Sacramento, CA 95834
Kristine.okino@abc.ca.gov

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EXHIBIT B
BUDGET DETAIL AND PAYMENT PROVISIONS

I. INVOICING AND PAYMENT

- For services satisfactorily rendered and upon receipt and approval of the invoice, the Department of Alcoholic Beverage Control agrees to pay a monthly payment of approved reimbursable costs per the Budget Detail of personnel overtime and benefits (actual cost) and/or allowable costs.

- Invoices shall clearly reference this contract number (24-APP19) and must not exceed the contract total authorized amount of $64,074.00. Invoices are to be submitted by the 15th of every month, on the prescribed form designed by the Department of Alcoholic Beverage Control.

Submit to: Department of Alcoholic Beverage Control
Attn: Kristine Okino, Grant Coordinator
3927 Lennane Drive
Sacramento, California 95834

- Payment shall be made in arrears within 30 days from the receipt of an undisputed invoice. Nothing contained herein shall prohibit advance payments as authorized by Item 2100-101-3036, Budget Act, Statues of 2024.

- Contractor understands in order to be eligible for reimbursement; cost must be incurred on or after the effective date of the project, July 1, 2024 and on or before the project termination date, June 30, 2025.

- Revisions to the “Scope of Work” and the “Budget Detail” may be requested by a change request letter submitted by the Contractor. If approved, the revised Grant Scope of Work and/or Budget Detail supersedes and replaces the previous grant and will initiate an amendment. No revisions can exceed allotted amount as shown on the Budget Detail. The total amount of the grant must remain unchanged.

- Contractor agrees to refund to the State any amounts claimed for reimbursement and paid to Contractor which are later disallowed by the State after audit or inspection of records maintained by the Contractor.

- Only the costs displayed in the Budget Detail are authorized for reimbursement by the State to Contractor under this agreement. Any other costs incurred by Contractor in the performance of this agreement are the sole responsibility of Contractor.

- Title shall be reserved to the State for any State-furnished or State-financed property authorized by the State which is not fully consumed in the performance of this agreement. Contractor is responsible for the care, maintenance, repair, and protection of any such property. Inventory records shall be maintained by Contractor and submitted to the State upon request. All such property shall be returned to the State upon the expiration of this grant unless the State otherwise directs.

- Prior approval by the State in writing is required for the location, costs, dates, agenda, instructors, instructional materials, and attendees at any reimbursable training seminar, workshop or conference, and over any reimbursable publicity or educational materials to be made available for distribution. Contractor is required to acknowledge the support of the State whenever publicizing the work under this grant in any media.

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II. BUDGET DETAIL

COST CATEGORY	TOTAL COST
A. Personnel Services	
Overtime	
Officers ($101.11/hourly)	$40,038.00
Sergeant ($125.80/hourly)	$21,386.00
Benefits – n/a	$0.00
TOTAL Personnel	**$61,424.00**
B. Operating Expenses (receipts required)	
n/a	$0.00
TOTAL Operating	**$0.00**
C. Equipment (receipts required, must be purchased by 12/31)	
n/a	$0.00
TOTAL Equipment	**$0.00**
D. Travel Costs	
Registration, lodging, per diem	$2,650.00
TOTAL Travel	**$2,650.00**
GRANT TOTAL	**$64,074.00**

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III. BUDGET CONTINGENCY CLAUSE

- It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to Contractor or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of this Agreement.

- If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an agreement amendment to Contractor to reflect the reduced amount.

IV. PROMPT PAYMENT CLAUSE

- Payment will be made in accordance with, and within the time specified in, Government Code Chapter 4.5, commencing with Section 927.

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EXHIBIT C
GENERAL TERMS AND CONDITIONS

1. APPROVAL: This Agreement is of no force or effect until signed by both parties and approved by the Department of General Services, if required. Contractor may not commence performance until such approval has been obtained.

2. AMENDMENT: No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties and approved as required. No oral understanding or Agreement not incorporated in the Agreement is binding on any of the parties.

3. ASSIGNMENT: This Agreement is not assignable by the Contractor, either in whole or in part, without the consent of the State in the form of a formal written amendment.

4. AUDIT: Contractor agrees that the awarding department, the Department of General Services, the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. Contractor agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this Agreement. (Gov. Code §8546.7, Pub. Contract Code §10115 et seq., CCR Title 2, Section 1896).

5. INDEMNIFICATION: Contractor agrees to indemnify, defend and save harmless the State, its officers, agents and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Contractor in the performance of this Agreement.

6. DISPUTES: Contractor shall continue with the responsibilities under this Agreement during any dispute.

7. TERMINATION FOR CAUSE: The State may terminate this Agreement and be relieved of any payments should the Contractor fail to perform the requirements of this Agreement at the time and in the manner herein provided. In the event of such termination the State may proceed with the work in any manner deemed proper by the State. All costs to the State shall be deducted from any sum due the Contractor under this Agreement and the balance, if any, shall be paid to the Contractor upon demand.

8. INDEPENDENT CONTRACTOR: Contractor, and the agents and employees of Contractor, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of the State.

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9. RECYCLING CERTIFICATION: The Contractor shall certify in writing under penalty of perjury, the minimum, if not exact, percentage of post-consumer material as defined in the Public Contract Code Section 12200, in products, materials, goods, or supplies offered or sold to the State regardless of whether the product meets the requirements of Public Contract Code Section 12209. With respect to printer or duplication cartridges that comply with the requirements of Section 12156(e), the certification required by this subdivision shall specify that the cartridges so comply (Pub. Contract Code §12205).

10. NON-DISCRIMINATION CLAUSE: During the performance of this Agreement, Contractor and its subcontractor*s* shall not deny the contract's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Contractor and subcontractors shall comply with the provision*s* of the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135-11139.5), and the regulations or standards adopted by the awarding state agency to implement such article. Contractor shall permit access by representatives of the Department of Fair Employment and Housing and the awarding state agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause. Contractor and its subcontractor*s* shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. (See Cal. Code Regs., tit. 2,§11105.)

    Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

11. CERTIFICATION CLAUSES: The CONTRACTOR CERTIFICATION CLAUSES contained in the document CCC 04/2017 are hereby incorporated by reference and made a part of this Agreement by this reference as if attached hereto.

12. TIMELINESS: Time is of the essence in this Agreement.

13. COMPENSATION: The consideration to be paid Contractor, as provided herein, shall be in compensation for all of Contractor's expenses incurred in the performance hereof, including travel, per diem, and taxes, unless otherwise expressly so provided.

14. GOVERNING LAW: This contract is governed by and shall be interpreted in accordance with the laws of the State of California.

15. ANTITRUST CLAIMS: The Contractor by signing this agreement hereby certifies that if these services or goods are obtained by means of a competitive bid, the Contractor shall comply with the requirements of the Government Codes Sections set out below.

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a. The Government Code Chapter on Antitrust claims contains the following definitions:

1) "Public purchase" means a purchase by means of competitive bids of goods, services, or materials by the State or any of its political subdivisions or public agencies on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code.

2) "Public purchasing body" means the State or the subdivision or agency making a public purchase. Government Code Section 4550.

b. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder. Government Code Section 4552.

c. If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Government Code Section 4553.

d. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action. See Government Code Section 4554.

16. CHILD SUPPORT COMPLIANCE ACT: For any Agreement in excess of $100,000, the contractor acknowledges in accordance with Public Contract Code 7110, that:

a. The contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and

b. The contractor, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

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17. UNENFORCEABLE PROVISION: In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.

18. PRIORITY HIRING CONSIDERATIONS: If this Contract includes services in excess of $200,000, the Contractor shall give priority consideration in filling vacancies in positions funded by the Contract to qualified recipients of aid under Welfare and Institutions Code Section 11200 in accordance with Pub. Contract Code §10353.

19. SMALL BUSINESS PARTICIPATION AND DVBE PARTICIPATION REPORTING REQUIREMENTS:

    a. If for this Contract Contractor made a commitment to achieve small business participation, then Contractor must within 60 days of receiving final payment under this Contract (or within such other time period as may be specified elsewhere in this Contract) report to the awarding department the actual percentage of small business participation that was achieved. (Govt. Code § 14841.)

    b. If for this Contract Contractor made a commitment to achieve disabled veteran business enterprise (DVBE) participation, then Contractor must within 60 days of receiving final payment under this Contract (or within such other time period as may be specified elsewhere in this Contract) certify in a report to the awarding department: (1) the total amount the prime Contractor received under the Contract; (2) the name and address of the DVBE(s) that participated in the performance of the Contract; (3) the amount each DVBE received from the prime Contractor; (4) that all payments under the Contract have been made to the DVBE; and (5) the actual percentage of DVBE participation that was achieved. A person or entity that knowingly provides false information shall be subject to a civil penalty for each violation. (Mil. & Vets. Code § 999.5(d); Govt. Code § 14841.)

20. LOSS LEADER: If this contract involves the furnishing of equipment, materials, or supplies then the following statement is incorporated: It is unlawful for any person engaged in business within this state to sell or use any article or product as a “loss leader” as defined in Section 17030 of the Business and Professions Code. (PCC 10344(e).)

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EXHIBIT D
SPECIAL TERMS AND CONDITIONS

1. Disputes: Any disputes concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Director, Department of Alcoholic Beverage Control, or designee, who shall reduce his decision in writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Department shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the State a written appeal addressed to the Director of the Department of Alcoholic Beverage Control. The decision of the Director of Alcoholic Beverage Control or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, Contractor shall proceed diligently with the performance of the contract and in accordance with the decision of the State.

2. Cancellation/Termination: This agreement may be cancelled or terminated without cause by either party by giving thirty (30) calendar days advance written notice to the other party. Such notification shall state the effective date of termination or cancellation and include any final performance and/or payment/invoicing instructions/requirements. No penalty shall accrue to either party because of contract termination.

3. Contract Validity: This contract is valid and enforceable only if adequate funds are appropriated in Item 2100-101-3036, Budget Act of 2024, for the purposes of this program.

4. Contractor Certifications: By signing this agreement, Contractor certifies compliance with the provisions of CCC 04/2017, Standard Contractor Certification Clauses. This document may be viewed at: https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/Standard-Contract-Language

5. If the State determines that the grant project is not achieving its goals and objectives on schedule, funding may be reduced by the State to reflect this lower level of project activity and/or cancel the agreement.

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.18**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Jeramy Young, Police Chief

SUBJECT: Resolution establishing fees for a concealed carry weapons (CCW) permit and appropriating $15,000 of the fee revenue to cover the costs to implement the CCW permit program.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution approving the listed rates for obtaining a concealed carry weapon (CCW) permit and appropriating $15,000 of the fee revenue to cover the costs to implement the CCW permit program.

SUMMARY

The responsibility of reviewing concealed carry weapons (CCW) applications resides with both the local Police Chief and the County Sheriff. In response to the 2022 United States Supreme Cout ruling in New York Rifle and Pistol Association v. Bruen, which changed the factors an agency can permissibly consider when reviewing an application, the Alameda County Sheriff's Office (ACSO) will only accept CCW applications from individuals who reside in unincorporated Alameda County. Therefore, the Livermore Police Department (LPD) is now required to review applications for and issue new, renewal, and modification/duplicate CCW permits to individuals whose primary residence is in the City of Livermore. Under state law, local agencies issuing CCWs may establish fee structures that reflect reasonable costs associated with receiving, processing, and issuing CCWs. The LPD developed a fee schedule for the review of applications for and the issuance of new CCW permits, permit renewals, permit modifications/duplicate permits.

DISCUSSION

On June 23, 2022, the United States Supreme Court (USSC) issued a ruling in New York Rifle and Pistol Association v. Bruen and held that the ability to carry a firearm in public was a constitutional right guaranteed by the Second Amendment. The Court held that states using "may-issue criteria" that relied on arbitrary evaluations of "need" made by local authorities are unconstitutional. The ruling invalidated California's requirement that an applicant show "good cause" to obtain a CCW permit as unconstitutional. In response to the USSC's ruling in the New York Rifle and Pistol Association v. Bruen, the State of

California enacted the 2023-24 CCW Senate bill (SB2) to implement changes to the CCW process, including establishing objective criteria that apply when reviewing a CCW application.

Until May 1, 2024, the ACSO processed and issued CCW's to individuals whose primary residence was within the Livermore city limits. As of May 1, 2024, ACSO only accepted CCW applications from individuals who reside in unincorporated Alameda County leaving the responsibility to local city governments within Alameda County for issuance within their jurisdictions. Therefore, after May 1, 2024, the LPD is tasked with reviewing applications for and issuing new, renewal, and modification/duplicate CCW permits to individuals whose primary residence is within the city limits. ACSO provided the LPD with CCW data for Livermore and there were approximately 120 CCW permits issued to individuals whose primary residence is in the City of Livermore and approximately another 200 applications waiting to be processed.

The process and issuance of the CCW's will comply with state law, which the criteria for approval are:
1. Not a disqualified person
2. At least 21 years of age
3. Resident of the City of Livermore
4. Completed a specified training course.
5. The firearm is registered with California Department of Justice (CADOJ).

Standard CCW permits are valid for two years, Judicial Officer CCW permits are valid for three years, and Reserve Police Officer CCW permits are valid for four years.

LPD created an application, background, and licensing process. The process will consist of an initial on-line application, a criminal history check (Live Scan), a background investigation that will be conducted by LPD staff, a psychological evaluation paid for by the applicant, applicant provided certificate of a Department of Justice (DOJ) approved16-hour CCW training course, and final review and issuance of the CCW permit. The on-line application process will be managed by a third-party vendor, Permitium, with oversight by Livermore Police Department staff.

Under state law, local agencies issuing CCWs may establish fee structures that reflect reasonable costs associated with receiving, processing, and issuing CCWs. The LPD developed a fee schedule to cover reviewing applications for and issuing of new CCW permits, permit renewals, and permit modifications/duplicate permits. The CCW permitting fees represent a cost recovery effort to cover the amount each type of permit assumes, absorbs an annual cost of $3553 for Permitium, City staff time of three hours for a new permit background, and one hour for permit renewals including DOJ background check, and one-half hour for modifications/duplicates. The applicant will pay an initial fee of $93.00, which will be paid to Permitium for the Live Scan criminal history check though DOJ. The fee schedule is as follows:

	Standard Permit (2 year)	**Judicial Permit** (3 year)	**Reserve Officer Permit** (4 year)
Initial Fee Paid upon submission of application	$93.00	$93.00	$93.00

Issuance Fee Paid upon approval of permit	$387.00	$387.00	$387.00
Renewal Fee Paid upon submission of application	$94.00	$94.00	$94.00
Modification/Duplicate Fee Paid upon submission of application	$47.00	$47.00	$47.00

The 2023-24 CCW Senate bill (SB2) requires issuing authorities to undertake a more detailed investigation and review of CCW applications than previous law; therefore, the LPD will likely incur significant workload costs. To offset the anticipated workload of CCW applications and the 90-day timeline requirement to determine whether the applicant is qualified or disqualified, the LPD requires hiring four Special Projects Coordinators (SPCs) to complete the CCW backgrounds. The SPC positions will be filled by retired law enforcement peace officers who meet the eligibility requirements for hire.

FISCAL AND ADMINISTRATIVE IMPACTS

The proposed CCW fees are intended to cover the reasonable staff and equipment costs associated with the CCW permit process and will not result in any significant revenue generation. There will be an anticipated monthly cost of approximately $1,250 or $15,000 annually for four special project coordinators (SPCs) to process and background each CCW applicant (each SPC will work approximately six hours/month on backgrounds related to CCW applicants). The proposed CCW fees will cover those costs to issue the CCW permit.

The estimated expenses and revenue have not been included in the Police Department's FY 2024-25 budget and will require an appropriation of $15,000 to hire the four SPCs.

COMMUNITY PILLAR

5: A City That Works

GOAL

17: Maintain strong financial policies that protect and enhance the City’s long-term fiscal strength.

ATTACHMENTS

1. Resolution

Prepared by: Joseph Draghi
Police Lieutenant

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION ADOPTING FEES FOR A CONCEALED CARRY WEAPONS PERMIT AND APPROPRIATING $15,000 OF THE FEE REVENUE TO IMPLEMENT THE PERMIT PROGRAM

Following the 2022 United States Supreme Court ruling in *New York Rifle and Pistol Association v. Bruen*, which changed the factors in which an agency can permissibly consider when reviewing a Concealed Carry Weapon (CCW) permit application, the Alameda County Sheriff's Office (ACSO) will only accept CCW permit applications from individuals who reside in unincorporated Alameda County. Therefore, the Livermore Police Department (LPD) is now required to review applications for and issue new, renewal, and modification/duplicate CCW permits to individuals whose primary residence is in the City of Livermore.

Based on the application processing and applicant background checks necessary for issuing a permit, the estimated cost of the permit process and issuance is $93.00 for the initial application, $387.00 for the issuance of the permit, $94.00 for a permit renewal, and $47.00 for a modification or duplicate permit. The fee amounts are calculated to recover costs for issuing the permits, including the annual cost for the third-party vendor that will manage the online application process, and the City staff time required, 3 hours for the issuance of new permits, 1 hour for permit renewal, and 0.5 hours for permit modification/duplicate issuance. The fee amount assumes LPD will process approximately 120 CCW permits and year, based on the data received from ACSO.

Additionally, there will be an anticipated monthly cost of approximately $1,250 or $15,000 annually for four special project coordinators (SPCs) to process and background each CCW applicant (each SPC will work approximately six hours/month on backgrounds related to CCW applicants). The proposed CCW fees will cover those costs to issue the CCW permit. The estimated expenses and revenue have not been included in the Police Department's FY 2024-25 budget and will therefore require an appropriation of $15,000 to hire the four SPCs.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby adopts fees for Concealed Carry Weapon permits in the amounts of $93.00 for an initial permit application, $387.00 for issuance of the permit, $94.00 for a permit renewal, and $47.00 for a modification or duplicate permit.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby appropriates $15,000 to the Police Department's FY 2024-25 budget to hire 4 SPCs to process CCW applications.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.19**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Jason Alcala, City Attorney

SUBJECT: Resolution authorizing the City Manager to execute all documents and forms for the City to participate in settlement agreements for the National Prescription Opiate Litigation.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute all documents and forms necessary for the City of Livermore to participate in settlement agreements for the National Prescription Opiate Litigation.

SUMMARY

Numerous lawsuits by states and local political subdivisions throughout the country have been brought against manufacturers, distributors, pharmaceutical companies, marketers, pharmacy chains, and others for their contributions to the current opioid epidemic. Those lawsuits have been consolidated in a master case entitled *In Re: National Prescription Opiate Litigation (United States District Court, Northern District of Ohio, Eastern Division, MDL 2804, Case No. 1:17-MD-2804).*

The City Council has previously authorized the City Manager to execute documents for Livermore to participate in the national settlements with distributors, manufacturers, and pharmacy chains, and to participate in the California agreements regarding the distribution and use of settlement funds allocated to Livermore. National settlements continue to be negotiated with additional parties, and most recently with the regional supermarket pharmacy Kroger Co.

The proposed resolution authorizes the City Manager to execute the required forms and documents necessary for Livermore to participate in the existing and all future settlement agreements for the National Prescription Opiate Litigation, subject to the City Attorney's approval of the agreements as to form and subject to the City Manager's determination whether Livermore should receive a direct payment of all or a portion of its allocation after considering the costs to receive, administer, and expend the funds locally for opioid remediation.

DISCUSSION

The federal government has acknowledged there is an opioid epidemic in the United States. The U.S. Department of Health and Human Services reports that in the late 1990's pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers and healthcare providers began to prescribe them at greater rates. It is also reported that increased prescription of opioid medications led to widespread misuse of both prescription and non-prescription opioids before it became clear that the medications could indeed be highly addictive.

Numerous lawsuits have been filed throughout the country seeking to address the effects from the public health crisis caused by the opioid epidemic. Many of those lawsuits have been consolidated in a master case entitled *In Re: National Prescription Opiate Litigation (United States District Court, Northern District of Ohio, Eastern Division, MDL 2804, Case No. 1:17-MD-2804).*

The National Prescription Opiate Litigation lawsuits allege that manufacturers, distributors, pharmaceutical companies, marketers, pharmacy chains, regional supermarket pharmacies, and others contributed to the current opioid epidemic by grossly misrepresenting the risk of long-term use of those drugs and by failing to properly monitor suspicious orders for those drugs.

The City Council has previously authorized the City Manager to execute all documents and forms necessary for Livermore to join the National Prescription Opiate Litigation settlement agreements with the following:

Distributors

- AmerisourceBergen Corporation
- Cardinal Health, Inc.
- McKesson Corporation

Manufacturers

- Johnson & Johnson
- Janssen Pharmaceuticals, Inc.
- Ortho-McNeil-Janssen Pharmaceuticals, Inc.
- Janssen Pharmaceutica, Inc.

Pharmacy Chains

- Allergen
- CVS
- Walgreens
- Walmart

Livermore’s participation in the national settlement agreements is also covered by the agreements the City Council authorized the City Manager to execute with the State of California for the distribution and use of settlement funds.

As directed by the City Council on November 8, 2021, the City of Livermore registered its desire to participate in the settlements to help secure funds for the State of California, County of Alameda, and itself to combat the effects of the opioid crisis. That registration enabled the City to join two settlement

agreements with the distributors and manufacturers that were approved by the City Council by Resolution Nos. 2021-208 and 2021-209, respectively.

Subsequently, on April 10, 2023, the City Council further authorized the City Manager to register the City of Livermore to participate in the National Prescription Opiate Litigation settlement agreements with the pharmacy chains. Now, the City has the opportunity to participate in the National Prescription Opiate Litigation settlement agreement Kroger Co. for the regional supermarket pharmacy's contribution to the opioid epidemic and its remediation.

The settlement agreements and documents including summaries and FAQs for each can be found at the following two websites, one hosted by the National Prescription Opiate Litigation parties, and the other hosted California Attorney General:

https://nationalopioidsettlement.com/

https://oag.ca.gov/opioids

Livermore has received the following allocations totaling $95,394 from the settlement agreements in FY 2023-24:

Settlement	Payment 1	Payment 2	Payment 3	FY 23-24 Total
Distributor	$0*	$26,445	$14,856	$41,301
Janssen	$10,631	$24,802	$18,660	$54,093
Pharmacy Chains*	$0	$0	$0	$0

*Livermore joined the settlement after the first Distributor payment was issued.
*Livermore has not received any Pharmacy Chain payments as the settlements are in the process of being finalized.

In June, La Familia was awarded a $7.6 million State Behavioral Health Continuum Infrastructure Program (BHCIP) grant for the new construction and renovation of a Substance Use Disorder (SUD) facility on Tesla Road in Unincorporated Alameda County. The planned 16 bed facility is made up of four sobering beds, four detox beds, and eight SUD treatment beds for Tri-Valley residents. Staff is in the early stages of determining how the Opioid Settlement funds can support La Familia's SUD facility. Once determined, staff will return to Council for approval. To date the city has not allocated any Opioid Settlement funds.

RECOMMENDATION

Staff recommends the City Council adopt a resolution ratifying and confirming the City Manager's authority to execute all documents and forms necessary for Livermore to participate in the National Prescription Opiate Litigation settlement agreements with the distributors, manufacturers, and pharmacy chains, and also authorizing the City Manager to execute all required forms and documents necessary for the City of Livermore to participate in any and all future settlement agreements for the National Prescription Opiate Litigation, subject to:

- the City Attorney's approval of the agreements as to form, and
- the City Manager's determination whether Livermore should receive a direct payment of all or a portion of its allocation after considering the costs to receive, administer, and expend the funds

locally for opioid remediation.

Staff further recommends that the City Council's delegation of authority restrict the use and expenditure of settlement proceeds from the National Prescription Opiate Litigation to the purposes set forth in those agreements.

FISCAL AND ADMINISTRATIVE IMPACTS

There are no fiscal or administrative impacts other than staff time to execute and process the documents. The actual amount of settlement funds to be allocated to the City of Livermore is uncertain due to the incentives, adjustments, administrative costs, number of participating states and subdivisions (as well as their status as litigating subdivisions), and other factors that will affect the distribution. The City Manager, in her discretion, will determine whether Livermore should receive a direct payment of all or a portion of its allocation after considering the costs to receive, administer, and expend the funds locally for opioid remediation.

COMMUNITY PILLAR

1: A Safe Community that Thrives

GOAL

8: Expand and improve access to human services

ATTACHMENTS

1. Resolution

Prepared by: Jason Alcala
City Attorney

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE ALL DOCUMENTS AND FORMS NECESSARY FOR THE CITY OF LIVERMORE TO PARTICIPATE IN THE SETTLEMENT AGREEMENTS FOR THE NATIONAL PRESCRIPTION OPIATE LITIGATION, AND DELEGATING AUTHORITY TO THE CITY MANAGER TO DETERMINE WHETHER TO ACCEPT OR REDIRECT SETTLEMENT FUNDS ALLOCATED TO LIVERMORE

Numerous lawsuits have been filed throughout the country seeking to address the effects from the public health crisis caused by the opioid epidemic. Many of those lawsuits have been consolidated in a master case entitled *In Re: National Prescription Opiate Litigation (United States District Court, Northern District of Ohio, Eastern Division, MDL 2804, Case No. 1:17-MD-2804)*.

The National Prescription Opiate Litigation lawsuits allege that manufacturers, distributors, pharmaceutical companies, marketers, pharmacy chains, regional supermarket pharmacies, and others contributed to the current opioid epidemic by grossly misrepresenting the risk of long-term use of those drugs and by failing to properly monitor suspicious orders for those drugs.

The City Council has previously authorized the City Manager all documents and forms necessary for Livermore to join the National Prescription Opiate Litigation settlement agreements with the following:

<u>Distributors</u>
AmerisourceBergen Corporation
Cardinal Health, Inc.
McKesson Corporation

<u>Manufacturers</u>
Johnson & Johnson
Janssen Pharmaceuticals, Inc.
Ortho-McNeil-Janssen Pharmaceuticals, Inc.
Janssen Pharmaceutica, Inc.

<u>Pharmacy Chains</u>
Allergen
CVS
Walgreens
Walmart

Livermore's participation in the national settlement agreements is also covered by the agreements the City Council authorized the City Manager to execute with the State of California for the distribution and use of settlement funds.

As directed by the City Council on November 8, 2021, the City of Livermore registered its desire to participate in the settlements to help secure funds for the State of California, County of Alameda, and itself to combat the effects of the opioid crisis. That registration enabled the city to join two settlement agreements with the distributors and manufacturers that were approved by the City Council by Resolution Nos. 2021-208 and 2021-209, respectively.

Subsequently, on April 10, 2023, the City Council further authorized the City Manager to register the City of Livermore to participate in the National Prescription Opiate Litigation settlement agreements with the pharmacy chains.

Council now desires to adopt a resolution ratifying and confirming the City Manager's authority to execute all documents and forms necessary for Livermore to participate in the National Prescription Opiate Litigation settlement agreements with the distributors, manufacturers, and pharmacy chains, and also authorizing the City Manager to execute all required forms and documents necessary for the City of Livermore to participate in any and all future settlement agreements for the National Prescription Opiate Litigation, subject to:

(i) the City Attorney's approval of the agreements as to form, and

(ii) the City Manager's determination whether Livermore should receive a direct payment of all or a portion of its allocation after considering the costs to receive, administer, and expend the funds locally for opioid remediation.

The City Council's delegation of authority restricts the use and expenditure of settlement proceeds from the National Prescription Opiate Litigation to the purposes set forth in those agreements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that the City Manager is hereby authorized to execute all documents and forms necessary for the City of Livermore to participate in settlement agreements for the National Prescription Opiate Litigation, and hereby ratifies and affirms the actions taken by the City Manager on behalf of the City of Livermore to participate in the National Prescription Opiate Litigation settlement agreements with the distributors, manufacturers, and pharmacy chains.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that the City Manager is authorized to make the determination in their discretion whether Livermore should receive a direct payment of all or a portion of its allocation, after considering the costs to receive, administer, and expend the funds locally for opioid remediation.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

_____
Jason R. Alcala
City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.20**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Rescind Resolution 170-82 designating Tri-Valley Community Television Corporation as the official body to receive cable television funds.

RECOMMENDED ACTION

Staff recommends that the City Council rescind Resolution 170-82 as it does not conform with current practices and is unnecessary to the management of Public, Education, and Government (PEG) funds.

SUMMARY

At the July 26, 1982, meeting of the Livermore City Council, Tri-Valley Community Television was designated as the appropriate body to receive Public, Education, and Government (PEG) funds. Since that time, the Tri-Valley cities of Pleasanton, Dublin, and Livermore have allocated a portion of each city's PEG funds to Tri-Valley Community Television to assist in the production of community television capital expenses. Federal law mandates that cable companies provide funding to communities with PEG channels. PEG funding is a designated funding source created to assist local agencies in capital expenses required to produce community television for residents. Rescinding the resolution will keep PEG funding with the City and allow staff to spend it on PEG-eligible facility and equipment expenses pursuant to City Council direction.

DISCUSSION

Upon review of current practices, staff determined that Resolution 170-82 is no longer accurate or necessary to expend PEG funds. Rescinding Resolution 170-82 will allow staff to efficiently use PEG funds at the direction of the City Council on the Civic Center Meeting Hall as necessary to produce PEG programming, ensure the City owns all equipment in the Civic Center Meeting Hall, maintain PEG eligible equipment on an appropriate schedule as determined by the City's Administrative Services Department, and continue to provide TV30 a portion of PEG funding for capital expenses that allow them to produce quality content for residents.

FISCAL AND ADMINISTRATIVE IMPACT

There is no fiscal or administrative impact with this item.

COMMUNITY PILLAR

1: A City That Works

GOAL

1: Create opportunities for the Mayor and City Council to effectively engage with regional partners and members of the Community.

ATTACHMENTS

1. Resolution
2. Exhibit A - Resolution 170-82

Prepared by: Marie Weber
Deputy City Manager

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION REPEALING RESOLUTION NO. 170-82

Since 1972, the City of Livermore ("City"), along with Dublin and Pleasanton, has utilized the services of Tri-Valley Community Television ("TVCT") to administer government and community television services in the Tri-Valley area.

On July 26, 1982, the City Council adopted Resolution No. 170-82, designating TVCT as the official body to receive cable television grant funds, also known as Public, Educational, and Governmental ("PEG") funds, due to the City of Livermore.

The TVCT Board of Directors approves the organization's annual operating budget, which includes a proportional share of PEG funding to cover TVCT's capital expenses. That amount is only a portion of PEG funding received by the City.

Since adopting Resolution 170-82, the City has passed the board-approved amount of PEG funds to TVCT annually to cover the City's share of the organization's capital expenses.

On July 1, 2023, the City signed formal agreements with TVCT for the operating (23-0448) and capital budget (24-0068) expenditures.

Since the adoption of agreements 23-0448 and 24-0068, City staff has recognized the need to reflect that the City is the official body receiving cable television grant funds to create more efficient and fiscally responsible practices, including:

1. Using PEG funding to maintain the technological needs of the new Civic Center Meeting Hall.
2. Purchasing all PEG-qualified capital expenditures in city-owned facilities to maintain City ownership of equipment.
3. Continue to cover the proportional cost of annual capital funding to TV30 at the direction of the City Council.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby repeals Resolution No. 170-82 to reflect that the City of Livermore is the official body receiving the PEG fees due to the City.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

Exhibit A – Resolution 170-82

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE

STATE OF CALIFORNIA

RESOLUTION NO. 170-82

RESOLUTION DESIGNATING THE TRI-VALLEY COMMUNITY TELEVISION CORPORATION AS THE OFFICIAL BODY TO RECEIVE CABLE TELEVISION GRANT FUNDS

WHEREAS, the City of Pleasanton and Viacom entered into an agreement extending the cable television franchise to July 15, 1985; and

WHEREAS, pursuant to the terms of the above agreement, a nonprofit corporation was to be formed to receive funds and to assist in the programing of community service television, said nonprofit corporation requiring approval by the City of Pleasanton with the concurrence of the City of Livermore; and

WHEREAS, Tri-Valley Community Television has been duly incorporated as a nonprofit corporation with its purpose being to provide community service television and represents all the tri-valley interests; and

WHEREAS, at this time, it is appropriate for the City Council to designate Tri-Valley Community Television as the official body to receive funds and develop community service television pursuant to the Viacom cablevision extension agreement entered into with the City of Pleasanton;

NOW, THEREFORE, BE IT RESOLVED by the Livermore City Council that the City of Livermore designates Tri-Valley Community Television as the nonprofit corporation to receive funds and to develop community service television pursuant to the Viacom cablevision extension agreement with the City of Pleasanton.

BE IT FURTHER RESOLVED that the City Manager is directed to advise the City of Pleasanton of this action noting the City of Livermore's concurrence with the City of Pleasanton's Resolution No. 82-228.

BE IT FURTHER RESOLVED that this resolution shall become effective immediately upon concurrence of the City of Livermore of this designation.

APPROVED AS TO FORM:

Steven R. Anderson
ASSISTANT CITY ATTORNEY

On motion of Councilmember Kamena, seconded by Councilmember Brown, the foregoing Resolution was passed and adopted this 26th day of July, 1982, by the following vote:

AYES: COUNCILMEMBERS STEIN, BROWN, KAMENA, WIESKAMP AND MAYOR TURNER

NOES: NONE

ABSENT: NONE

MAYOR, CITY OF LIVERMORE, CALIFORNIA

ATTEST:

CITY CLERK, DEPUTY

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.21**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Paul Spence, Assistant City Manager

SUBJECT: Resolution of continued local emergency in response to impacts from a series of severe storm events last year.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution of continued local emergency in response to impacts from a series of severe storm events last year.

SUMMARY

On January 10, 2023, the City Council adopted a resolution ratifying the Proclamation of the Director of Emergency Services Concerning the Existence of a Local Emergency (Resolution No. 2023-001) in response to impacts from a series of severe storm events.

On February 27, April 24, June 12, July 24, September 11, October 23, and December 11, 2023, and January 22, 2024, and March 11, 2024, and April 15, 2024, and June 10, 2024 the City Council adopted resolutions of continued local emergency. California Government Code section 8630 directs the City Council to review the need for continuing the local emergency at least once every 60 days.

DISCUSSION

On January 4, 2023, the Executive Department of the State of California issued Executive Order N-2-23 proclaiming a State of Emergency for the Atmospheric River that started on December 27, 2022. On January 10, 2023, the City Council ratified a proclamation by the Emergency Services Director of the existence of a local emergency due to conditions of extreme peril to the safety of persons and property that arose within the City of Livermore caused by a series of severe rainstorms and high wind commencing in December 2022 and continuing through January 2023.

Proclamation 23-01 was ratified, as required, by the City Council within seven days (Resolution No. 2023-001). Once ratified, California Government Code section 8630 directs the City Council to review the need for continuing the local emergency at least once every 60 days. On February 27, 2023, the City Council adopted a resolution of continued local emergency (Resolution No. 2023-06).

On March 1, 2023, the Executive Department of the State of California issued a proclamation of State of Emergency due to a severe winter storm event beginning in February 2023 bringing damaging winds and historic precipitation that caused federal and state highways and road closures, and continued to threaten critical infrastructures, power outages, etc.

On March 24, 2023, the Alameda County Director of Emergency Services proclaimed a state of emergency due to conditions of continuing peril that have been presented by winter storms that resumed on February 23, 2023, continuing through March 2023, causing extensive damage and local expenses throughout the County.

On February 27, April 24, June 12, July 24, and September 11, October 23, and December 11, 2023, and on January 22, March 11, and April 15, 2024, and June 10, 2024 the City Council adopted resolutions of continued local emergency (Resolution Nos. 2023-026, and 2023-072, and 2023-111, and 2023-150, and 2023-159, and 2023-187, and 2023-223, and 2024-012, and 2024-031, and 2024-053, and 2024-091 respectively).

Staff recommends that the City Council continue the emergency proclamation to reflect the fact that emergency repairs have not been fully implemented and on-going work is required to recover from the damage. Continuing the emergency proclamation allows staff to seek reimbursement of the eligible costs of this work from federal and state agencies through the public assistance program.

Work includes removing sediment and debris from creeks and trails, repairing creek banks that have been washed away, repairing damaged trails, and pedestrian bridge abutments. Staff estimates about 30 damaged sites totaling approximately $9,000,000.

FISCAL AND ADMINISTRATIVE IMPACTS

The continuance of a Local Emergency allows the City to access federal, state and county resources, including potential financial reimbursements.

COMMUNITY PILLAR

1: A Safe Community That Thrives

GOAL

1: Oversee the City's emergency preparedness, management, and response efforts

ATTACHMENTS

1. Resolution

Prepared by: Herbert Cole
Management Analyst

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION OF CONTINUED LOCAL EMERGENCY

(Severe Storm Events – December 2022 through March 2023)

On January 10, 2023, the City Council adopted a resolution, *Ratifying the Proclamation of the Director of Emergency Services Concerning the Existence of a Local Emergency* (Resolution No. 2023-001). The emergency services proclamation concerns conditions of extreme peril to the safety of persons and property which have arisen within the City of Livermore caused by a series of severe rainstorms and high winds commencing in December 2022, and continuing through January 2023. On February 27, 2023, the City Council adopted a resolution of continued local emergency (Resolution No. 2023-026).

On March 1, 2023, California Governor, Gavin Newsom, proclaimed a state of emergency due to the severe winter storms that struck in late February as the result of an atmospheric river system forecast to continue through mid-March. The Governor issued his proclamation in response to a series of atmospheric river systems that impacted the State since late December 2022, that forced closures and damaged highways and roads, and caused other impacts that local agencies did not have time to mitigate, and that the continuing storms were expected to exacerbate those conditions. The Governor adopted a subsequent proclamation on March 28, 2023, to apply his March 1st proclamation to Alameda County. The Governor's proclamation directed the California Office of Emergency Services to provide assistance to local governments for the protection of public health and the environment, allowed for the mobilization of the California National Guard, allowed for state-owned properties to be made available for staging debris, and modified the hours-of-service limits in the California Vehicle Code and California Code of Regulations for fuel transportation and relief efforts.

Given the declaration of emergency by the State of California and Alameda County, as well as the existing damage and impacts from the prior storms, and in anticipation of additional storms and wind, the need for continued debris removal, emergency response protective measures, and permanent repairs, continue to present conditions that are likely to be beyond the control of the services, personnel, equipment, and facilities of the City of Livermore.

On March 24, 2023, the Alameda County Director of Emergency Services proclaimed a state of emergency due to conditions of continuing peril that have been presented by winter storms that resumed on February 23, 2023, continuing through March 2023, causing extensive damage and local expenses throughout the Alameda County Operational Area.

Although efforts have been made to remedy the emergency conditions, City staff report that the emergency conditions identified by the proclamation still exist. City staff recommends continuing the declaration of emergency since it is required to be active in

order to remain eligible to apply for and receive funding for costs to respond to and repair damages caused by the storm events.

Once a proclamation of local emergency is adopted, California Government Code section 8630 directs the City Council to review the need for continuing the local emergency at least once every 60 days.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it has reviewed the January 4, 2023 proclamation of local emergency that the City Council ratified on January 10, 2023 (Resolution No. 2023-001) and continued on February 27, 2023 (Resolution No. 2023-026) and on April 24, 2023 (Resolution No. 2023-072), and on June 12, 2023 (Resolution No. 2023-111), and on July 24, 2023 (Resolution No. 2023-150), and on September 11, 2023 (Resolution No. 2023-159), and on October 23, 2023 (Resolution 2023-187), and on December 11, 2023 (Resolution No. 2023-223), and on January 22, 2024 (Resolution 2024-012), and on March 11, 2024 (Resolution 2024-031) and on April 15, 2024 (Resolution 2024-053), and on June 10, 2024 (Resolution 2024-091) as well as the subsequent proclamations of emergency in March 2023 by both the State of California and the County of Alameda due to the continuing systems of storms affecting the State and local areas, and hereby finds that conditions warrant continued maintenance of that proclamation of local emergency.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.22**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: THIS ITEM WAS CONTINUED FROM THE JULY 8, 2024 CITY COUNCIL MEETING. Resolution accepting the recommendation of the Altamont Landfill Open Space Committee to authorize the City's grant request, finding the acquisition of the Hartford Hills Property is categorically exempt from CEQA, authorizing the City Manager to enter into a Purchase and Sale Agreements for open space land, and appropriating funds from the Dougherty Valley Settlement Agreement account. Location: Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2).

RECOMMENDED ACTION

Staff recommends the City Council adopt separate resolutions to:

1. Accept the recommendation of the Altamont Landfill Open Space Committee to authorize the City of Livermore's grant requests for the Hartford Hills Property (in the amount of $980,000); and determine that the Altamont Landfill Open Space Committee's recommended expenditure of Open Space Account funds is not a project under California Environmental Quality Act (CEQA) Guidelines section 15378.
2. Determine the acquisition is categorically exempt from CEQA in accordance with CEQA Guidelines Section 15313, which exempts acquisitions of lands to preserve the land in its natural condition.
3. Authorize the City Manager to enter into a Purchase and Sale Agreement and execute all documents necessary to acquire the Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2); and
4. Appropriate funds from the Dougherty Valley Settlement Agreement (Fund 925) for the amount of $980,000 to acquire the Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2).

SUMMARY

The City is proposing to purchase in fee title the 82-acre Hartford Hills Property for purposes of open space preservation and conservation. The property has significant biological, scenic and recreational value. The property is outside of the City limits and outside the North Livermore Urban Growth Boundary

in unincorporated Alameda County. The total acquisition cost including transaction costs is $1,960,000.

The City actively engages in acquiring land for open space preservation and conservation using a variety of dedicated open space acquisition funding sources. Staff engages with willing property sellers on the open market to purchase land and secure it as open space in perpetuity. The City coordinates the acquisitions with partner agencies such as Tri-Valley Conservancy to establish conservation easements and long-term stewardship of the land.

In July and November of 2023, the City Council authorized staff to enter negotiations with three separate property owners to acquire the following three properties for open space and conservation purposes.

- 82-acre Hartford Hills property
- 32-acre Altamont Hills Property
- 125.5-acre Greenville Road Property

Staff has negotiated purchase and sale agreements with two out of the three properties. The City Council approved the Greenville Road Property acquisition at the July 8, 2024, City Council meeting. The Hartford Hills acquisition was continued to the July 22, 2024, City Council meeting. The City Council continued the item to allow Citizens for Balanced Growth (CBG) one more week with a deadline of July 12 to meet and confer with City staff, as required by the Dougherty Valley Settlement Agreement.

City staff has requested meetings with CBG numerous times since December 2023, but CBG has continually declined to meet but has requested information from the City. City staff provided all the information that it could that was available to the public. City staff sent a final request letter on April 9 (Attachment 5) offering CBG a final deadline to meet before moving the property acquisition forward to Planning Commission (for a Consistency Determination) and City Council. CBG declined to meet City staff by this deadline.

After the City Council meeting on July 8, staff did send out an e-mail to CBG on Tuesday, July 9 to request a meeting. CBG responded on July 9, that they could not meet this week and requested more information, but said they are as committed as ever to scheduling the required consult. Staff provided responses to CBG's information requests in a July 11 email and offered to meet with CGB on July 12. CGB did not take the opportunity to meet with staff on July 12.

On March 15, 2024, the Altamont Landfill Open Space Committee approved the City of Livermore's sponsored grant applications for the Hartford Hills Property and the Greenville Road Property including a third grant request for the Altamont Hills Property (32-acres - APN: 99B-5680-4).

On April 16, 2024, the Planning Commission adopted three separate resolutions (including the Altamont Hills Property) approving Consistency Determinations finding the City’s proposed acquisitions of the three properties to be consistent with Livermore’s 2003 General Plan. The property owner representatives and the City have agreed on terms for the acquisitions for the Hartford Hills Property. The City Council is responsible for authorizing the City Manager to execute the Purchase and Sale Agreement for each property and appropriating funds to purchase real property.

DISCUSSION

BACKGROUND

The City of Livermore ("City") has acquired or helped to acquire and permanently protect over 1,000 acres of open space land. Currently, the City owns nearly 340 acres of land in Doolan Canyon and approximately 300 acres of alkali wetlands, and sensitive habitat in Springtown. The City protects open space land to achieve strategic goals, including:

- Maintain and enhance biological diversity
- Secure land for agricultural conservation
- Support climate resilience and mitigation programs
- Provide non-motorized recreational opportunities
- Preserve scenic value; and
- Manage watershed and address flood control

Following acquisition of open space land, a crucial step is stewarding the land and ensuring it is properly managed for its conservation values. City staff accomplishes this step by encumbering the land with a conservation easement (held by Tri-Valley Conservancy for example) and establishing a non-wasting endowment to fund management of the land in perpetuity.

In July and November of 2023, the City Council authorized staff to enter into negotiations with three separate property owners to acquire in fee title of three properties for open space and conservation purposes. Staff has negotiated a purchase and sale agreement with two out of the three properties. The two properties proposed for purchase are located outside of the city limits and outside of the North Livermore Urban Growth Boundary. The City Council approved the Greenville Road Property acquisition at the July 8, 2024, meeting and continued the Hartford Hills Property acquisition to the July 22, 2024, meeting.

- Hartford Hills Property – 82 acres (APNs: 902-9-3-1 and 902-9-3-2)
- Greenville Road Property – 125.5 acres (APN: 99B-5685-12) - *Property Acquisition approved by the City Council on 7/8/2024.*

Funding for the Hartford Hills acquisition would come from the Altamont Landfill Settlement Agreement Open Space Fund, Vasco Road Landfill Open Space Fund, and the Dougherty Valley Settlement Agreement Fund.

Altamont Landfill Settlement Agreement Open Space Fund

In 1999, Alameda County, the Cities of Livermore and Pleasanton, Sierra Club, Northern California Recycling Association, Altamont Landowners Against Rural Mismanagement, and Waste Management of Alameda County entered into the Altamont Landfill Settlement Agreement to resolve litigation. The Settlement Agreement resolved a challenge to the proposed expansion of the Altamont Landfill and created the Altamont Landfill Settlement Agreement Open Space Fund. Specifically, the Settlement Agreement limits landfill expansion and waste imports and requires the operator to collect a $0.75 per ton fee for open space acquisition.

Vasco Road Landfill Open Space Fund

On May 4, 2006, the Alameda County Board of Supervisors upheld a County Planning Commission

approval of an amended Conditional Use Permit allowing continued landfill and recycling activities at the Vasco Road Landfill. Consistent with the language in the Altamont Settlement Agreement, the approval requires the Vasco Road Landfill operator (Republic Services, Inc.) to collect the same per-ton fees as the Altamont Landfill operator (Waste Management of Alameda County, Inc.). The Vasco Road Landfill Conditions of Approval require the collection and expenditures of fees to be identical to the Altamont Landfill Settlement Agreement.

Altamont Landfill Open Space Committee

The Altamont Landfill Open Space Committee ("Open Space Committee") reviews potential land acquisitions for consistency with both Settlement Agreements and recommends expenditures of funds (from the two landfill funds described above) used solely for purchase of properties in Alameda County to protect natural resources, biodiversity, scenic value, and recreational opportunities. The Committee reviews grant applications to permanently preserve open space through fee acquisition and easements.

The Committee is comprised of four members: one member appointed by the Board of Supervisors, one member appointed by the Livermore City Council, one member appointed by the Pleasanton City Council and one member appointed by the Sierra Club. A representative of the City of Dublin may participate as a non-voting member.

Rotating Livermore City Council members provide representation on the Committee. Vice Mayor Carling is the current Livermore representative. The Open Space Committee reviewed the recommended property acquisitions on March 15, 2024 (see discussion below). To date, the City Council has approved the Open Space Committee's recommendations to distribute funds for 10 acquisitions in the eastern acquisition priority area, as summarized in Attachment 1: Table 1.

Dougherty Valley Settlement Agreement (Dougherty Agreement)

In November 1999, Citizens for Balanced Growth, the City of Livermore, and Zone 7 Water Agency settled litigation over water supply to portions of Contra Costa County. The Agreement to Settle Water Litigation (Dougherty Agreement), required Windemere and/or its successors to pay the City of Livermore $1,000 per residential unit as an open space conservation fee. The fee was subject to an annual CPI adjustment and averaged approximately $1,056 per residential unit over the 10-year buildout. All 5,170 units are built, and the Dougherty Valley project areas have been annexed into the City of San Ramon.

The Dougherty Agreement funds are for acquisitions from willing sellers of permanent easements or fee title for conservation or agricultural preservation purposes. Priorities for funding are for acquisitions, including permanent trails, open space, or agricultural preservation easements from willing sellers in areas north of I-580 and east of Collier Canyon Road within Alameda County.

PROJECT DESCRIPTION

The City is proposing to purchase in fee title the 82-acre Hartford Hills Property for open space preservation and conservation. The property has significant biological, scenic and recreational value. The property is outside of the City limits and outside the North Livermore Urban Growth Boundary in unincorporated Alameda County (see attachments 2 and 3). The total cost to purchase including transaction costs is $1,960,000.

STAFF ANALYSIS

The Hartford Hills Property is located in unincorporated Alameda County and outside of the North Livermore Urban Growth Boundary. The property is strategically located to preserve the open space buffers around Livermore and satisfy the City's General Plan and Active Transportation Plan objectives. The property has a City General Plan Land Use designation of Large Parcel Agriculture (LPA) and Alameda County zoning designation of Agriculture (A).

The City's LPA designation is derived from the Alameda County East County Area Plan (ECAP) and applies to locations outside the City's Urban Growth Boundary (UGB) but within the City's designated "Planning Area". The intent of the LPA designation includes agriculture support uses. If acquired, the City would own and manage the property as permanently preserved open space. Staff proposes that the City acquire the property in fee title.

Preserving the subject property as open space in perpetuity would reinforce the Urban Growth Boundary, permanently preclude suburban expansion, and preserve natural lands in these areas. Acquiring the property for permanent open space would stabilize the property's land use and allow permanent preservation through long-term management agreements with the City's partner agencies.

Consistent with the City Council's prior direction, City staff has negotiated a purchase agreement with the property owner. On April 16, 2024, the Planning Commission adopted resolutions finding the property acquisition to be consistent with General Plan Policies for open space and conservation purposes (see General Plan Consistency discussion below). The City Council is responsible for authorizing the purchase and identifying the appropriating funding sources. Staff recommends the Council authorize the City Manager to execute the Purchase and Sale Agreements and all other documents necessary to acquire the property.

Altamont Landfill Open Space Committee Funding Approval

On March 15, 2024, the Altamont Landfill Open Space Committee (Committee) approved grant applications for three properties. Staff has negotiated purchase and sale agreements with two out of the three properties. The properties are listed below as well the approved grant amounts.

- Hartford Hills Property in the amount of $980,000
- Greenville Road Property in the amount of $1,284,000 *(Property Acquisition approved by the City Council on 7/8/2024)*

According to the Altamont Landfill Settlement Agreement, the Livermore City Council and the Alameda County Board of Supervisors shall take affirmative action on Committee expenditure recommendations. The actions must be in conformance with the Settlement Agreement provisions and must align with Livermore General Plan policy.

The Settlement Agreement's first priority is for the preservation of native biological diversity and/or wildlife habitat. The second priority is for the acquisition of property with significant value for visual character and/or non-motorized recreation. Additional criteria developed and utilized by the Open Space Committee includes Strategic Value in Land Protection, Additional Funding Sources, and Willing Sellers.

Both property acquisitions are consistent with each priority criteria as described below.

Staff recommends the City Council confirm that the Committee's expenditure recommendations are consistent with the Altamont Landfill Settlement Agreement and the Livermore General Plan.

Citizens for Balance Growth

Section 6(d)(i) of the Dougherty Settlement Agreement contains the following clause related to the expenditure of funds from the settlement:

"City staff will meet and confer with [Citizens for Balanced Growth] prior to formulating its recommendations for acquisitions."

Consistent with the Dougherty Settlement Agreement, City staff made numerous attempts to meet-and-confer with Citizens for Balanced Growth (CBG) concerning the recommended expenditure of settlement funds to acquire the Properties for conservation and habitat preservation. City staff made requests in December 2023 and January, February, and March of 2024. City staff made a final request to meet-and-confer by April 24, 2024 (see attachment 5). Despite these repeated requests to meet-and-confer, CBG has not met with City staff. At the July 8, 2024, City Council meeting, CBG was given an additional week to meet-and-confer with staff by July 12, 2024. CBG has declined to meet with staff as described above in the Summary section. Based on the response from CBG, and consistent with the Dougherty Agreement, staff may conclude that CBG does not support the expenditure of Dougherty Valley settlement funds for the Hartford Hills Property listed in this staff report.

Staff recommends the City Council appropriate funds from the Dougherty Valley Settlement Agreement account for the total amount of $980,000 to provide approximately 50 percent of the acquisition cost for the Hartford Hills Property (82 acres - $1,960,000).

Hartford Hills Property

The Hartford Hills property, consisting of two adjacent parcels, is located within unincorporated Alameda County, north of Interstate 580 and to the west of the City boundary adjacent to Springtown (see attachment 3). The approximately 82-acre property contains potential habitat for special status species and potential regulated wetlands and/or waters, and the property is geographically suited as a wildlife corridor. Further, the property is strategically located to preserve the open space buffer around Livermore and satisfies City General Plan and Active Transportation Plan objectives as explained below.

During the Open Space Committee meeting on March 15, 2024, City staff presented a grant request for $980,000 to acquire the Hartford Hills property. Additional funding will be provided through the City's Dougherty Valley Settlement Agreement Open Space Funds. The grant request included components and costs as shown in Attachment 1: Table 2.

The property generally consists of rolling hillsides, annual grassland, perennial and ephemeral drainage, a seasonal wetland/ vernal pool, and a stock pond. According to a Biological Assessment conducted by Olberding Environmental Inc, dated September 2023 (the Biological Assessment), the Arroyo Las Positas meanders through the property, with well incised and densely vegetated banks. The northeastern portion of the property also contains wetland depressions and upland mounds, with numerous ground squirrel burrows across the site.

The Biological Assessment notes that the natural features described above have the potential for jurisdictional waters and special status plant and wildlife species. Specifically, such perennial waters and seasonal wetlands with emergent vegetation provide highly suitable breeding and foraging habitat and supports California Red Legged Frog (CRLF), a Special Status Species.

The property provides a critical trail linkage identified in Livermore's Active Transportation Plan. The proposed Trail T-6 would extend across the property, connecting the existing Arroyo Las Positas trail to the north of Ponderosa Drive with the Las Colinas overpass. Trail T-6 would link Springtown with the rest of Livermore and provide a comfortable bike and pedestrian crossing of Interstate-580, and Trail T-6 cannot be completed without access across the subject property. For these reasons, the property offers significant visual and non-motorized recreational value. Finally, Trail T-6 will be added to the City's CIP list for construction within the next five years.

The property owner is a willing seller. Securing the subject property for permanent open space would stabilize the current land use and maintain the existing greenbelt in this area.

General Plan Consistency

Government Code Section 65402(a) requires that if a General Plan has been adopted, no real property shall be acquired by dedication or otherwise for public purposes until the location, purpose, and extent of such acquisition has been reported upon by the planning agency as to conformity with its adopted General Plan. On April 16, 2024, in accordance with Government Section 65402(a), the Livermore Planning Commission adopted separate resolutions, making the necessary findings, and determined the City's acquisition of the properties is in conformance with Livermore's 2003 General Plan and implements the General Plan goals, objectives, policies, and strategies outlined in the resolutions (Exhibit A to the Purchase Agreement Resolution and the Planning Commission meeting minutes (Attachment 4).

ENVIRONMENTAL DETERMINATION

The allocation of funds towards the acquisition of real property is not considered a "project" under California Environmental Quality Act and CEQA Guidelines Section 15378. A project is defined as: the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. Allocating funds would not approve a physical development project, would not physically change the environment, and would help to preserve natural habitat. Therefore, no environmental review is required for the funding allocations.

The Hartford Hills Property acquisition is categorically exempt from CEQA in accordance with CEQA Guidelines Section 15313, which exempts acquisitions of lands where the purpose of the acquisition is to preserve the land in its natural condition.

FISCAL AND ADMINISTRATIVE IMPACTS

The initial cost of the property acquisitions would have no impact on the City's General Fund. The purchase price plus the transaction costs will be paid by the dedicated open space funding sources described above and summarized below. The acquisitions will have the following effects on the funding

sources used in the acquisitions:

• The Altamont Landfill Settlement Open Space Fund for East Acquisition Priority Area expenditures would be reduced by $980,000 which would be used to acquire the Hartford Hills Property. These expenditures would reduce the fund from its current balance of approximately $20,332,000 to $19,352,000.

• The Dougherty Valley Settlement Agreement (Fund 925) would be reduced by $980,000 to acquire the Hartford Hills Property, reducing the fund from its current balance of approximately $5,028,960 to $4,048,960.

As the landowner, the City would be responsible for stewarding the land, ensuring it is properly managed for its conservation values, and incurring typical property management costs. The City's Open Space Conservation Program achieves this in a variety of ways.

Staff anticipates using best practices to minimize maintenance costs through grazing agreements with ranchers, similar to other open space properties the City owns. In addition, City staff will work with its open space consultants and land conservancy partners (e.g. Tri-Valley Conservancy) to establish permanent conservation easements and restore and enhance habitat on these properties through the sale of mitigation credits. The sale of mitigation credits results in a permanent conversation easement, long term management planning, and provides dedicated funding to cover the long-term maintenance costs through a non-wasting endowment. Any future conservation easement sale would return to Council for authorization.

The annual maintenance costs can vary depending on the particular property attributes. On average, the City can anticipate an approximate range of between $10,000 to $15,000 per year for maintenance. As noted above, these costs can be offset or eliminated if the City is able to identify mitigation value and sell mitigation credits on the properties. Council created the Open Space Mitigation Revenue Fund (Fund 642) to cover ongoing maintenance costs on open space land. Fund 642 is a special account generated from revenues received from the sale of mitigation values on City owned property. Funds are restricted to open space management (for properties not held under easement or with dedicated long term management fund) and for open space acquisitions.

COMMUNITY PILLAR

3: Environmental Stewardship

GOAL

1: Lead Efforts to Implement the Updated Climate Action Plan in Collaboration with Internal and External Partners

ATTACHMENTS

1. Financial Analysis
2. Property Acquisitions Map
3. Location Map - Hartford Hills Property

4. Planning Commission Meeting Minutes
5. Letter to Citizens for Balanced Growth
6. Resolution - Hartford Hills Concurrence of Funds
7. Resolution - CEQA Hartford Hills Property
8. Resolution - Hartford Hills Authorizing City Manager
9. Exhibit A - Planning Commission Resolution
10. Exhibit B - Hartford Hills Purchase and Sale Agreement
11. Resolution - Hartford Hills Acquisition Funding

Prepared by: Kam Purewal
Associate Planner

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

CITY OF LIVERMORE CALIFORNIA

Table 1: Approved Acquisitions in the eastern acquisition priority area

City Council Date	Grant Amount	Acres	Acquisition Entity	Location
February 25, 2008	$200,000	80	East Bay Regional Park District	Adjacent to Del Valle Regional Park (Newbury Property)
July 13, 2009	$1,040,465	107	City of Livermore	Doolan Road adjacent to UGB and City Boundary
September 27, 2010	$300,000	74	Tri-Valley Conservancy	Bobba Property off Arroyo Road near the Veteran's Hospital
October 25, 2010	$2,000,000	633	East Bay Regional Park District	Doolan Ranch
June 27, 2011	$1,000,000	65	East Bay Regional Park District	Farber Property
October 28, 2013	$420,000	81	City of Livermore	Doolan Road north of City-owned properties
December 9, 2013	$500,000	79	East Bay Regional Park District	Eddie's Flat between Vasco and Lauglin Road
October 27, 2017	$132,200	2	East Bay Regional Park District	Gosselin Staging Area and Trail Easement into Doolan Canyon Preserve
December 10, 2018	$1,000,000	137	City of Livermore	Doolan Road adjacent to Dublin and in proximity to Doolan Ranch
January 29, 2019	$500,000	0	Tri-Valley Conservancy	Shadow Cliffs to Del Valle Trail Bridge
November 27, 2023	$145,810	0	California Rangeland Trust	DC Ranch Conservation Easement
Total	**$7,238,475**	**1,258**		

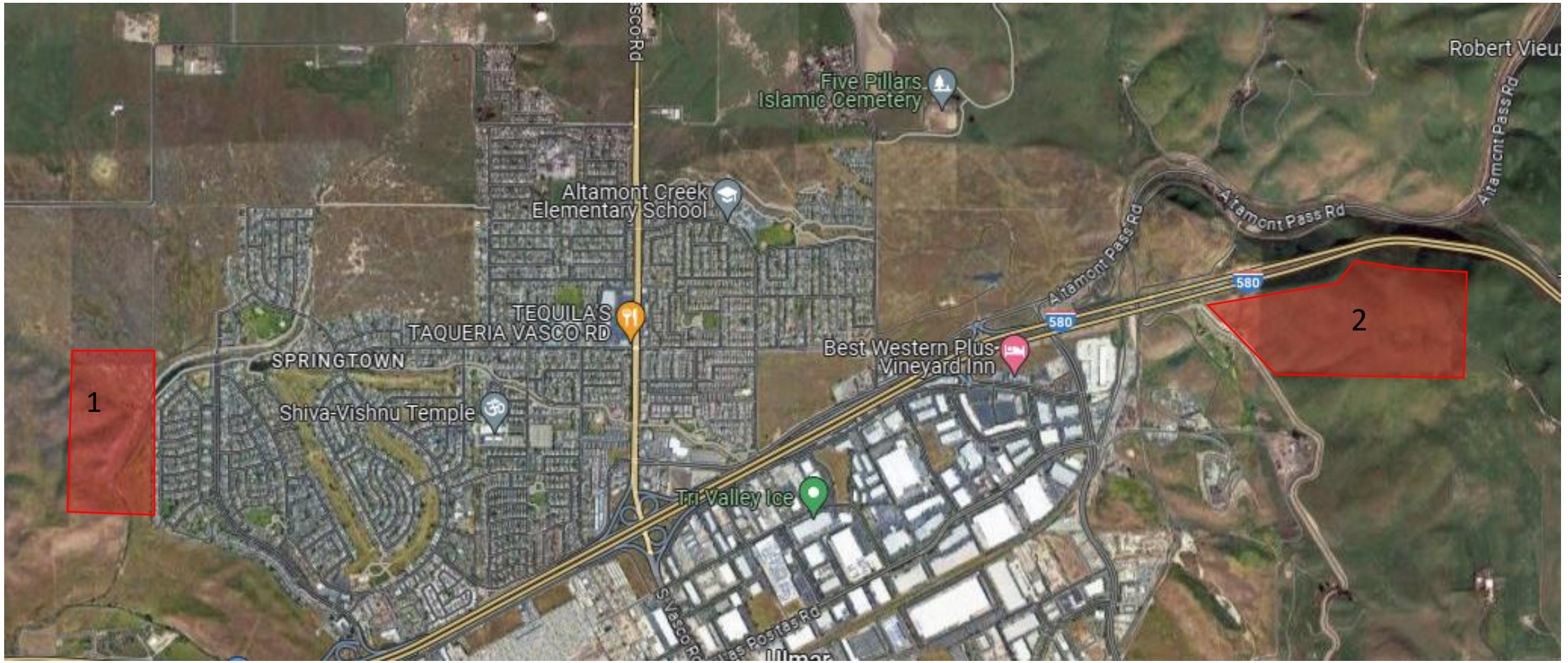
Table 2 – Hartford Hills Property ALOSC Grant Request

Itemized Expenses (estimated)	
Purchase Price	*$1,920,000 ($23,415/acre)*
Transaction Costs (appraisal/ staff/ legal/title/ escrow)	*$40,000*
Total Project Cost	**$1,960,000**
Funding from ALOSC	*$980,000 (50% of total cost)*
Funding from City of Livermore – Livermore Open Space Funds	*$980,000 (50% of total cost)*

Proposed Property Acquisitions

1. Hartford Hills Property
2. Greenville Road Property

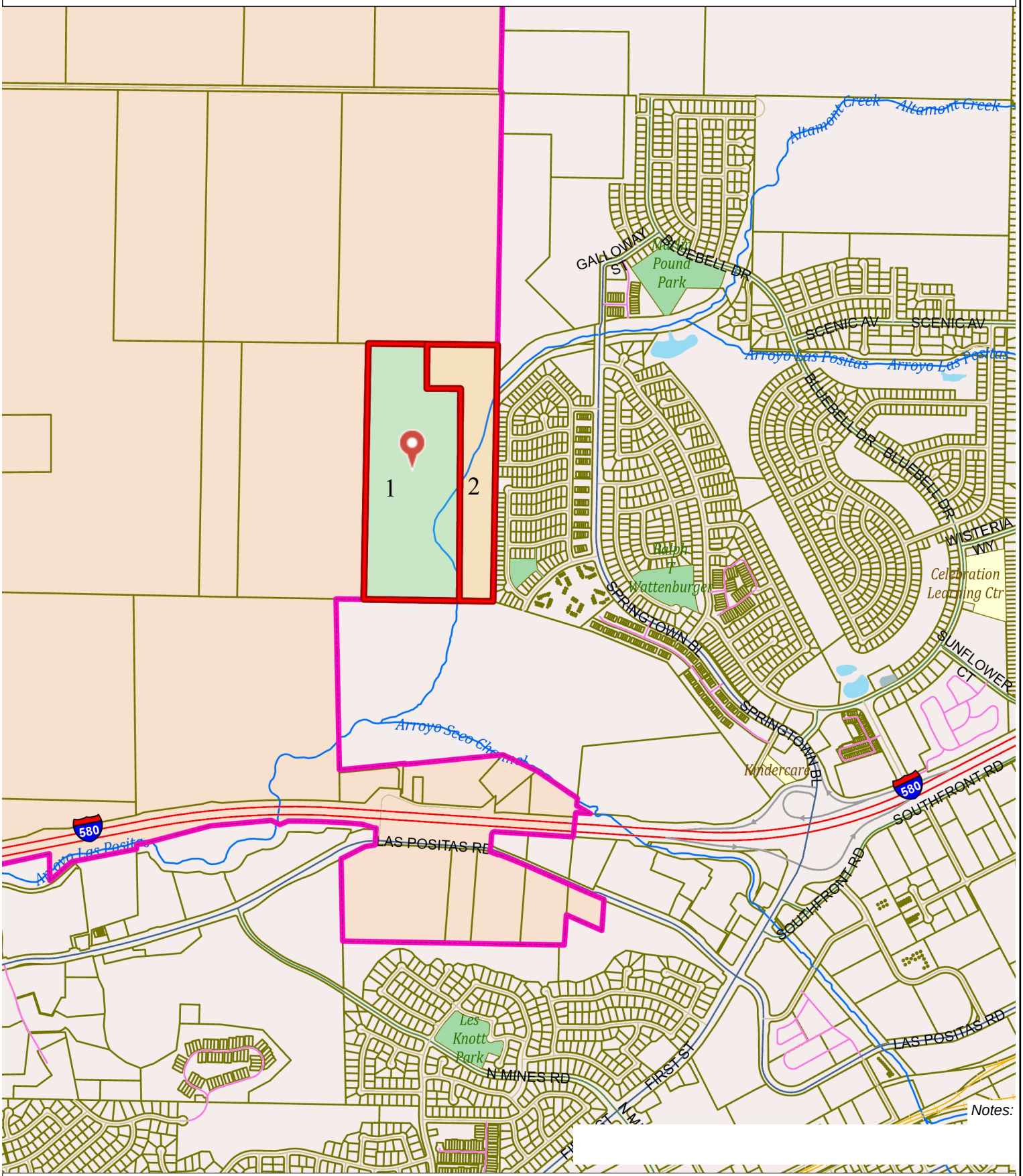
**Greenville Road Property Acquisition approved by the City Council on 7/8/2024.*



*Not exact property lines. (see location maps for each property)

LIVERMORE CALIFORNIA

Hartford Hills Property



Notes:

2,666.7 0 1,333.33 2,666.7 Feet

NAD_1983_2011_StatePlane_California_III_FIPS_0403_

Livermore IT, GIS Services

Scale: 1: 16,000

This map is based on City of Livermore GIS Information and reflects the most current information at the time of this printing. The map is intended for reference purposes only and the City and its staff is not responsible for errors.

Prepared:

4/3/2024 10:19:19 AM

Hartford Hills Property



LIVERMORE
CALIFORNIA

PLANNING COMMISSION
APRIL 16, 2024

REGULAR MEETING

1. CALL TO ORDER – The meeting of the Planning Commission was called to order by Chairperson Jacob Anderson at 7:00 pm, held in person at 1016 S. Livermore Avenue.

ROLL CALL – Present: Chairperson Jacob Anderson, Vice-Chairperson Yolanda Fintschenko, Commissioner Steven Dunbar, Commissioner Daniel Leary, Commissioner Tracy Kronzak.

PLEDGE OF ALLEGIANCE

3. OPEN FORUM – NONE.

4. CONSENT CALENDAR

4.1 Approval of the March 5, 2024 Planning Commission Draft Meeting Minutes.

Recommendation:
Staff recommends the Planning Commission approve the draft minutes.

ON THE MOTION OF COMMISSIONER DUNBAR, SECONDED BY COMMISIONER FINTSCHENKO AND CARRIED ON A 5-0 VOTE, THE PLANNING COMMISSION APPROVED THE CONSENT CALENDAR.

5. PUBLIC HEARINGS – NONE.

6. MATTERS FOR CONSIDERATION – NONE

6.1 Consideration of General Plan Consistency Determinations for the acquisition of three properties for open space and conservation purposes.

Recommendation:
Staff recommends the Planning Commission adopt three separate resolutions approving Consistency Determination (CD) 24-001, Consistency Determination (CD) 24-002, and Consistency Determination

(CD) 24-003, finding the City's acquisition of the following three properties for open space and conservation is consistent with Livermore's 2003 General Plan.

1. Consistency Determination (CD) 24-001 - 82 acres (Hartford Hills Property - APNs: 902-9-3-1, 902-9-3-2)
2. Consistency Determination (CD) 24-002 - 32 acres (Altamont Hills Property - APN: 99B-5680-4)
3. Consistency Determination (CD) 24-003 - 125.5 acres (Greenville Road Property - APN: 99B-5685-12)

Associate Planner Kam Purewal presented the staff report.

Chairperson Anderson opened the public comment period.

David Furst, Sierra Club, indicated the Sierra Club provided grant funds to purchase the three properties and he suggested the cross be removed from the property.

Jean King indicated support for the purchase of the three properties to support the City's goals for biological diversity, open space, flood control and non-motorized uses and in keeping with the Livermore Urban Growth Boundary. She encouraged the City to work with the Tri Valley Conservancy to establish easements in perpetuity and concurred that the City should remove the cross from the property.

There were no more speakers, and the public comment period was closed.

Commissioner Kronzak indicated review of the Community Character and Open Space policies in the General Plan.

In response to Commissioner Dunbar, Associate Planner Purewal and Economic Development Manager Andy Ross discussed the goal for Trail 6 to be completed within five years based on resources; allowable uses in the agricultural zone; and purpose of nonwasting endowment. Staff indicated it would provide data on noise and lights from the freeway impacting the parcels and confirmed that the trail was within the Active Transportation Plan but not as imminent as the Hartford Hills Trail.

Commissioner Leary pointed out benefits of the parcels including providing a permanent buffer to urban sprawl, preserving scenic corridors, maintaining rural character and the recreation aspect.

In response to Commissioner Dunbar, Associate Planner Purewal and Economic Development Manager Ross indicated the properties were owned by private sellers and within the jurisdiction of the County; due diligence would be conducted; and the powerline towers were for PG&E. Staff explained that the parcels would allow stormwater and flood control issues in alignment with the City's Climate

Action Goals.

In response to Vice Chair Fintschenko, Associate Planner Purewal and Economic Development Manager Ross confirmed that the Hartford Hills property roadway, utilities and sidewalk would no longer be extended; purchasing both properties would increase the opportunity to establish wildlife crossings; ownership under the freeway and efforts to work to preserve then enhance the property; the Climate Action Plan supported acquisition of parcels; and the relationship between the General Plan and Climate Action Plan.

Commissioner Kronzak confirmed the ultimate destination of the T6 Trail.

Chair Anderson confirmed that the Planning Commission was tasked with determining the acquisition met the policies and goals of the 2003 General Plan but they would likely comply with the updated General Plan. He stated the acquisition would also fulfill the requirements of the Conservation and Open Space Elements and was consistent with current General Plan.

Commissioner Dunbar asked the status of the cross property. Economic Development Manager Ross stated a determination had not been made on what the City would do moving forward. Commissioner Dunbar indicated he could make the finding that acquisition furthered the General Plan policies.

ON THE MOTION OF COMMISSIONER KRONZAK, SECONDED BY COMMISSIONER DUNBAR AND CARRIED ON A 5-0 VOTE, THE PLANNING COMMISSION ADOPTED THE FOLLOWING RESOLUTIONS:

Resolution 06-24 approving Consistency Determination (CD) 24-001 for the acquisition of approximately 82 acres (Hartford Hills Property – APNs: 902-9-3-1, 902-9-3-2)

Resolution 07-24 approving Consistency Determination (CD) 24-002 for the acquisition of approximately 32 Acres (Altamont Hills Property – APN: 99b-5680-4)

Resolution 08-24 approving Consistency Determination (CD) 24-003 for the acquisition of approximately 125.5 acres (Greenville Road Property – APN: 99b-5685-12)

7. MATTERS INITIATED BY PLANNING COMMISSION AND STAFF

Commissioner Dunbar expressed concern with bicycle safety.

The Commissioners commended Senior Assistant City Attorney Kim Cilley and wished her well in future endeavors.

Senior Assistant City Attorney Kim Cilley stated no appeal was filed in the Forum Mobility decision.

8. ADJOURNMENT – at 7:46 pm to a Regular Planning Commission Meeting on Tuesday, May 7, 2024, at 7:00 pm, Civic Center Meeting Hall, City Council Chambers, 1016 S. Livermore Avenue.

LIVERMORE
CALIFORNIA

April 9, 2024

Doug Mann
On behalf of Citizens for Balanced Growth
Sent via Email to: doug@citizensforbalancedgrowth.org

Michael Ferruci
On behalf of Citizens for Balanced Growth
Sent via Email to: frettedfriend@gmail.com

RE: Dougherty Valley Settlement Fund Recommendation
Acquisition of Open Space Properties
Buyer: City of Livermore

Messrs. Mann and Ferruci on behalf of Citizens for Balances Growth,

This letter is a final request to meet-and-confer with Citizens for Balanced Growth regarding the recommendation being formulated by City staff to the Livermore City Council regarding the expenditure of Dougherty Valley settlements funds for acquisition of the following properties for conservation preservation purposes (collectively known as the "Properties"):

- Garaventa Hills property - 32 acres (APN 099B-53-0-1)
- Hartford Hills Property – 82 acres (APNs: 902-9-3-1 and 902-9-3-2)
- Altamont Hills Property (formerly called the Cross property) – 32 acres (APN: 99B-5680-4)
- Greenville Road Property – 125.5 acres (APN: 99B-5685-12)

As you are aware, the Agreement to Settle Water Litigation dated November 2, 1999, and commonly known as the Dougherty Valley Settlement Agreement, contains the following clause in section 6(d)(i) for the expenditure of funds realized from the settlement:

> "City staff will meet and confer with [Citizens for Balanced Growth] prior to formulating its recommendations for acquisitions."

City staff has made numerous attempts to meet-and-confer with Citizens for Balanced Growth concerning the recommendations being prepared by City staff to the City Council regarding the expenditure of settlement funds for acquisition of the Properties by the City of Livermore for conservation preservation purposes. Those requests were

made in December, January, February, and March, but Citizens for Balanced Growth has not met with City staff.

Even though Citizens for Balanced Growth deviated from past practices and rebuffed requests to meet-and-confer by requesting information not previously requested for prior meet-and-confers and inserting new demands that the City identify the buyer before meeting, City staff provided the requested information and advised that the recommendation is based upon the City being the buyer.

It appears that Citizens for Balanced Growth is reluctant to meet because it does not support the expenditure of Dougherty Valley Settlement funds for the City's acquisition of the Properties for conservation preservation purposes. It may also be that Citizens for Balanced Growth is attempting to delay staff's recommendation concerning the proposed acquisitions.

Mr. Mann has expressed his personal opinion, at both the Livermore City Council meeting on February 26, 2024, and the Altamont Open Space Committee meeting on February 16 and March 15, 2024, that he does not support the City's acquisition of the Properties. However, he has not met-and-conferred with City staff on behalf of Citizens for Balanced Growth.

City staff proposes the following dates and times to meet-and-confer with Citizens for Balanced Growth about the staff recommendation being formulated to the Livermore City Council regarding the expenditure of Dougherty Valley settlements funds for the City's acquisition of the Properties:

Date: Thursday, April 18, 2024
Time: 4-5 pm or later if necessary
Location: Teams call or City Hall

Date: Tuesday, April 23, 2024
Time: 5-6 pm or later if necessary
Location: Teams call or City Hall

Date: Wednesday, April 24,2024
Time: 5-6 pm or later if necessary
Location: Teams call or City Hall

City staff is prepared to meet after hours if needed and can also meet at a publicly accessible location other than City Hall if that works better for both of you.

In the event Citizens for Balanced Growth does not meet-and-confer with City staff by April 24, 2024, staff will then formulate its recommendation to the City Council consistent with the Dougherty Valley Settlement Agreement with the following as the preferred recommendation by Citizens for Balanced Growth:

> "Citizens for Balanced Growth does not support the expenditure of Dougherty Valley settlement funds for the City of Livermore to acquire the following Properties:

- Garaventa Hills property - 32 acres (APN 099B-53-0-1)
- Hartford Hills Property – 82 acres (APNs: 902-9-3-1 and 902-9-3-2)
- Altamont Hills Property (formerly called the Cross property) – 32 acres (APN: 99B-5680-4)
- Greenville Road Property – 125.5 acres (APN: 99B-5685-12)"

I am be reached at (925) 960-4461 or via e-mail at spriley@livermoreca.gov. **Please contact me to accept one of the proposed dates to meet-and-confer or to identify a date-and-time that will occur before April 24, 2024, that works for Citizens for Balanced Growth and City staff.**

Sincerely,

Stephen Riley
Acting Planning Manager
City of Livermore Planning Division

Cc Paul Spence, Assistant City Manager
Jason Alcala, City Attorney
Kam Purewal, Assistant Planner

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION ACCEPTING THE ALTAMONT LANDFILL OPEN SPACE COMMITTEE'S RECOMMENDATION TO EXPEND FUNDS IN THE AMOUNT OF $980,000 FOR THE PURCHASE OF HARTFORD HILLS PROPERTY (82-ACRES) IN EASTERN ALAMEDA COUNTY (APNS 902-9-3-1 AND 902-9-3-2)

The City of Livermore's General Plan includes goals for long-term preservation of open space, including low-intensity agriculture, habitat protection, watershed management, and recreational uses.

In 1996, Alameda County certified an Environmental Impact Report and approved a conditional use permit for expansion of the Altamont Landfill by Waste Management of Alameda County, Inc., resulting in litigation.

In 1999, the lawsuit parties (Alameda County, the cities of Livermore and Pleasanton, the Sierra Club, Northern California Recycling Association, Altamont Landowners Against Rural Mismanagement, and Waste Management of Alameda County, Inc.) entered into a settlement agreement relating to the proposed expansion of the Altamont Landfill ("Settlement Agreement").

The Settlement Agreement provides for collection of a fee allocated to an Open Space Account for expenditure on open space acquisitions in fee or permanent easement. The Settlement Agreement required Alameda County to convene an advisory committee comprised of four members as follows: one member appointed by Alameda County, one member appointed by the City of Livermore, one member appointed by the City of Pleasanton, and one member appointed by the Sierra Club ("Open Space Committee").

The Settlement Agreement establishes criteria that limit the use the funds in the Open Space Account to open space acquisition including properties having significant value for preservation of native biological diversity and/or wildlife, and properties having significant value for visual character, and/or non-motorized recreation. The Open Space Committee has developed and utilized additional criteria for the use of the funds, including strategic value in land protection, additional funding sources, and willing sellers.

The Settlement Agreement assigns the Open Space Committee the responsibility to make recommendations on priority lists and allocations for the expenditure of the Open Space Account funds, and then requires the County and the respective city (depending upon the acquisition area) to determine whether the Open Space Committee's recommendation is consistent with the Settlement Agreement and the Open Space Committee's priorities. The City of Livermore, Alameda County, and the Sierra Club represent the voting members of the Open Space Committee for acquisitions in the eastern acquisition priority area that receives 80% of the Open Space Account funds. The City of Pleasanton, Alameda County, and the Sierra Club represent the voting members of the Open Space Committee for acquisitions in the western acquisition priority area that receives 20% of the Open Space Account funds.

On March 15, 2024, the Open Space Committee considered the City of Livermore's request for a grant in the amount of $980,000 to acquire the Hartford Hills Property (82-acres - APNS 902-9-3-1 and 902-9-3-2).

The Hartford Hills property is located within the eastern acquisition priority area. The Open Space Committee recommended expending $980,000 (50% of the acquisition cost) from the Open Space fund for a grant to the City of Livermore for acquisition and recommended the Livermore City Council and the Alameda County Board of Supervisors determine that the expenditure is consistent with the Settlement Agreement and the Open Space Committee's priorities.

The Open Space Committee's recommended expenditure of Open Space Account funds, and their expenditure for the acquisition of the Hartford Hills Property, is not a project under the California Environmental Quality Act (CEQA) and CEQA Guidelines section 15378, because an approval of the expenditure of funds would not approve a physical development project, would not physically change the environment, and would help preserve natural habitat. Therefore, no environmental review is required.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that based upon its own independent review of the entire record it hereby finds the Open Space Committee's recommendation for the expenditure of $980,000 of Altamont Open Space Funds to fund the grant request by the City of Livermore to purchase and manage the Hartford Hills Property is consistent with the Livermore General Plan and the priorities set by the Settlement Agreement and the Open Space Committee.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION FINDING THAT THE ACQUISITON OF THE HARTFORD HILLS PROPERTY (82 ACRES – APNS 902-9-3-1 AND 902-9-3-2) IS EXEMPT FROM THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

In July and November of 2023, the City Council authorized City of Livermore ("City") staff to enter negotiations with the property owner to acquire in fee title for open space and conservation purposes. The property is located outside of the City limits and outside of the North Livermore Urban Growth Boundary.

On March 15, 2024, the Altamont Landfill Open Space Committee approved the City of Livermore's grant applications for the acquisition of the Hartford Hills Property. On April 16, 2024, in accordance with Government Section 65402(a), the Livermore Planning Commission adopted a resolution and determined the City's acquisition of the Hartford Hills Property is in conformance with Livermore's 2003 General Plan and implements the General Plan goals, objectives, policies, and strategies outlined below.

On July 22, 2024, the City Council considered the Project, Planning Commission and staff recommendations, and all public comments and testimony, and findings.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that prior to taking action on the Project the City Council reviewed written and oral staff reports on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that based upon the City Council's own independent review of the Record Evidence and considerations the City Council hereby finds that the Project is categorically exempt under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15313, which exempts acquisitions of lands for the purpose of conservation, and none of the exceptions to the exemption listed in Section 15300.2 apply.

Exceptions - Section 15300.2

None of the exceptions to the categorical exemption listed in CEQA Guidelines Section 15300.2 apply, as described below.

1. Location. This exception does not apply. Categorical Exemption Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located. The proposed land acquisition qualifies for a Class 13 Categorical Exemption and, therefore, is not subject to this possible exception due to project location.

2. Cumulative Impact. The undeveloped and vacant property will remain as open space. The property will be managed for its conservation value and will be encumbered with a conservation easement. The acquisition of the property would not result in any significant impacts, and its contribution to regional growth is not cumulatively considerable. Therefore, the property acquisition will not result in any cumulative impacts.

3. Significant Effects Resulting from Unusual Circumstances. There is no reasonable possibility that the acquisition of the property will have a significant effect on the environment due to unusual circumstances. There is no evidence that any unusual circumstances exist. The undeveloped and vacant property will remain as open space. The property will be managed for its conservation value and will be encumbered with a conservation easement.

4. Scenic Highways. The property site is not designated as a Scenic Highway by the California Department of Transportation. No damage to scenic resources will occur because the Project is not located within the Scenic Corridor of the General Plan. The Project site is not designated as a Scenic Highway by the California Department of Transportation. No damage to scenic resources will occur because the Project is not located within the Scenic Corridor of the General Plan.

5. Hazardous Waste Sites. The project is not included on the list of hazardous waste facilities compiled pursuant to California Government code Section 65962.5, which comprises the following five parts: the list of Hazardous Waste and Substances sites from the Department of Toxic Substances Control (DTSC) EnviroStor database; the list of Leaking Underground Storage Tank (LUST) sites from the State Water Resource Control Board (SWRCB) Geotracker database; the list of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management list; the list of active Cease and Desist Orders or Cleanup and Abatement Orders that concern the discharge of wastes that are hazardous materials; or the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

6. Historical Resources. The site is not a historical resource and therefore will not cause a substantial adverse change in the significance of a historical resource.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby directs the Planning Manager to file a Notice of Exemption with the Alameda County Clerk if the project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the City Clerk's Office, 1052 S. Livermore Avenue, in Livermore, California. This resolution shall be effective upon adoption by the City Council.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE A PURCHASE AND SALE AGREEMENT FOR THE ACQUISITON OF THE HARTFORD HILLS PROPERTY (82 ACRES – APNS 902-9-3-1 AND 902-9-3-2)

In July and November of 2023, the City Council authorized City of Livermore ("City") staff to enter negotiations with the property owner to acquire in fee title for open space and conservation purposes. The property is located outside of the City limits and outside of the North Livermore Urban Growth Boundary.

On March 15, 2024, the Altamont Landfill Open Space Committee approved the City's grant applications for the acquisition of the Hartford Hills Property. On April 16, 2024, in accordance with Government Section 65402(a), the Livermore Planning Commission adopted a resolution and determined the City's acquisition of the Hartford Hills Property is in conformance with Livermore's 2003 General Plan and implements the General Plan goals, objectives, policies, and strategies outlined below.

The Livermore 2003 General Plan includes a Community Character Element with the following goals, objectives, and policies regarding the preservation and enhancement of Livermore's natural environment as a valuable component of Livermore's character and identity (Exhibit A).

Goal CC-1 - Preserve and enhance Livermore's natural setting.

Objective CC-1.1 - Use open space to protect and enhance local community character and identity, to preserve rural characteristics, and to provide an edge to urban growth.

Policy CC-1.1 P6 - The City shall maintain an area of non-urbanized land surrounding Livermore to serve as a buffer between communities. Uses that are considered compatible with this area include agriculture, grazing, open space, recreation, and reclaimed sand and gravel extraction.

Policy CC-1.1 P7 - Open space shall be used to protect and enhance local community character and identity, and to guide the physical shape and direction of urban growth to preserve the rural characteristics of the area.

The City's acquisition will also implement the following General Plan goals, objectives, and policies regarding Open Space and Conservation:

Goal OSC-1 - Conserve the value and function of Livermore's open space as a biological resource.

Objective OSC-1.1 - Maintain biodiversity within the Planning Area with special emphasis on species that are sensitive, rare, declining, unique, or represent valuable biological resources.

Objective OSC-5.1 - Provide a comprehensive system of parks and recreation facilities in Livermore.

Policy OSC-5.1 P6 - The City shall coordinate and cooperate with LARPD and EBRPD in developing adequate regional park space around Livermore to serve foreseeable population increases in Livermore and its environs.

The proposed land acquisition will implement the following General Plan Land Use goals and objectives related to the North Livermore Urban Growth Boundary:

Goal LU-5 - It is the goal of the City to establish a coherent and logical pattern of urban uses that protects and enhances open space and agricultural uses by providing a clear and permanent boundary for urban uses within the City's Planning Area.

Objective LU-5.1 - Maintain an Urban Growth Boundary to protect open space and agricultural uses in North Livermore.

The proposed land acquisitions will implement the following General Plan Strategy related to the Climate Action Plan:

S-1.4 - Preserve open spaces. Continue the City's open space preservation efforts to preserve open space as conservation or working land to maintain carbon sequestration and other benefits.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that prior to taking action on the Project, and at a properly noticed public meeting, the City Council reviewed written and oral staff reports, took testimony, and received into the record all pertinent documents (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it has considered the Record Evidence and adopted a resolution finding the acquisition of the Hartford Hills Property (82 acres – APNs: 902-9-3-1 and 902-9-3-2) to be exempt from the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15313, which exempts acquisitions of lands for the purpose of conservation.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby directs the Planning Manager to file a Notice of Exemption with the Alameda County Clerk.

BE IT FURTHER RESOLVED by the City Council of the City of Livermore that it hereby authorizes the City Manager to execute a Purchase and Sale Agreement and all other documents necessary for the acquisition of the Hartford Hills Property (Exhibit B).

The documents that constitute the record of proceedings upon which this decision is based can be found in the City Clerk's Office, 1052 S. Livermore Avenue, in Livermore California.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

Exhibit A – Planning Commission Resolution
Exhibit B – Hartford Hills Purchase and Sale Agreement

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROVING CONSISTENCY DETERMINATION (CD) 24-001 FOR THE ACQUISITION OF APPROXIMATLEY 82 ACRES (HARTFORD HILLS PROPERTY – APNs: 902-9-3-1, 902-9-3-2)

The Planning Commission, as the City's planning agency, is required by Government Code Section 65402(a) to determine the consistency of the acquisition of real property and easements for public purposes with the City's General Plan; and

A Consistency Determination for the acquisition of real property and easements does not constitute a project for the purposes of the California Environmental Quality Act (CEQA) per section 21065 of the California Environmental Quality Act and CEQA Guidelines. Therefore, no environmental review under CEQA is required.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public meeting, the Planning Commission reviewed written and oral staff reports, took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED, with respect to Consistency Determination (CD) 24-001, the Planning Commission finds:

1. Acquisition and disposition of real property is determined to be consistent with the City of Livermore General Plan

   Response: The acquisition of approximately 82 acres (Hartford Hills Property – APNs: 902-9-3-1, 902-9-3-2) is consistent with the General Plan goals, objectives, policies, and strategies outlined below. The Livermore 2003 General Plan includes a Community Character Element with the following goals, objectives, and policies regarding the preservation and enhancement of Livermore's natural environment as a valuable component of Livermore's character and identity.

   Goal CC-1 - Preserve and enhance Livermore's natural setting.

   Objective CC-1.1 - Use open space to protect and enhance local community character and identity, to preserve rural characteristics, and to provide an edge to urban growth.

   Policy CC-1.1 P6. The City shall maintain an area of non-urbanized land surrounding Livermore to serve as a buffer between communities. Uses that are considered compatible with this area include agriculture, grazing, open space, recreation, and reclaimed sand and gravel extraction.

Policy CC-1.1 P7. Open space shall be used to protect and enhance local community character and identity, and to guide the physical shape and direction of urban growth to preserve the rural characteristics of the area.

The City's acquisition will also implement the following General Plan goals, objectives, and policies regarding Open Space and Conservation:

Goal OSC-1 - Conserve the value and function of Livermore's open space as a biological resource.

Objective OSC-1.1 - Maintain biodiversity within the Planning Area with special emphasis on species that are sensitive, rare, declining, unique, or represent valuable biological resources.

Objective OSC-5.1 - Provide a comprehensive system of parks and recreation facilities in Livermore.

Policy OSC-5.1 P6 - The City shall coordinate and cooperate with LARPD and EBRPD in developing adequate regional park space around Livermore to serve foreseeable population increases in Livermore and its environs.

The proposed land acquisitions will implement the following General Plan Land Use goals and objectives related to the North Livermore Urban Growth Boundary:

Goal LU-5 - It is the goal of the City to establish a coherent and logical pattern of urban uses that protects and enhances open space and agricultural uses by providing a clear and permanent boundary for urban uses within the City's Planning Area.

Objective LU-5.1 - Maintain an Urban Growth Boundary to protect open space and agricultural uses in North Livermore.

The proposed land acquisitions will implement the following General Plan Strategy related to the Climate Action Plan:

S-1.4 Preserve open spaces. Continue the City's open space preservation efforts to preserve open space as conservation or working land to maintain carbon sequestration and other benefits.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Livermore has considered the findings set forth above and adopts these findings as part of this resolution. Based upon the Planning Commission's independent review of the Record Evidence and considerations, the Planning Commission, finds the acquisition of the Hartford Hills Property including approximately 82 acres (APNs 902-9-3-1, 902-9-3-2) is consistent with Livermore's General Plan and hereby approves Consistency Determination

(CD) 24-001.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department, 1052 S. Livermore Avenue, in Livermore, California.

The Planning Commission's decision is subject to a 15-day appeal period in accordance with Livermore Development Code Chapter 9.15.

On the motion by Commissioner Kronzak, seconded by Commissioner Dunbar, the foregoing Resolution was passed and adopted at the Planning Commission meeting of April 16, 2024, by the following vote:

AYES: ANDERSON, DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: NONE.

Jacob Anderson, Chairperson

Stephen Riley

By Stephen Riley, Acting Planning Manager
Secretary to the Planning Commission

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PURCHASE AGREEMENT AND ESCROW INSTRUCTIONS

This Purchase and Sale Agreement and Escrow Instructions ("Agreement") dated as of _____ _____, 20 24 (the "Effective Date"), is made by and between the City of Livermore, a municipal corporation ("Buyer") and Hartford Hills Estates, Ltd., a California limited partnership, ("Seller").

RECITALS

A. Seller is the owner of the Property (as defined in Section 1 below) pursuant to that certain (Grant Deed) for APN No. 902-9-3-1 dated May 11, 1988, and recorded on May 12,1988, in the Official Records of Alameda County, California as Instrument No. 88-113342 and (Grant Deed) for APN No. 902-9-3-2 dated March 7, 1988 an recorded on March 31, 1988, in the Official Records of Alameda County, California as Instrument No. 88-077874.

B. Buyer wishes to purchase the Property from Seller, and Seller wishes to sell the Property to Buyer, each upon the terms and conditions in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Buyer and Seller agree as follows:

1. Purchase of the Property. Subject to the terms and conditions of this Agreement, Seller shall sell to Buyer and Buyer shall purchase from Seller the following (collectively, the "Property"):

   1.1. Real Property. That certain real property located in Alameda County, California, consisting of approximately a total of (82) acres of land, relating to APNs: 902-9-3-1 and 902-9-3-2, as more particularly described in Exhibit A attached hereto, together with all privileges, rights, easements, and appurtenances belonging to such real property (collectively, the "Real Property").

   1.2. Improvements. Any and all improvements, buildings, facilities, fixtures, structures, fences, and parking areas located on the Real Property (collectively, the "Improvements").

   1.3. All Other Tangible and Intangible Rights and Assets. All other rights and assets, tangible or intangible and wherever located, which relate to the Real Property.

2. Purchase Price. The purchase price for the Property ("Purchase Price") shall be $1,920,000 One Million Dollars Nine Hundred and Twenty Thousand Dollar (purchase price), and shall be payable as follows:

   2.1. Deposit. Within five (5) business days of Effective Date, Buyer shall deposit into Escrow 50% of the Purchase Price, for a sum of Nine Hundred and Sixty Thousand Dollars ($960,000) in cash ("Deposit"). In the event that Buyer exercises the option, in its sole discretion, to terminate this Agreement, the Escrow Holder shall be, and is hereby irrevocably instructed by Seller and Buyer, to immediately pay to Buyer the full amount of the Deposit and any interest earned thereon without further instructions.

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3. Escrow; Closing Conditions.

3.1. Escrow. Upon full execution and delivery of this Agreement, Buyer shall promptly open an escrow account ("Escrow") with First American Title Company, located at 4900 Hopyard Road, Suite 110, Pleasanton, CA 94588 (Attn: Kellie Sanders – (925) 460-0790) ("Escrow Holder"). This Agreement shall, to the extent possible, serve as escrow instructions. The parties agree to execute such additional escrow instructions as may be required by Escrow Holder, which instructions shall be consistent with this Agreement. The "Close of Escrow" shall occur as soon as practicable after the satisfaction of all conditions precedent specified in this Agreement, but in any event, on or before thirty (30) business days following the Effective Date.

3.2. Fees. Buyer shall pay all of Escrow Holder's fees, including escrow charges and fees. Buyer shall pay the costs of a CLTA Standard Owner's Policy of Title Insurance with respect to the Real Property insuring Buyer in the full amount of the Purchase Price, all documentary transfer taxes, and recording fees. Buyer shall pay for the costs of any endorsements to the Title Policy (as hereinafter defined) and the incremental cost of an ALTA Extended Owner's Policy of Title Insurance if Buyer desires to obtain such a policy. As used herein, "Title Policy" shall mean a CLTA Standard Owner's Policy of Title Insurance and, if applicable, an ALTA Extended Owner's Policy of Title Insurance, subject only to the Permitted Exceptions (as hereinafter defined) and containing such endorsements as Buyer may require in its sole discretion.

3.3. Deposit of Documents into Escrow.

3.3.1. Seller shall deposit with Escrow Holder the following items no later than five (5) business days after the Effective Date, duly executed and acknowledged where required:

a. The Grant Deed;

b. Completed Franchise Tax Board Form 597-W and an affidavit certifying that Seller is not a "foreign person" as defined in the Internal Revenue Code;

c. A completed California Form 593-C (which provides that no portion of the Purchase Price shall be required to be withheld by or on behalf of Buyer), duly executed by Seller; and

d. Any other documents, instruments or agreements reasonably required to be delivered hereunder to Escrow Holder or to Buyer in order to consummate the transactions contemplated by this Agreement.

3.3.2. Buyer shall execute and/or deliver the following to the Escrow Holder for delivery or disbursement to Seller on Close of Escrow:

a. The Purchase Price;

b. Escrow Holder's costs and expenses, as herein provided; and

c. Any other documents, instruments or agreements reasonably required to be delivered

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hereunder to Escrow Holder or to Seller in order to consummate the transactions contemplated by this Agreement.

3.4. Close of Escrow. Escrow Holder shall do all of the following upon Close of Escrow:

3.4.1. Record the Grant Deed, with a Certificate of Acceptance, in the Official Records of Alameda County, California;

3.4.2. Cause the Title Policy to be issued to Buyer within a reasonable time after Close of Escrow; and

3.4.3. Disburse the Purchase Price to Seller less the amount of any other closing expense payable by Seller pursuant to the terms of this Agreement.

4. Title Matters; Insurance.

4.1. Title. Title to the Property shall be conveyed to Buyer free and clear of all liens, claims and encumbrances except as permitted in this Section (the "Permitted Exceptions").

4.2. Approval of Exceptions. Within five (5) business days after Escrow is opened, or as soon thereafter as reasonably possible, Seller shall cause Escrow Holder to deliver to Buyer a preliminary title report with respect to the Real Property (the "Preliminary Report") together with copies of all recorded documents shown as exceptions thereto. Buyer shall notify Seller ("Buyer's Title Objection Notice") within ten (10) business days after the Effective Date of any objections to the preliminary title report. If Buyer, in its sole and absolute discretion, disapproves of any of the exceptions shown on the Preliminary Report, Buyer must deliver Buyer's Title Objection Notice to Seller, which shall outline the Disapproved Exceptions, those items that appear on the Preliminary Report to which the Buyer objects. The term "Permitted Exceptions" shall mean (i) the title exceptions that are not disapproved of by Buyer in Buyer's Title Objection Notice or (ii) the title exceptions for which Escrow Holder is irrevocably committed to insure against by the issuance of endorsements to the Title Policy, which endorsements must be acceptable to Buyer in its sole discretion. Notwithstanding anything else contained in this Agreement, the following shall be Permitted Exceptions: real estate taxes, assessments, vault charges and water and sewer charges not currently due and payable, subject to adjustment as provided in Section 7 of this Agreement.

4.3. Seller shall have five (5) business days following receipt of Buyer's Title Objection Notice to provide Buyer with written notice ("Seller's Title Notice") that either: (i) Seller is unwilling or unable to deliver title to the Real Property subject only to the Permitted Exceptions; or (ii) Seller is willing to use commercially reasonable efforts to deliver title to the Real Property subject only to the Permitted Exceptions within a specified period of time not to exceed thirty (30) business days from the date of such Seller's Title Notice ("Extension Date"). Failure by Seller to deliver Seller's Title Notice to Buyer within the five (5) business day period specified above shall constitute Seller's agreement to use commercially reasonable efforts to deliver title at Close of Escrow subject only to the Permitted Exceptions. If in Seller's Title Notice, Seller has deemed that it is unwilling or unable to deliver title to the Real Property subject only to the Permitted Exceptions, Buyer shall have the option, by notice to Seller within five (5) business days after receipt of Seller's Title Notice, but in no event after the expiration of the Review Period (as defined in Section 5.1 below), to either (i) accept such

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title to the Real Property as Seller can provide, or (ii) to terminate this Agreement and have the Deposit returned if permitted by Section 2.1 hereof. If for any reason whatsoever, Seller remains unable or unwilling to deliver title subject only to the Permitted Exceptions by the Extension Date, and if Buyer shall still be unwilling to accept such title to the Real Property as Seller can provide, then either party may terminate this Agreement without further liability. If, after the date hereof, any additional items come into existence which would show as exceptions to title insurance in the Title Policy, and Seller fails to remove same prior to the Close of Escrow, Buyer shall have the choice of: (i) terminating this Agreement and the Escrow and thereafter neither Seller nor Buyer shall have any further obligations under this Agreement; or (ii) completing the purchase of the Property in accordance with the terms of this Agreement.

5. Due Diligence Investigation.

5.1. Review Period. Buyer may conduct investigations and reviews of the Property including, but not limited to, the physical condition or state of the Property, environmental matters (including, without limitation, Phase I and Phase II environmental reports of the Property), title matters, zoning matters, governmental, regulatory or land use matters, and any other matters affecting Buyer or Buyer's anticipated use and ownership of the Property during the term of this Agreement. The Review Period shall continue for a period of 15 business days after the Effective Date. After 15 business days after the Effective Date, the Review Period shall be terminated.

5.2. Disapproval of Investigation. If Buyer, in its sole and absolute discretion, disapproves any of the results of its investigation and review, Buyer may, subject to Section 2.1 hereof, terminate this Agreement without any liability whatsoever by providing written notice thereof to Seller on or before the termination date of the Review Period. If this Agreement is so terminated, the Deposit shall be returned if permitted by Section 2.1 hereof and neither party shall have any further liability hereunder. If Buyer fails to deliver such notice to Seller on or before the termination of the Review Period, Buyer shall be deemed to have elected to consummate this transaction.

5.3. Access to Property. Seller agrees to grant Buyer and Buyer's employees, agents, consultants, and other authorized representatives the right to reasonable access to the Property at reasonable times during the Term of this Agreement subject to twenty-four hours' notice to the Seller of Buyer's intent to access the Property.

6. Possession. Possession of the Property shall be delivered to Buyer on Close of Escrow in its "as-is" condition, free of all tenancies and subject to the representations and warranties and covenants of Seller contained herein.

7. Prorations. All utility costs, real property taxes and assessments, water charges and assessments, bond payments and other expenses affecting the Property shall be prorated as of Close of Escrow. If, at the time of the Close of Escrow, the tax rate or the assessed valuation of the Property has not been fixed, the apportionment of taxes will be upon the basis of the most recently established tax rate applied to the latest assessed valuation (subject to adjustment as hereinafter provided). If any expenses (other than taxes) for the Property cannot be determined finally as of Close of Escrow, such expense will be prorated on the best available information. Adjustments to the prorations will be made from time to time after Close of Escrow to take account of final information as to expenses estimated as of the Close of Escrow or to adjust expenses that were not included in the prorations

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done at the Close of Escrow, and Buyer or Seller, as applicable, will pay the other on demand such amounts as may be appropriate based on such adjustments, together with interest at twelve percent (12%) per annum from the date of demand if such amount remains unpaid more than ten (10) business days after demand. Any reproration of expenses must be completed within one hundred eighty (180) calendar days after Close of Escrow or, in the case of taxes, within ninety (90) calendar days after the tax (or adjustment of tax) is billed, and neither Buyer nor Seller will be entitled to request a payment on account of reprorations after such date. Notwithstanding the foregoing, Seller shall remain fully liable for the payment of any taxes assessed against the Property and attributable to any period prior to Close of Escrow, irrespective of when such taxes are billed by the relevant taxing authorities. In addition, Buyer specifically acknowledges that Seller shall be entitled to any refund of real and personal property taxes, installments of bonds and special taxes and assessments attributable to the Property and allocable to the period prior to Close of Escrow ("Refunds"). Any such Refunds shall be paid to Seller regardless of when they are received.

8. Real Estate Brokers. Each party hereby agrees to indemnify, protect and defend the other (by counsel acceptable to the party seeking indemnification) against and hold the other harmless from and against any and all damages, liabilities, loss, cost and expense, including, but not limited to, reasonable attorneys' fees and court costs, resulting from any claims for any such real estate commission, finder's fee or other real estate brokerage-type commission by any person or entity based upon such acts. The foregoing indemnities shall survive Close of Escrow or any earlier termination of this Agreement.

9. Representations, Warranties, and Covenants of Seller. Seller represents, warrants and covenants to Buyer that:

   9.1. Seller's Warranty of Authority. Seller has the full power and authority to execute and enter into this Agreement and the authority to consummate the transactions contemplated in this Agreement.

   9.2. Non-Foreign Person. Seller is not a "foreign person" within the meaning of Internal Revenue Code section 1445.

   9.3. Enforceability. This Agreement constitutes the valid and binding agreement of Seller, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and creditors' rights laws generally.

   9.4. Due Diligence Deliverables. True, correct and complete copies of all Due Diligence Deliverables prepared by third parties will be delivered to Buyer within five (5) business days following receipt by Seller; provided, however, that Seller makes no warranty express or implied as to the correctness of the contents of such Due Diligence Deliverables. True and correct copies of all other Due Diligence Deliverables prepared by Seller will be delivered to Buyer not later than three (3) business days following the execution and delivery of this Agreement by Seller and Buyer.

   9.5. Notices. Except as disclosed to Buyer in the Due Diligence Deliverables, Seller has not received any notices from or sent any notices to any federal, state, or local governmental authority having jurisdiction over the Property or any other third party regarding, without limitation, environmental conditions, the presence or absence of hazardous materials, zoning, land use, suitability for a particular purpose, or compliance with law. To Seller's knowledge,

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the Property is in compliance with all laws, rules and regulations, including, without limitation, any state or federal environmental laws, e.g., CERCLA, RCRA, FWPCA, TSCA, HMTA.

9.6. Leases; Agreements. Seller represents it is not a party to any lease, license or other agreement granting possessory rights with respect to the Property, and that there are no tenants on the Property. As of the Close of Escrow, Seller shall not be a party to any lease agreement, license, or other agreement granting possessory rights with respect to the Property and there shall be no tenants on the Property. To the extent Seller is a party to any lease agreement, license, or other agreement granting possessory rights with respect to the Property, Seller shall provide Buyer with Estoppel Certificates and copies of all leases, licenses or other such agreements no later than five (5) business days after the Effective Date. From and after the Effective Date, Seller shall not create any leases or other agreements affecting the Property without Buyer's prior written consent.

9.7. Contracts. Within five (5) business days after the Effective Date, Seller shall deliver to Buyer true and correct copies of any contracts and agreements affecting the Property. As of the Close of Escrow, no contracts or agreements that are binding on the owner of the Property shall remain in effect. From and after the Effective Date, Seller shall not enter into any new contracts or agreements relating to the Property without the prior written consent of Buyer, which consent shall not be unreasonably withheld or delayed and shall be deemed given if the term of such contract or agreement shall expire prior to the Close of Escrow.

9.8. Actions, Suits or Proceedings. There are no actions, suits, or proceedings, pending, or, to Seller's knowledge, threatened, before any commission, board, bureau, agency, arbitrator, court, or tribunal affecting, or that would affect, the Property or the right to occupy or utilize the Property.

9.9. No Bankruptcy Proceedings. Seller is not the subject of any bankruptcy, insolvency, or probate proceeding.

9.10. Taxes and Assessments. Seller represents it has paid all taxes, charges, and assessments (special or otherwise) billed, due and payable for all years up through and including the 2023-2024 tax year required to be paid to any taxing authority or other association, which, if unpaid, could in any way constitute a lien against the Property or any part thereof. Seller has not received any notice from any taxing authority, governmental agency or other association:
(i) asserting that Seller has failed to file or has improperly filed any tax return or report required to be filed or of any charges now owing by it which could in any way now or hereafter constitute a lien or claim against the Property or any part thereof; or (ii) regarding any pending or contemplated taxes, assessments, charges or fees which affect or will affect the Property other than customary property taxes/assessments, as reflected in the Title Report. No action or proceeding is now pending by a governmental agency or authority or other association for the assessment or collection of any such taxes, charges or assessments against Seller.

10. Representations and Warranties of Buyer. Buyer hereby represents to Seller that at the date of execution hereof and at and as of Close of Escrow, Buyer is a municipal corporation and has the legal capacity to understand and execute this Agreement and all related documents.

11. Survival. All of the representations and warranties of Buyer and Seller made in conjunction with

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and pursuant to this Agreement shall survive Close of Escrow, but only for a period of ninety (90) calendar days. No claim shall be allowed on any such representation or warranty unless notice of the claim and a detailed statement of the basis for the claim is delivered by the claimant to the other party within such period.

12. Conditions of Closing.

12.1. Buyer's Conditions. Buyer's obligations to purchase the Property on Close of Escrow are expressly conditioned upon each of the following:

12.1.1. Title Insurance. Seller shall be prepared to convey to Buyer good and marketable title to the Real Property subject only to the Permitted Exceptions, and the Escrow Holder shall be irrevocably committed to issuing the Title Policy.

12.1.2. Buyer's Inspection. There shall have been no material adverse change in the condition of the Property between the end of the Review Period and the Close of Escrow.

12.1.3. Closing Warranties. The representations and warranties of Seller contained in this Agreement being true, correct and complete on and as of Close of Escrow as if the same were made on such date.

12.1.4. Delivery Into Escrow. Seller having delivered to Escrow all items required by this Agreement and having complied with all other covenants and conditions of this Agreement to be performed or complied with by Seller.

12.2. Seller's Conditions. Seller's obligation to sell the Property on Close of Escrow is expressly conditioned upon each of the following:

12.2.1. Closing Warranties. The representations and warranties of Buyer contained in this Agreement being true, correct and complete on and as of Close of Escrow as if the same were made on such date.

12.2.2. Delivery Into Escrow. Buyer having delivered to Escrow all items required by this Agreement, including without limitation the Purchase Price, and having complied with all other covenants and conditions of this Agreement to be performed or complied with by Buyer.

13. Failure of Conditions. If any of the conditions specified in this Agreement fail to occur prior to Close of Escrow, the party benefited by such condition shall have the power, exercisable by giving written notice to the Escrow Holder and to the other party, either to waive the condition or to cancel the Escrow and terminate this Agreement. In the event this Agreement is terminated due to the failure of a condition specified herein, the Deposit shall be disbursed in accordance with Section 2.1.

14. Indemnification.

14.1. Seller's Indemnification. From and after Close of Escrow, Seller shall indemnify, defend, protect, and hold harmless Buyer, Buyer's past, present, and future parents, subsidiaries, and affiliates, and their respective directors, officers, shareholders, partners,

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members, managers, trustees, employees, agents, attorneys, representatives, affiliates, predecessors in interest, successors and assigns (collectively, the "Buyer Indemnified Parties"), from and against any and all claims, demands, liabilities, costs, expenses, damages and losses, cause or causes of action and suit or suits of any nature whatsoever (including reasonable attorneys' fees, expert fees, and costs) arising from any misrepresentation or breach of warranty or covenant by Seller in this Agreement, or for any activity or event involving Seller's activities on the Property occurring prior to Close of Escrow. This indemnity does not apply, however, to any item, matter, occurrence or condition which was disclosed in writing to or known to Buyer (including its agents, consultants and representatives) or any other of the Buyer Indemnified Parties with authorization to act on behalf of Buyer prior to the expiration of the Review Period.

14.2. Buyer's Indemnification. From and after Close of Escrow, Buyer shall indemnify, defend, protect and hold harmless Seller, Seller's past, present and future parents, subsidiaries and affiliates, and their respective directors, officers, shareholders, partners, members, managers, trustees, employees, agents, attorneys, representatives, affiliates, predecessors in interest, successors and assigns (collectively, the "Seller Indemnified Parties"), from and against any and all claims, demands, liabilities, costs, expenses, damages and losses, cause or causes of action and suit or suits of any nature whatsoever (including reasonable attorneys' fees and costs) ("Losses") arising out of Buyer's ownership and/or operation of the Property following Close of Escrow, or from any misrepresentation or breach of warranty or covenant by Buyer in this Agreement; provided, however, Buyer shall not indemnify any of the Seller Indemnified Parties for any Losses resulting from: (i) any of the Seller Indemnified Parties' negligence, negligence per se, or intentional misconduct; or (ii) any Environmental Clean Up Claims.

15. Notices. All notices and demands of any kind that either party may be required or desire to serve upon the other party shall be in writing and shall be served upon such other party by personal service (including overnight delivery by a recognized carrier such as UPS or FedEx), by facsimile transmission followed by mail delivery of the original of such notice, or by mailing a copy thereof, certified or registered mail, postage prepaid, addressed as follows:

If to Buyer: City of Livermore
1052 S. Livermore Ave.
Livermore, CA 94550 Attn:
Stephen Riley (Acting)
Planning Manager Telephone:
(925) 960-4461
Facsimile: (925) 960-4149

If to Seller: Hartford Hills Estates, Ltd.
Attn:Richard H. Kulka
2821 Darnby Drive
Oakland, CA 94611

Service by mail shall be deemed complete on the date of actual delivery as shown on the addressee's return receipt. Service by facsimile transmission shall be deemed served upon receipt of the facsimile transmission by the addressee, provided it is received prior to 5:00 PM local time by the recipient on a

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business day (and if not so received by such time, then it shall be deemed given on the next business day) and the sender receives written confirmation of transmission; provided that the sender shall also send the original by mail delivery or overnight courier. The addresses to which notices and demands shall be delivered or sent may be changed from time to time by notice to the other party.

16. Binding Effect. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, successors and permitted assigns.

17. Time is of the Essence. Time is of the essence in this Agreement.

18. Severability. If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions hereof shall remain in full force and effect. However, unless such stricken term, provision, covenant or condition goes to the essence of the consideration bargained for by a party, the remaining terms, provisions, covenants and conditions of this Agreement shall continue in full force and effect, and to the extent required, shall be modified to preserve their validity.

19. Entire Agreement. This Agreement constitutes the sole and only agreement between Buyer and Seller concerning the Property and their rights and duties in connection with the Property. Any prior or other agreements or representations between Buyer and Seller regarding such matters shall be null and void, unless otherwise expressly set forth in this Agreement.

20. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California. Any suit brought here on shall be brought in the state or federal courts sitting in Alameda County, California, the parties hereby waiving any claim or defense that such forum is not convenient or proper.

21. Counterparts. This Agreement may be executed and delivered (including by facsimile transmission) in counterparts and all counterparts so executed shall constitute one agreement binding on all parties hereto. It shall not be necessary for each party to execute the same counterpart hereof.

22. Assignment. Seller may assign this Agreement and all rights and obligations hereunder without Buyer's consent to any parent, subsidiary or affiliate of Seller. Buyer shall have no right to assign its rights under this Agreement to any other person or entity.

23. Attorneys' Fees. If any action is filed by any of the parties hereto to enforce and/or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and costs from the non-prevailing party.

24. BUYER'S REMEDIES. **IF THE SALE OF THE PROPERTY IS NOT CONSUMMATED BECAUSE OF A DEFAULT UNDER THIS AGREEMENT ON THE PART OF SELLER (INCLUDING SELLER'S BREACH OF ANY REPRESENTATION OR WARRANTY SET FORTH IN SECTION 9 OF THIS AGREEMENT OR SELLER'S FAILURE TO DELIVER ANY OF THE DOCUMENTS DESCRIBED IN SECTIONS 3, 9, & 12 OF THIS AGREEMENT OR DUE TO THE FAILURE OF A CONDITION FOR BUYER'S BENEFIT SET FORTH IN SECTIONS 9, OR 12, AND BUYER IS READY, WILLING AND ABLE TO CLOSE, BUYER, AS ITS SOLE AND EXCLUSIVE REMEDY, MAY EITHER (A)**

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TERMINATE THIS AGREEMENT IN ITS ENTIRETY BY DELIVERY OF NOTICE OF TERMINATION TO SELLER, WHEREUPON THE DEPOSIT SHALL BE IMMEDIATELY RETURNED TO BUYER, OR (B) CONTINUE THIS AGREEMENT PENDING BUYER'S ACTION FOR SPECIFIC PERFORMANCE HEREUNDER PROVIDED APPROPRIATE PROCEEDINGS ARE PROMPTLY COMMENCED BY BUYER (BUT IN ANY EVENT WITHIN (30) BUSINESS DAYS AFTER DISCOVERY OF SUCH DEFAULT) AND PROSECUTED WITH DILIGENCE AND CONTINUITY WHEREUPON SELLER SHALL PAY TO BUYER ALL REASONABLE FEES, COSTS AND EXPENSES INCURRED BY BUYER IN CONNECTION WITH BUYER'S ACTION FOR SPECIFIC PERFORMANCE IF SUCCESSFUL AND ANY OTHER AMOUNTS WHICH MAY BE PAYABLE PURSUANT TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, BUYER HEREBY WAIVES ANY AND ALL REMEDIES FOR SELLER'S FAILURE IN PERFORMANCE, INCLUDING, WITHOUT LIMITATION, ANY RIGHT TO OBTAIN DAMAGES FROM SELLER, INCLUDING, WITHOUT LIMITATION, CONSEQUENTIAL, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES, AND BUYER ACKNOWLEDGES THAT SELLER SHALL IN NO EVENT BE LIABLE THEREFOR.

Seller's Initials DS RHK Buyer's Initials _____

25. Condemnation. If prior to Close of Escrow any Non-Material Part (as defined below) of the Real Property is taken by eminent domain or a notice or threat of any eminent domain proceedings with respect to any Non-Material Part of the Real Property is received by the Seller, this Agreement shall remain in force, and Buyer shall be entitled to all awards or damages by reason of any exercise of the power of eminent domain or condemnation with respect to or for the taking of the Real Property or any part thereof. If, prior to Close of Escrow, all or any part of the Real Property, other than a Non-Material Part, is taken by eminent domain or a notice or threat of any eminent domain proceedings with respect to the Real Property or any part thereof, then Seller shall within five (5) business days thereafter give notice thereof to Buyer and Buyer shall have the option to (i) complete the purchase hereunder, or (ii) terminate this Agreement, in which event the Deposit shall be immediately refunded to Buyer, and thereafter neither party shall have any further liability hereunder. Buyer shall deliver written notice of its election to the Seller within fifteen (15) business days after the date upon which the Buyer receives written notice from Seller of such eminent domain proceedings or notice or threat thereof. If notice of condemnation is received by Buyer and Buyer fails to deliver said written notice of its election within said time period, such failure shall constitute a waiver by Buyer of its right to terminate this Agreement. If this Agreement is not so terminated, any negotiation for, or agreement to, and all contests of any offers and awards relating to eminent domain proceedings shall be conducted with the joint approval and consent of the Seller and the Buyer, and Buyer shall be entitled to all awards or damages by reason of any exercise of the power of eminent domain or condemnation with respect to or for the taking of the Real Property or any part thereof. For purposes hereof a taking of a Non-Material Part of the Real Property shall be deemed to have occurred if it results in a taking of less than ten percent (10%) of the gross acreage of the Real Property.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

BUYER:

CITY OF LIVERMORE

By:_____
Name: Marianna Marysheva
Title: City Manager

APPROVED AS TO FORM:

DocuSigned by:
Katherine Mirassou
D48B6A0C4F27411...
DS

Deputy/Assistant/City Attorney

SELLER:

Hartford Hills Estates, Ltd., a
California limited partnership

By: DocuSigned by:
Richard H. Kulka
5C39A9D72491...
Name: Richard H. Kulka
Title: General Partner and Limited Partner

AGREED AND ACCEPTED BY:

First American Title Company

By:_____ Dated:_____
Name: Kellie Sanders
Title: Escrow Officer

Attachments:
Exhibit A - Legal Description

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Exhibit "A"

Legal Description

Real property in the City of Livermore, County of Alameda, State of California, described as follows:

PARCEL 1: [APN: 902-0009-003-01]

BEGINNING AT THE QUARTER SECTION CORNER COMMON TO SECTIONS 33 AND 34, TOWNSHIP 2 SOUTH, RANGE 2 EAST, MOUNT DIABLO BASE AND MERIDIAN; RUNNING THENCE NORTH 89°45' WEST 700.00 FEET; THENCE SOUTHERLY ALONG A LINE PARALLEL TO THE EASTERLY BOUNDARY LINE OF SAID SECTION 33, A DISTANCE OF 454.26 FEET; THENCE SOUTH 89°45' EAST 350.00 FEET; THENCE SOUTHERLY, PARALLEL TO THE EASTERLY BOUNDARY LINE OF SECTION 33, A DISTANCE OF 2202.90 FEET TO THE SOUTHERN BOUNDARY LINE OF SECTION 33; THENCE SOUTH 89°45' EAST 350.00 FEET, MORE OR LESS, ALONG SAID SOUTHERN BOUNDARY LINE OF SECTION 33 TO THE SOUTHEASTERN CORNER OF SAID SECTION 33 AND THENCE NORTH 2657.16 FEET TO THE POINT OF COMMENCEMENT.

PARCEL 2: [APN: 902-0009-003-02]

BEGINNING AT THE QUARTER SECTION CORNER COMMON TO SECTIONS 33 AND 34, IN TOWNSHIP 2 SOUTH RANGE 2 EAST, M.D.B. & M., RUNNING THENCE NORTH 89° 45' WEST 20.30 TO THE NORTHEASTERN CORNER OF THE LAND CONVEYED BY ABSOLAR JOSE AND WIFE TO HENRY PRALL, BY DEED RECORDED OCTOBER 19, 1896, IN BOOK 609 OF DEEDS, PAGE 324, IN THE OFFICE OF THE COUNTY RECORDER OF SAID ALAMEDA COUNTY, RUNNING THENCE SOUTH ALONG THE EASTERN BOUNDARY LINE OF SAID LAND 40.26 CHAINS TO THE SOUTHERN BOUNDARY LINE OF SAID SECTION 33; THENCE SOUTH 89° 45' EAST 20.30 CHAINS, MORE OR LESS, TO THE SOUTHEASTERN CORNER OF SAID SECTION 33; AND THENCE NORTH ALONG THE EASTERN BOUNDARY LINE OF SAID SECTION 33, 40.26 CHAINS TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SECTION 33 TOWNSHIP 2 SOUTH RANGE 2 EAST, MOUNT DIABLO BASE AND MERIDIAN.

EXCEPT THAT CERTAIN PORTION OF PARCEL ONE WHICH WAS DESCRIBED IN A DEED OF PARTIAL RECONVEYANCE DATED APRIL 2, 1975, WHICH LAND SO RECONVEYED IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE QUARTER SECTION CORNER COMMON TO SECTIONS 33 AND 34, IN TOWNSHIP 2 SOUTH, RANGE 2 EAST, MOUNT DIABLO BASE AND MERIDIAN, RUNNING THENCE NORTH 89° 45' WEST 700.00 FEET; THENCE SOUTHERLY ALONG A LINE PARALLEL TO THE EASTERLY BOUNDARY LINE OF SAID SECTION 33, A DISTANCE OF 454.26 FEET; THENCE SOUTH 89° 45' EAST 350 FEET; THENCE SOUTHERLY, PARALLEL TO THE EASTERLY BOUNDARY LINE OF SECTION 33, A DISTANCE OF 2202.90 FEET TO THE SOUTHERN BOUNDARY LINE OF SECTION 33; THENCE SOUTH 89° 45' EAST 350 FEET, MORE OR LESS, ALONG SAID SOUTHERN BOUNDARY LINE OF SECTION 33, TO THE SOUTHEASTERN CORNER OF SAID SECTION 33; AND THENCE NORTH ALONG THE EASTERN BOUNDARY LINE OF SECTION 33, A DISTANCE OF 2657.15 FEET, TO THE POINT OF COMMENCEMENT, CONTAINING TWENTY-FIVE (25) ACRES OF LAND, MORE OR LESS.

PARCEL 3:

A NON-EXCLUSIVE EASEMENT AND RIGHT OF WAY FOR INGRESS AND EGRESS BY PEDESTRIANS, ANIMALS AND VEHICLES OF ALL KINDS AND FOR INSTALLATION OF PUBLIC UTILITY SERVICES

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INCLUDING, BUT NOT LIMITED TO UNDERGROUND PIPES, CABLES, WIRES AND CONDUITS FOR WATER, GAS, ELECTRICITY, POWER, SEWERS, CABLE TELEVISION, TELEPHONE AND STORM DRAINAGE FACILITIES, IN, UNDER, OVER AND ACROSS A STRIP OF LAND OF THE UNIFORM WIDTH OF SIXTY (60) FEET LYING WITHIN THE TWENTY-FIVE (25) ACRE PARCEL OF LAND HERETOFORE RECONVEYED FROM THE LIEN OF THE DEED OF TRUST DESCRIBED HEREIN, WHICH 60 FOOT (60') STRIP OF LAND IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERN BOUNDARY LINE OF SECTION 33 IN TOWNSHIP 2 SOUTH, RANGE 2 EAST, MOUNT DIABLO BASE AND MERIDIAN, DISTANT THEREON 454.26 FEET SOUTHERLY FROM THE QUARTER SECTION CORNER COMMON TO SECTIONS 33 AND 34, RUNNING THENCE NORTH 89° 45' WEST, 350 FEET, MORE OR LESS, TO THE WESTERLY BOUNDARY LINE OF THE LAND RECONVEYED BY THE PARTIAL RECONVEYANCE; THENCE SOUTHERLY ALONG A LINE PARALLEL TO THE EASTERN BOUNDARY OF SECTION 33, A DISTANCE OF 60 FEET; THENCE SOUTH 89° 45' EAST 350 FEET, MORE OR LESS, TO THE EASTERN BOUNDARY OF SECTION 33; THENCE-NORTHERLY ALONG THE EASTERN BOUNDARY OF SECTION 33, A DISTANCE OF 60 FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 2 EAST, MOUNT DIABLO BASE AND MÉRIDIAN.

APN: 902-0009-003-01

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Code Area Nos. 64-005

EXHIBIT B

808 REVISOR'S MAP 902

9 Scale: 1" = 1000'

MAP OF THE RANCHO LAS POSITAS (Bk. 95 D's. Pg. 205)
SECTIONS 33 & 34, T2S, R2E

Corrected: 11-21-77 RM 78-1
4-10-07 LL

9-16-81 PB
10-29-82 KT
12-29-83 PB.
8-23-84 PB.
10-3-84 PB
11-14-84 PB.
2-15-85 PB.
7-30-86 PB.
10-4-88 BV
2-25-91 JT
5-17-93 PB
7-1-94 NVF
12-12-94 BV
5-03-95 VF.
12-09-96 JW

10

28 | 27 | 26

CO. RD. NO. 1781 (Dagnino Road)

HARTFORD AVENUE | LORRAINE ST. | CO. RD. NO. 1544 (Beck Rd.) | HARTMAN ROAD

N 88°59'44"W

(2615 chs. - 1329.90) 1331.73 | 934.73 | N89°00'08"W 1389.93 (1397) | 1656.81

66'

N1°01'25"E AVENUE N. LIVERMORE

(39.67 chs. - 26.78.22) 2615.43 | N01°01'43"E 2419.50 (Rad) N01°01'43"E 2421.72 | N00°57'08"E 2625.55 | 2632.75

55.67 Ac.± (P) (1-6) | 82.91 Ac.± (C) (2-5) | 100.00 Ac (2-4)

99/24

903/8

33 | 34

N88°45'12"W 1311.43 | (N89°45'W) 1654.83 (699.90(M)) 700 | S89°54'47"E (km.) | 2640±

25 Ac.± (3-1) | 350

924 Ac± (1-7) North 694± South 694±

BRISTLECONE WY. 99/1328

S89°47'07"E (6294.15)

55 Ac.± (3-2)

204.42 Ac.± (P) (1-8) | 24.26 Ac.± (1-3) | 80.02 Ac.± (2-1)

2,640.00 | 2637.16 | 2209.30 | 350±

PLOT 99/1319

PLOT C 99/15 | PLOT N89°18'54"W E 99/15 | PLOT F

997 | 1,311.42 | 989.80(CE)

Boundary of Tracts 2370 & 2440 where numerals appear

1.	R= 944	L = 46.10	23.	N 57°34'40"E	47.47
2.	R= 127	L= 44.02	24.	N 59°30'00"E	136.42
3.	N 85°12'48"W	127.0	25.	N 63°01'50"E	72.0
4.	S 0°16'W	60.0	26.	R= 2039	L= 155.64
4A	R=190	L= 29.79	27.	N 58°39'25"E	106.85
5.	S 47°38'46"W	48.81	28.	S 45°27'00"E	59.60
6.	R= 20	L= 30.38	29.	S 50°52'58"E	59.80
7.	N 29°20'47"W	55.19	30.	S 56°26'51"E	62.56
8.	N 22°52'08"W	65.82	31.	S 62°04'48"E	61.23
9.	N 17°27'02"W	72.19	32.	S 67°54'43"E	67.0
10.	N 11°58'40"W	67.21	33.	S 77°24'34"E	141.53
11.	N 6°38'14"W	68.83	34.	S 86°31'36"E	58.65
12.	N 1°14'W	68.83	36.	S 89°34'14"E	8.26
13.	N 4°10'16"E	68.83			
14.	N 9°27'26"E	65.82			
15.	N 14°37'30"E	65.82			
16.	N 20°02'36"E	72.19			
17.	N 25°30'58"E	67.21			
18.	N 30°51'24"E	68.83			
19.	N 36°23'36"E	72.19			
20.	N 41°29'15"E	57.57			
21.	N 46°24'58"E	68.83			
22.	N 52°04'30"E	74.46			

N22°53'45"E

L.P. XXIV | L.P. XXVI | L.P. XXIII | L.P. XXII

16-071 | 16-096 | 16-015

N 74°05'57"W 1078.43 | N 48°38'01"W 640.49 | N 33°44'38"W 1936.24

8

PLOT J 99B

BOOK

LILAC AVE. | BLUEBELL LANE | HAREBELL ROAD | HEATHER DRIVE | HOLLYHOCK ST. | PRIMROSE LANE | LARKSPUR DR. | BLUEBELL DRIVE | LAS FLORES RD. | RAINFLOWER DR. | SUNFLOWER CT. (PVT)

U.S. HIGHWAY NO. 50 EAST | U.S. 50 EAST Southfront Road | FIRST ST. 100'

REF: R/S ARB. No. 162 A (R/S BK. 4 PG. 55) R/S 1159 19/5

A.C.M. 49

FMLY: BK. 99, BLK. 25

H.N. 6-29

Ind. 1

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING FUNDS FROM THE DOUGHERTY VALLEY SETTLEMENT AGREEMENT (FUND 925) FOR THE AMOUNT OF $980,000 TO ACQUIRE THE HARTFORD HILLS PROPERTY (82 ACRES – APNS 902-9-3-1, 902-9-3-2)

As part of the Dougherty Valley Settlement Agreement, a fund was established to settle Water Litigation. The fund was created to support habitat preservation. The Agreement contains the following clause in section 6(d)(i) for the expenditure of funds from the settlement:

> "City staff will meet and confer with [Citizens for Balanced Growth] prior to formulating its recommendations for acquisitions."

City of Livermore ("City") staff has made numerous attempts to meet-and-confer with Citizens for Balanced Growth concerning the recommendations being prepared by City staff to the City Council regarding the expenditure of settlement funds for acquisition of the Properties by the City of Livermore for conservation and preservation purposes. Those requests were made in December 2023 and January, February, and March 2024, but Citizens for Balanced Growth has not met with City staff. A final request was made to meet-and-confer with City staff by April 24, 2024. Citizens for Balanced Growth did not meet with City staff. At the July 8, 2024, City Council meeting, CBG was given an additional week to meet-and-confer with staff by July 12, 2024. CBG has declined to meet with staff within this deadline. Based on the response from CBG and consistent with the Agreement, staff may conclude that Citizens for Balanced Growth does not support the expenditure of Dougherty Valley settlement funds for the acquisition of the Hartford Hills Property.

In July and November of 2023, the City Council authorized City staff to enter negotiations with the property owner to acquire in fee title for the Hartford Hills Property for open space and conservation purposes. The property owner representatives and the City have negotiated terms for the acquisition of the property. The City Council is responsible for appropriating funds from the Dougherty Valley Settlement Agreement (Fund 925).

The funding authorization is not a project under the California Environmental Quality Act (CEQA) and CEQA Guidelines section 15378, because an approval of the expenditure of funds would not approve a physical development project, would not physically change the environment, and would help preserve natural habitat. Therefore, no environmental review is required.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore, hereby:

1. Authorizes the allocation of $980,000 from the Dougherty Valley Settlement Agreement (Fund 925) for the acquisition of the Hartford Hills Property (82 acres - APNs: 902-9-3-1 and 902-9-3-2).

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 5.23**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Resolution authorizing an agreement with Attitude Aviation Inc. for the use of airport property for equipment, materials, and vehicle storage, for a term up to five years and a Base Rental Rate of $21,582 per year.

RECOMMENDED ACTION

Staff recommends the City Council adopt a resolution authorizing the City Manager to sign an agreement with Attitude Aviation Inc. for the use of airport property for equipment, materials, and vehicle storage, for a term up to five years and a Base Rental Rate of $21,582 per year.

SUMMARY

Attitude Aviation has requested the City enter into a License Agreement for the use of airport property on a month-to-month basis for the storage of construction equipment, materials, and associated vehicles.

Staff recommends the City Council adopt a Resolution approving a License Agreement with Attitude Aviation Inc, d.b.a Gradetech, Inc (Attitude Aviation) for the use of airport property for equipment, materials, and vehicle storage authorizing the City Manager to sign.

DISCUSSION

Attitude Aviation is a fixed base operator on the airport who also does business as Gradetech Inc, a general construction company. Attitude Aviation has requested the use of airport property under a License Agreement for the purpose of storing construction equipment, materials, and associated vehicles. The use of the property is non- aeronautical in an aeronautical zoned area; however, the Federal Aviation Administration (FAA) allows this type of use provided the property is leased at fair market value and is month-to-month. This License Agreement is month-to-month and assessed at fair market value based on other like uses at the Airport per FAA regulation.

As a part of this agreement, Attitude Aviation will be making improvements to the fence and gated areas.

Staff recommends the City Council adopt a resolution approving a License Agreement with Attitude

Aviation Inc, d.b.a Gradetech, Inc (Attitude Aviation) for the use of airport property for equipment, materials, and vehicle storage authorizing the City Manager to sign.

FISCAL IMPACTS

After the initial term of the agreement in exchange for onsite improvements, the City will realize an increase in Airport revenue by $21,582 per year.

COMMUNITY PILLAR

5: A City that Works

GOAL

14: Develop, operate, and maintain the City's infrastructure

ATTACHMENTS

1. Resolution
2. Exhibit A - Agreement

Prepared by: Benedict Stuth
Acting Airport Manager

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION AUTHORIZING EXECUTION OF A LICENSE AGREEMENT WITH ATTITUDE AVIATION, INC. FOR THE USE OF PROPERTY AT THE LIVERMORE MUNICIPAL AIRPORT FOR A TERM UP TO FIVE YEARS AND A BASE RENTAL RATE OF $21,582 PER YEAR

The City of Livermore wishes to enter into a license agreement for the use of airport property known and referred to as "the Boneyard" to store construction equipment, materials, and vehicles at the Livermore Municipal Airport with Attitude Aviation, Inc./Grade Tech, Inc.

The license agreement is a month-to-month agreement, can be terminated in thirty (30) days, and is set at fair market value per Federal Aviation Administration (FAA) requirements under FAA Grant Assurance obligations of which the City of Livermore is encumbered by.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby:

1. Approves the License Agreement for the use of a portion of property at the Livermore Municipal Airport known as the "Boneyard" for the purposes of storing construction equipment, materials, and vehicles with Attitude Aviation, Inc., dba Gradetech, Inc.

2. Authorizes the City Manager to execute the License Agreement, attached hereto as Exhibit A, on behalf of the City of Livermore.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Tara Mazzanti
Tara Mazzanti
Assistant City Attorney

Exhibit A – License Agreement with Attitude Aviation, Inc./Gradetech, Inc

DocuSign Envelope ID: 1CF63831-F5E3-47E6-A13D-206394BA3DD9

EXHIBIT A

LICENSE AGREEMENT
with
Attitude Aviation, Inc

THIS REVOCABLE LICENSE AGREEMENT, effective this _____ day of_____, 2024 is entered into by and between the City of Livermore, a municipal corporation ("City") and Attitude Aviation, Inc., a California corporation ("Licensee").

RECITALS

A. The City is the owner of property located on West Jack London Blvd identified as being a portion of Parcel B of Parcel Map 3750 recorded February 10, 1982, in book 131 of maps pages 86 & 87 under Record Series 82-020636, APN 904-0012-001-00, as further depicted in Exhibit A ("Property")

B. Licensee desires to store paving and grading equipment in addition to construction materials on the Property described above. Licensee acknowledges the described parcel above is identified for aeronautical use and proposed use will be for non-aeronautical purposes. This agreement is made on a month-to-month basis, not to exceed a period of five years. Further, this agreement is for the licensing of a portion of the area referred to as the "Bone Yard" ("License Area") as depicted in Exhibit A.

C. Licensee acknowledges that it represents both Attitude Aviation Inc and Gradetech, Inc both California Corporations and that principally the area qualified under this agreement will be solely utilized by Gradetech, Inc and its employees and that insurance coverages as required under this agreement will cover the operations of Gradetech, Inc.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises contained herein, the parties agree that the aforementioned recitals are true and correct and incorporated herein, and further agree as follows:

1) Description of Licensed Premises

The City agrees to make available to Licensee the License Area as indicated on the attached Exhibit B, located on West Jack London Blvd with the Property in Livermore, California ("Premises"), approximately 51,386 square feet used for vehicle and construction equipment parking and storage, including materials storage limited to general construction materials as noted in Section 2. Additionally, the licensee agrees to erect additional fencing and gate as outlined in Exhibit F, the License Agreement Fencing Plan.

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2) Use of the Licensed Premises

The Licensee agrees to use the Premises for the purpose of storing vehicle paving and grading equipment necessary for, and in support of Licensee's business operations. Additionally, the Licensee may use the premises for storage of construction materials limited to sand, gravel, base materials, wood, or any other construction material provided materials do not contain oils, adhesives, solvents, paint, or any other material deemed as hazardous that have the potential ability to leech into the soil or in amounts which can reasonably block access and or use to any portion of the site. The Airport, City, or their designated representative may cause, direct, or notify any materials on and or in the soil within the premises they deem as hazardous or in violation of a licensed use at their discretion to be removed and at the sole cost of the Licensee. Directives or notifications to remove materials by the Airport, City, or their designated representative shall be completed within 48 hours of notification by mail or email. If, after this period, materials have not been removed, the Licensee will incur fees in the amount of $250.00 per day in liquidated damages until the removal of said materials is completed. The Airport, at its discretion, may cause to have the materials removed by a third party, the cost of which will be fully borne by the licensee in addition to the daily liquidated damages until the materials are removed. Failure to comply with any such directive will result in a default of this lease as noted in Section 12. Licensee shall not use Premises for storage of personal vehicles. Licensee shall construct and maintain, fencing and a gate to the licensed Premise as shown in Exhibit B. Access to the site will solely be from Jack London Blvd, as shown on Exhibit A Licensee will immediately notify and obtain the written consent of City for any proposed changes to the scope of use of the Premises.

a. Licensee shall comply with all federal, state and local laws, requirements and policies now or hereafter in effect relating to hazardous materials and environmental conditions concerning the use of the property including, but not limited to, soil and groundwater conditions and shall not contaminate the Airport or the subsurface with any hazardous material.
b. Licensee shall prevent petroleum products and other deleterious waste from entering into the sewage and storm water drainage system serving the Airport. Licensee agrees to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) of the Federal Clean Water Control Act regarding permits for stormwater discharges. Licensee is responsible for ensuring full compliance with the California and federal stormwater laws and regulations.
c. Upon vacating the premises at the end of this agreement, or any extensions thereof, the Licensee is required to return the site to its original condition including, but not limited to cleanup or removal of any hazardous material or site improvements, both above and below ground. Acceptance of the premises back will be based on City inspections and concurrence.
d. City retains the right to inspect, at its sole discretion, the site to ensure all requirements for storing any hazardous materials, storm water requirements, and potential points of contaminants or hazardous conditions are being maintained to the city's satisfaction. Any and all determinations made by the

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City as a result of these inspections will be required by the Licensee to remediate at the City's discretion and the Licensees cost.

3) Effective Date of License Agreement, Rental Amount, and Term

This License Agreement shall begin on the effective date written above or on the date of the last signature of this agreement, whichever is sooner. Licensee expressly waives all interest in and any claim for relocation assistance when and if City requires the Premises.

The premises, as depicted in Exhibits A and B, shall have a base rental consideration as follows:

Base Rental Rate: $21,582.00 per year ($0.42/sqft/year)

The licensee may offset rent in the first eighteen months of this agreement, and no subsequent months, an amount equal to the installation cost of fencing and gates divided equally over the initial eighteen month period. The costs must be part of an official quote or estimate provided by a contractor currently licensed in the State of California and listed in the Department of Industrial Relations database, with appropriate insurance requirements as stipulated by the City prior to erection of the fence; and,

In no event will the offset result in payment back to the Licensee from the airport should the cost outlined in the quote or estimate be greater than what is owed in rental consideration during the first eighteen months of this agreement. Additionally, any offset amount greater than the initial base rent in the first eighteen months of this agreement will not result in a credit towards subsequent months as an offset.

On July 1st, following the initial twelve months of the license agreement, and every July 1st thereafter, the rental rates will be subject to an annual adjustment based on the San Francisco Bay Area Consumer Price Index, February to February of the current year. Licensee shall be responsible for and pay the costs of all direct and incidental costs associated with the use of the space.

The term of this agreement is on a month-to-month basis.

Because rent is being offset in exchange for installation of fencing and gating for the subject property, the fencing/gating, as installed, will become the property of the airport in full following the initial eighteen months of this agreement. Any attempt to remove fencing from the outset, or at any time throughout the life of this agreement, is strictly prohibited without prior permission of the airport manager.

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4) Notices

Communication and details concerning this Agreement shall be directed to the following Agreement representatives:

City: Airport Manager
City of Livermore
1052 S. Livermore Avenue
Livermore, CA 94550

Licensee: Mr. Sam Rivinius, President
Attitude Aviation, Inc.
299 West Jack London Blvd.
Livermore, CA 94551

Mr. Sam Rivinius, President
Gradetech, Inc
299 W. Jack London Blvd.
Livermore, CA 94551

5) Insurance Requirements for Licensees

For the duration of this License, Licensee shall procure and maintain, at its own cost, insurance in the amounts and under the terms set forth in the attached Exhibit C against claims for injuries to persons or damages to property which may arise from or in connection with the Premises, any improvements and/or the use of the Premises by the Licensee, its agents, representatives, or employees. Gradetech will maintain and provide evidence of auto liability and workers compensation insurance, while Attitude Aviation will provide general liability insurance. Licensee agrees to comply with any changes in the amounts and terms of such insurance as may be required from time to time by the City's Risk Manager, upon reasonable written notice.

6) Indemnity

Licensee agrees to and shall defend, indemnify, protect and hold **City**, its elected officials, officers, directors, employees, agents, and designated volunteers harmless from and against any and all loss, damage, injury, accident, casualty, liability, claim, cost or expense (including, but not limited to, reasonable attorneys' fees) of any kind or character to any person or property arising from or related to any act or omission of Licensee, its employees, agents or contractors, the Licensee's use of the Premises, the Licensee's installation and maintenance of improvements on the Premises, or as a result of this License. City shall not be responsible for any loss or theft of any property on the Premises. To the greatest extent permitted by law, Licensee waives all claims or demands against City for any loss, damage or injury to Licensee or Licensee's property in connection with this License or the operation or use of the Licensee's property by Licensee or its agents, servants, contractors or employees and agrees to so indemnify and hold City harmless.

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7) Maintenance Responsibility and Modification of Premises

Licensee agrees that any special power or other equipment hookups are subject to City approval prior to installation. Specialized cleaning or disposal needs based upon the Licensee's use of the space shall be paid by the Licensee. Licensee shall maintain the Premises in a safe and clean manner for the duration of the License. The Licensee expressly waives the right to make repairs at the expense of the City.

Maintenance and repair of the site is the sole responsibility of the Licensee and the site is accepted by the licensee in as-is condition.

Additionally, the Licensee shall be responsible for any and all repairs or maintenance to the licensed and any adjacent premises, facility, or infrastructure caused by negligent, careless, or willful acts of the Licensee, its employees, equipment, or visitors.

The premises may be modified by the licensee provided any such modifications are requested by the licensee of the City in writing. Any and all documentation or permitting required to accommodate modifications are at the sole determination of the City, shall be provided to the City, and deemed satisfactory by the City in writing or issuance of any permit and attached to this agreement prior to any modification(s) taking place. Modifications to the premises may or may not require amendment to this agreement. Any determination of an amendment under this section shall be at the sole discretion of the City.

8) Terms Binding on Successors

All the terms, covenants, and conditions of this License shall inure to the benefits of and be binding upon successors and assigns of the parties hereto. The Licensee shall not assign, sublease, or transfer any of the rights, licenses, and privileges herein contained in this License without the written consent of the City.

9) Grant Agreement Covenants and Federal Provisions

Licensee, its heirs, personal representatives, successors-in-interest, and assigns, as a part of the consideration hereof, shall operate under the following conditions:

a. This license shall be subordinate and subject to the Grant Lease, dated June 14, 1965, and the Amendment thereto, dated July 26, 1965, by and between the United States of America, Federal Aviation Administration, and City, and subsequent grants and leases.

b. Licensee acknowledges that the City is subject to Federal Grant Agreement obligations as a condition precedent to both the granting of funds for improvement of the Livermore Municipal Airport and ensuring compliance with FAA rules, regulations and procedures; and accordingly agrees to, and agrees to be bound by, the Airport Sponsor Assurances provided by the Federal Aviation Administration. Licensee shall

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comply with the most recent Airport Sponsor Assurances attached as Exhibit D to this License and which may be amended from time to time and incorporated by reference. To the extent any provision of this Agreement conflicts with any requirement of the Airport Sponsor Assurances, the Airport Sponsor Assurances shall control.

In the event a conflict between this section 9(b) and any other within this agreement arises, those sections will be considered invalid and no longer in force or effect. In the event the invalidation of any section also substantially invalidates this agreement (at the interpretation of the City, which may be validated by the FAA upon request), the agreement must be amended to cure the conflict. If the licensee cannot come to agreement with any such amendment, the agreement in its entirety will be terminated with the licensed premises immediately being surrendered back to the City and all mitigations required upon vacation of the premises will take effect to the satisfaction of the City.

c. Licensee shall comply with all required Federal Contract Provisions attached hereto as Exhibit E.

Licensee's non-compliance with any provisions under this section shall constitute a material breach and subject to points (1) and (2) below. Additionally, in the event of a breach of any of the nondiscrimination covenants, (49 CFR Part 21) the City or the United States shall have the right to:

(1) terminate this License; or

(2) seek judicial enforcement of said covenants.

11) Right to Amend due to FAA.

In the event that the Federal Aviation Administration ("FAA") or City finds that any provision of this License violates the Airport Sponsor Assurances, which would require modifications or changes in this License as a condition precedent to the granting of funds for the improvement of the Airport or lands and improvements, or any component related to Airport compliance with federal rules, regulations, or assurances, Licensee agrees to consent to such amendments, modifications, revisions, supplements, or deletions of any of the terms, conditions or requirements of this License as may be required to obtain such funds or ensure compliance.

12) Termination

A. *Termination at Will*: This License may be terminated by either party, for any reason, with one (1) month written notice.

B. *Termination for Cause*: The City may immediately terminate this License for cause by providing written notice to Licensee following:
   i. City's discovery that the Premises is being used in violation of Section 2, above; or,
   ii. City's discovery of any condition on the Premises which endangers the public's health, safety and welfare; and

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iii. Licensee's fails to cure, remedy, or otherwise correct the condition within 48 hours' notice of default by City.

13) Right and Remedies

The City shall have all rights and remedies available under California law including, but not limited to, actions for damages and specific performance, for any breach of Licensee's obligations hereunder.

14) Lien Free Condition

Licensee shall not cause or permit any liens to be placed against the Premises or against Licensor's other property as a result of Licensee's exercise of rights under this License Agreement. In the event of the filing of any such liens, Licensee shall promptly cause such liens to be removed.

15) Alteration in Writing

This License Agreement supersedes any and all prior understandings and agreements, whether written or oral, between the parties with respect to the subject matter of this License. No alteration or variation of this License Agreement shall be valid unless made in writing and signed by both City and Licensee.

16) Entire Agreement

This License Agreement, including any attachments hereto, constitutes the entire agreement of the parties relating to the subject matter of this License Agreement and correctly sets forth the rights, duties and obligations of each party to the other.

17) Attachments and Exhibits

All attachments/exhibits referred to in and attached to this License Agreement are incorporated by reference as though set forth in full.

****Signatures on Next Page****

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IN WITNESS WHEREOF, the parties have executed this License Agreement the day and year first above written.

CITY OF LIVERMORE	ATTITUDE AVIATION, INC.
By: _____	By: DocuSigned by: Sam Rivinius C9B776B6B38245F...
Marianna Marysheva City Manager	Sam Rivinius Attitude Aviation, President Gradetech, President
Date: _____	Date: 5/23/2024 | 2:47 PM CDT

APPROVED AS TO FORM:

DocuSigned by: Tara Mazzanti 19DF47CAC5D045... DS JS

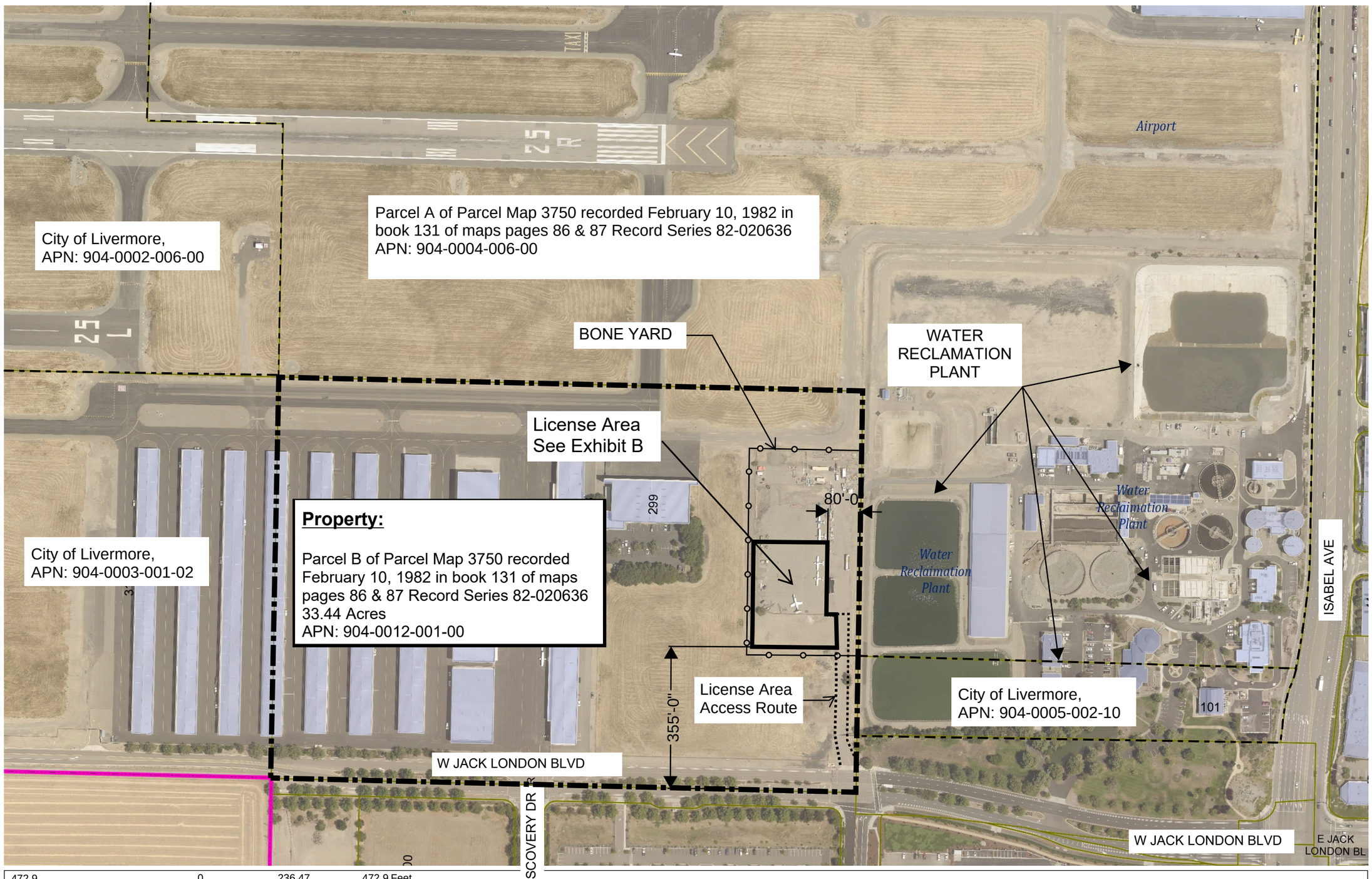
Assistant/City Attorney

Exhibits:

Exhibit A – Property Map
Exhibit B – License Map
Exhibit C – Insurance Requirements
Exhibit D – Federal Aviation Administration Grant Assurances
Exhibit E – Federal Contract Provisions
Exhibit F – License Agreement Fencing Plan

EXHIBIT A - PROPERTY

EXHIBIT A



Legend

Property Boundary

License Area Boundary

Bone Yard Boundary

NORTH

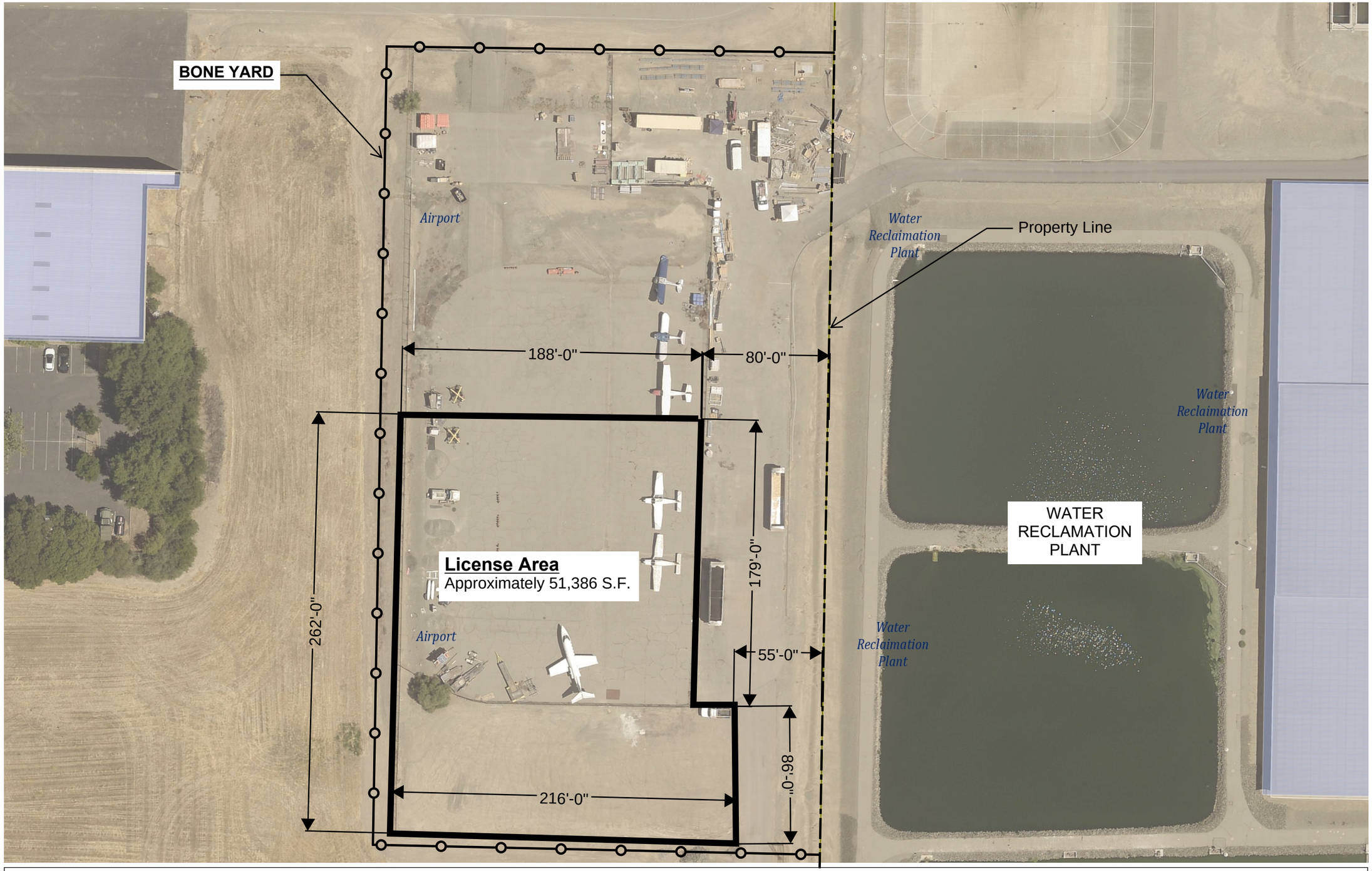
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Information Technologies, GIS Division, City of Livermore

Notes

EXHIBIT B - LICENSE AREA

EXHIBIT A



Legend

License Area Boundary

Bone Yard Boundary

NORTH

118.2 0 59.12 118.2 Feet

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Information Technologies, GIS Division, City of Livermore

Notes

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EXHIBIT C

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Licensee/Lessee shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $1,000,000 per occurrence/**$2,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $1,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Licensee/Lessee is a sole proprietor, then Licensee/Lessee must sign "Contractor Release of Liability."
4. Property Insurance:
   Total value of all tenant improvements, betterments, and contents. The City of Livermore shall be named as loss payee as its interest may appear. The insurer shall waive all rights against City.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Licensee/Lessee;

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or automobiles owned, leased, hired or borrowed by the Licensee/Lessee. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or designated volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Licensee's/Lessee's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or designated volunteers.
4. The Licensee's/Lessee's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Licensee/Lessee shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before License/Lease commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

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FAA Airports

EXHIBIT - D

ASSURANCES

AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this Grant Agreement.

B. Duration and Applicability.

1. **Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.**

   The terms, conditions and assurances of this Grant Agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. **Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.**

   The preceding paragraph (1) also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. **Airport Planning Undertaken by a Sponsor.**

   Unless otherwise specified in this Grant Agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 23, 25, 30, 32, 33, 34, and 37 in Section C apply to planning projects. The terms, conditions, and

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assurances of this Grant Agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Grant including but not limited to the following:

FEDERAL LEGISLATION

a. 49 U.S.C. subtitle VII, as amended.
b. Davis-Bacon Act, as amended — 40 U.S.C. §§ 3141-3144, 3146, and 3147, et seq.[1]
c. Federal Fair Labor Standards Act – 29 U.S.C. § 201, et seq.
d. Hatch Act – 5 U.S.C. § 1501, et seq.[2]
e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. § 4601, et seq.[1, 2]
f. National Historic Preservation Act of 1966 – Section 106 – 54 U.S.C. § 306108.[1]
g. Archeological and Historic Preservation Act of 1974 – 54 U.S.C. § 312501, et seq.[1]
h. Native Americans Grave Repatriation Act – 25 U.S.C. § 3001, et seq.
i. Clean Air Act, P.L. 90-148, as amended – 42 U.S.C. § 7401, et seq.
j. Coastal Zone Management Act, P.L. 92-583, as amended – 16 U.S.C. § 1451, et seq.
k. Flood Disaster Protection Act of 1973 – Section 102(a) - 42 U.S.C. § 4012a.[1]
l. 49 U.S.C. § 303, (formerly known as Section 4(f)).
m. Rehabilitation Act of 1973 – 29 U.S.C. § 794.
n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin).
o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.) (prohibits discrimination on the basis of disability).
p. Age Discrimination Act of 1975 – 42 U.S.C. § 6101, et seq.
q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
r. Architectural Barriers Act of 1968, as amended – 42 U.S.C. § 4151, et seq.[1]
s. Powerplant and Industrial Fuel Use Act of 1978 – Section 403 – 42 U.S.C. § 8373.[1]
t. Contract Work Hours and Safety Standards Act – 40 U.S.C. § 3701, et seq.[1]
u. Copeland Anti-kickback Act – 18 U.S.C. § 874.[1]

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v. National Environmental Policy Act of 1969 – 42 U.S.C. § 4321, et seq.[1]

w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. § 1271, et seq.

x. Single Audit Act of 1984 – 31 U.S.C. § 7501, et seq.[2]

y. Drug-Free Workplace Act of 1988 – 41 U.S.C. §§ 8101 through 8105.

z. The Federal Funding Accountability and Transparency Act of 2006, as amended (P.L. 109-282, as amended by section 6202 of P.L. 110-252).

aa. Civil Rights Restoration Act of 1987, P.L. 100-259.

bb. Build America, Buy America Act, P.L. 117-58, Title IX.

EXECUTIVE ORDERS

a. Executive Order 11246 – Equal Employment Opportunity[1]

b. Executive Order 11990 – Protection of Wetlands

c. Executive Order 11998 – Flood Plain Management

d. Executive Order 12372 – Intergovernmental Review of Federal Programs

e. Executive Order 12699 – Seismic Safety of Federal and Federally Assisted New Building Construction[1]

f. Executive Order 12898 – Environmental Justice

g. Executive Order 13166 – Improving Access to Services for Persons with Limited English Proficiency

h. Executive Order 13985 – Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

i. Executive Order 13988 – Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation

j. Executive Order 14005 – Ensuring the Future is Made in all of America by All of America's Workers

k. Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad

FEDERAL REGULATIONS

a. 2 CFR Part 180 – OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).

b. 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. [4, 5]

c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment.

d. 14 CFR Part 13 – Investigative and Enforcement Procedures.

e. 14 CFR Part 16 – Rules of Practice for Federally-Assisted Airport Enforcement Proceedings.

f. 14 CFR Part 150 – Airport Noise Compatibility Planning.

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g. 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.

h. 28 CFR § 50.3 – U.S. Department of Justice Guidelines for the Enforcement of Title VI of the Civil Rights Act of 1964.

i. 29 CFR Part 1 – Procedures for Predetermination of Wage Rates.[1]

j. 29 CFR Part 3 – Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States.[1]

k. 29 CFR Part 5 – Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act).[1]

l. 41 CFR Part 60 – Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and Federally-assisted contracting requirements).[1]

m. 49 CFR Part 20 – New Restrictions on Lobbying.

n. 49 CFR Part 21 – Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964.

o. 49 CFR Part 23 – Participation by Disadvantage Business Enterprise in Airport Concessions.

p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.[1, 2]

q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

r. 49 CFR Part 27 – Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance.[1]

s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation.

t. 49 CFR Part 30 – Denial of Public Works Contracts to Suppliers of Goods and Services of Countries That Deny Procurement Market Access to U.S. Contractors.

u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).

w. 49 CFR Part 38 – Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.

x. 49 CFR Part 41 – Seismic Safety.

FOOTNOTES TO ASSURANCE (C)(1)

[1] These laws do not apply to airport planning sponsors.

[2] These laws do not apply to private sponsors.

[3] 2 CFR Part 200 contains requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation shall

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apply where applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

[4] Cost principles established in 2 CFR part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.

[5] Audit requirements established in 2 CFR part 200 subpart F are the guidelines for audits.

SPECIFIC ASSURANCES

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this Grant Agreement.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this Grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this Grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this Grant Agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this Grant Agreement which it will own or control.

4. Good Title.

a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this Grant Agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere

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with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.

b. Subject to the FAA Act of 2018, Public Law 115-254, Section 163, it will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this Grant Agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this Grant Agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this Grant Agreement.

c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.

d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.

e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.

f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in this Grant Agreement and shall ensure that such arrangement also requires compliance therewith.

g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

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7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance-Management.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under 49 U.S.C. § 44706, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this Grant, the total cost of the project in connection with which this Grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The

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accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.

b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this Grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this Grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of $2,000 for work on any projects funded under this Grant Agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor under 40 U.S.C. §§ 3141-3144, 3146, and 3147, Public Building, Property, and Works), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this Grant Agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in 49 U.S.C. § 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this Grant Agreement, and, upon approval of the Secretary, shall be incorporated into this Grant Agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this Grant Agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

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18. Planning Projects.

In carrying out planning projects:

a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.

b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.

c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.

d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.

e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.

f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.

g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.

h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for:

   1. Operating the airport's aeronautical facilities whenever required;

   2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

   3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or

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facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.

b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to:

   1. Furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and

   2. Charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.

d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.

e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable

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classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling) that it may choose to perform.

g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.

h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.

i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and

b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for

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which a Grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:

   1. If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.

   2. If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor’s acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.

   3. Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at 49 U.S.C. § 47102), if the FAA determines the airport sponsor meets the requirements set forth in Section 813 of Public Law 112-95.

b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.

c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of 49 U.S.C. § 47107.

26. Reports and Inspections.

It will:

a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the

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public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;

c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this Grant Agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and

d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:

   1. all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and

   2. all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:

a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or

b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

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29. Airport Layout Plan.

a. Subject to the FAA Reauthorization Act of 2018, Public Law 115-254, Section 163, it will keep up to date at all times an airport layout plan of the airport showing:

1. boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
2. the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities;
3. the location of all existing and proposed non-aviation areas and of all existing improvements thereon; and
4. all proposed and existing access points used to taxi aircraft across the airport's property boundary.

Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.

b. Subject to the FAA Reauthorization Act of 2018, Public Law 115-254, Section 163, if a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary:

1. eliminate such adverse effect in a manner approved by the Secretary; or
2. bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, color, and national origin (including limited English proficiency) in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4); creed and sex (including sexual orientation and gender identity) per 49 U.S.C. § 47123 and related requirements; age per the Age Discrimination Act of 1975 and related requirements; or disability per the Americans with Disabilities Act of 1990 and related requirements, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program and activity conducted with, or benefiting from, funds received from this Grant.

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a. Using the definitions of activity, facility, and program as found and defined in 49 CFR §§ 21.23(b) and 21.23(e), the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by or pursuant to these assurances.

b. Applicability

   1. Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.

   2. Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter, or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.

   3. Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

   The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

   1. So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or

   2. So long as the sponsor retains ownership or possession of the property.

d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this Grant Agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

   "The (**[Selection Criteria: Sponsor Name]**), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award."

e. Required Contract Provisions.

   1. It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation (DOT), and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.

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2. It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.
3. It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
4. It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability as a covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:
    a. For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
    b. For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.

g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:
    1. Reinvestment in an approved noise compatibility project;
    2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
    3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
    4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
    5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

    If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development

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project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:

   1. Reinvestment in an approved noise compatibility project;
   2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
   3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
   4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
   5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.

d. Disposition of such land under (a), (b), or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

If any phase of such project has received Federal funds under Chapter 471 subchapter 1 of Title 49 U.S.C., it will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services in the same manner as a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 U S.C., or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this Grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by

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the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (https://www.faa.gov/airports/aip/media/aip-pfc-checklist.pdf) for AIP projects as of [Selection Criteria: Project Application Date].

35. Relocation and Real Property Acquisition.

a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.

b. It will provide a relocation assistance program offering the services described in Subpart C of 49 CFR Part 24 and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.

c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

The sponsor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its Disadvantaged Business Enterprise (DBE) and Airport Concessions Disadvantaged Business Enterprise (ACDBE) programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. §§ 3801-3809, 3812).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

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39. Competitive Access.

a. If the airport owner or operator of a medium or large hub airport (as defined in 49 U.S.C. § 47102) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that:

   1. Describes the requests;
   2. Provides an explanation as to why the requests could not be accommodated; and
   3. Provides a time frame within which, if any, the airport will be able to accommodate the requests.

b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

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EXHIBIT E

REQUIRED FEDERAL PROVISIONS

A. Compliance with Nondiscrimination Provisions. During the performance of this Agreement, LICENSEE, for itself, its assignees, and successors in interest (hereinafter collectively referred to as "LICENSEE") agrees as follows:

1. **Compliance with Regulations:** LICENSEE will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Agreement.

2. **Non-discrimination:** LICENSEE, with regard to the work performed by it during the term of this Agreement, will not discriminate on the grounds of race, color, or national origin in the selection and retention of contractors, including procurements of materials and leases of equipment. LICENSEE will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Agreements, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by LICENSEE for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential contractor or supplier will be notified by LICENSEE of LICENSEE's obligations under this Agreement and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** LICENSEE will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of LICENSEE is in the exclusive possession of another who fails or refuses to furnish the information, LICENSEE will so certify to LESSOR or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of LICENSEE's noncompliance with the Non-discrimination provisions of this contract, LESSOR will impose such sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to cancelling, terminating, or suspending the Agreement, in whole or in part.

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6. **Incorporation of Provisions:** LICENSEE will include the provisions of paragraphs one through six of this Exhibit B, Section (A) in every contract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. LICENSEE will take action with respect to any contract or procurement as LESSOR or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if LICENSEE becomes involved in, or is threatened with litigation by a contractor, or supplier because of such direction, LICENSEE may request LESSOR to enter into any litigation to protect the interests of LESSOR. In addition, LICENSEE may request the United States to enter into the litigation to protect the interests of the United States.

B. Real Property Acquired or Improved Under the Airport Improvement Program. LICENSEE for itself, its heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that in the event facilities are constructed, maintained, or otherwise operated on the property described in this Agreement for a purpose for which a Federal Aviation Administration activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, LICENSEE will maintain and operate such facilities and services in compliance with all requirements imposed by the Nondiscrimination Acts and Regulations listed in the Pertinent List of Nondiscrimination Authorities (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

C. Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program. LICENSEE for itself, its heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, and (3) that LICENSEE will furnish its services in compliance with all other requirements imposed by or pursuant to the List of Nondiscrimination Acts And Authorities.

D. Title VI List of Pertinent Nondiscrimination Acts and Authorities. During the performance of this Agreement, LICENSEE, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq*., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);

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ii. 49 CFR Part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);

iii. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

iv. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq*.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;

v. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq*.), (prohibits discrimination on the basis of age);

vi. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

vii. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

viii. Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR Parts 37 and 38;

ix. The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

x. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

xi. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); and

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xii. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

E. General Civil Rights Provision. LICENSEE agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. If LICENSEE transfers its obligation to another, the transferee is obligated in the same manner as LICENSEE. This provision obligates LICENSEE for the period during which the property is owned, used or possessed by LICENSEE and the airport remains obligated to the Federal Aviation Administration. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

F. Right of Re-entry. In the event of breach of any of the above Nondiscrimination covenants, LESSOR will have the right to terminate the Agreement and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the Agreement had never been made or issued.

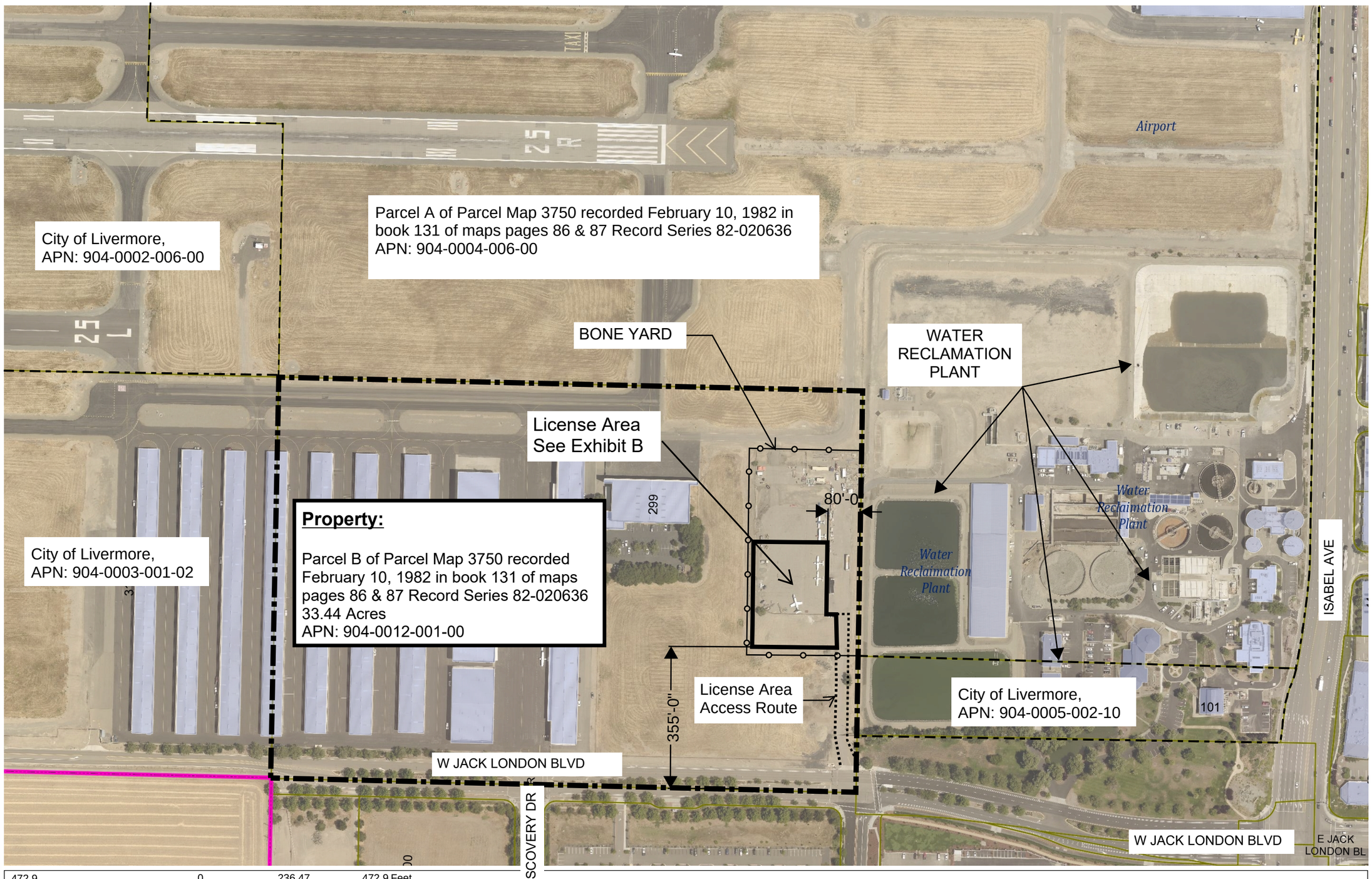
G. Subcontracts. LICENSEE agrees that it shall insert the above six provisions (Section (A) through Section (F)) in any agreement by which LICENSEE grants a right or privilege to any person, firm, or corporation to render accommodations and/or services to the public under this Agreement.

EXHIBIT A


Attitude Aviation - Boneyard
License Agreement Fencing Plan
A - Install Manual Slide Gate
- Install Fence w/top bar
- Existing Fence
A

EXHIBIT A - PROPERTY

EXHIBIT A



Legend

Property Boundary

License Area Boundary

Bone Yard Boundary

NORTH

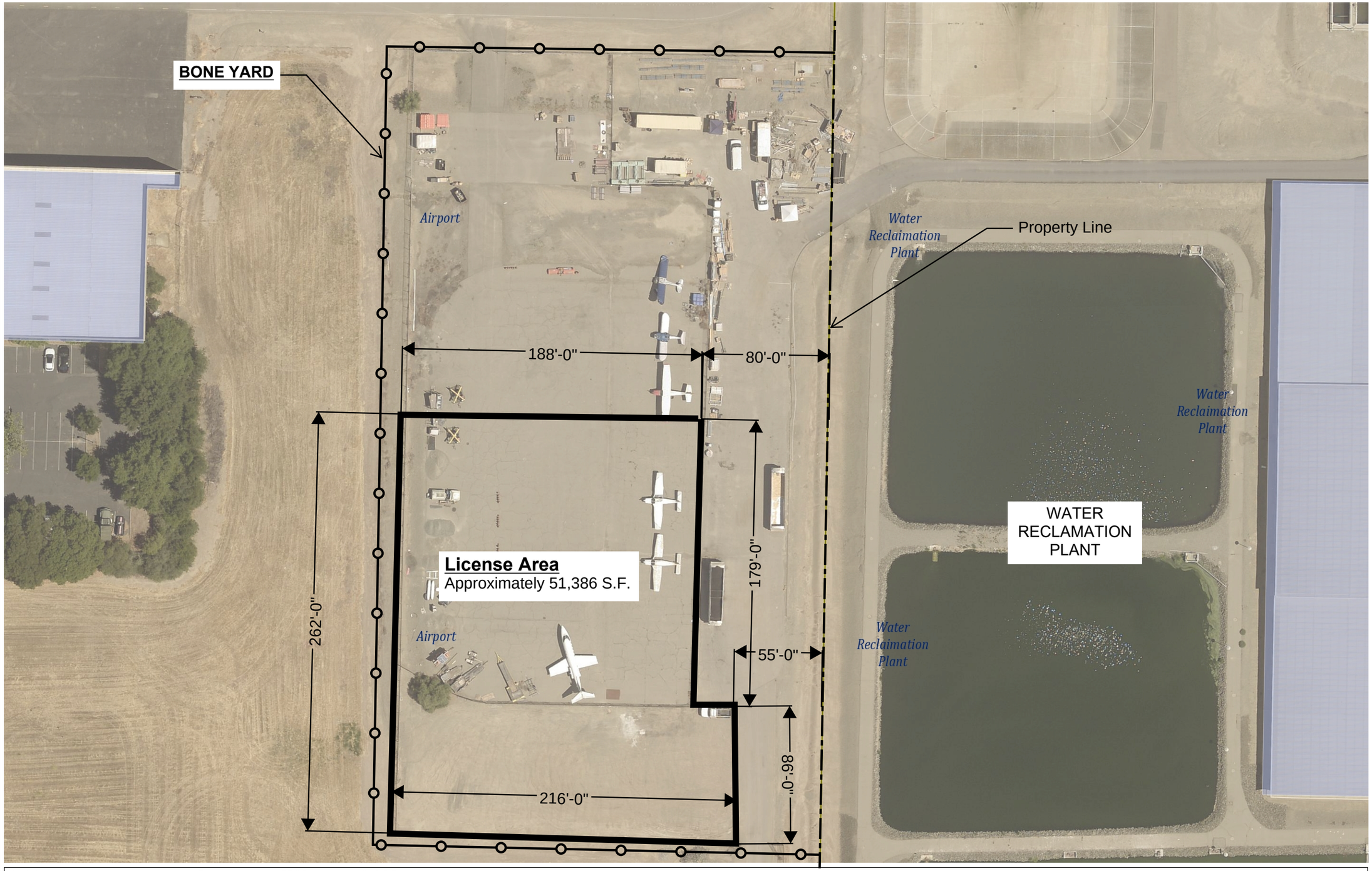
472.9 0 236.47 472.9 Feet

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Information Technologies, GIS Division, City of Livermore

Notes

EXHIBIT B - LICENSE AREA

EXHIBIT A



Legend

License Area Boundary

Bone Yard Boundary

NORTH

118.2 0 59.12 118.2 Feet

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Information Technologies, GIS Division, City of Livermore

Notes

EXHIBIT C

INSURANCE REQUIREMENTS

Minimum Scope and Limits of Insurance

Licensee/Lessee shall maintain limits no less than:

1. Commercial General Liability, including operations, products, and completed operations, as applicable:
   $1,000,000 per occurrence/**$2,000,000** aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability or other form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability:
   $1,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation and Employer's Liability:
   Statutory limits as required by the State of California including **$1,000,000** Employers' Liability per accident, per employee for bodily injury or disease. A waiver of subrogation is required for Workers' Compensation insurance. If Licensee/Lessee is a sole proprietor, then Licensee/Lessee must sign "Contractor Release of Liability."
4. Property Insurance:
   Total value of all tenant improvements, betterments, and contents. The City of Livermore shall be named as loss payee as its interest may appear. The insurer shall waive all rights against City.

Deductibles and Self-Insured Retention

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide, or be endorsed to provide, that the SIR may be satisfied by either the named insured or the City of Livermore. The City of Livermore reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII and accepted to do business in the State of California, unless otherwise acceptable to the City of Livermore.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Livermore, its officers, officials, employees, and designated volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Licensee/Lessee;

or automobiles owned, leased, hired or borrowed by the Licensee/Lessee. The coverage shall contain no special limitations on the scope of protection afforded to the City of Livermore, its officers, officials, employees, or designated volunteers.

2. The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. The additional insured coverage under the Licensee's/Lessee's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as ISO Form CG 20 10 04 13. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Livermore before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.
3. Any failure to comply with reporting or other provisions of the policy, including breaches of warranties, shall not affect coverage provided to the City of Livermore, its officers, officials, employees, or designated volunteers.
4. The Licensee's/Lessee's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party before expiration of the policy unless notice is delivered in accordance with policy provisions.
6. It shall be a requirement under this agreement that any available insurance proceeds broader than, or in excess of, the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.
7. Certificate Holder section of the insurance certificate should read: City of Livermore, 1052 S. Livermore Avenue, Livermore, CA 94550

Verification of Coverage

Licensee/Lessee shall furnish certificates of insurance and endorsement(s) effecting coverage to the City of Livermore for approval. The endorsements shall be on forms acceptable to the City of Livermore. All certificates and endorsements are to be received and approved by the City of Livermore before License/Lease commences. The City of Livermore reserves the right to require complete and certified copies of all insurance policies required by this Agreement.

FAA Airports

EXHIBIT - D

ASSURANCES

AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this Grant Agreement.

B. Duration and Applicability.

1. **Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.**

   The terms, conditions and assurances of this Grant Agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. **Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.**

   The preceding paragraph (1) also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. **Airport Planning Undertaken by a Sponsor.**

   Unless otherwise specified in this Grant Agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 23, 25, 30, 32, 33, 34, and 37 in Section C apply to planning projects. The terms, conditions, and

assurances of this Grant Agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Grant including but not limited to the following:

FEDERAL LEGISLATION

a. 49 U.S.C. subtitle VII, as amended.
b. Davis-Bacon Act, as amended — 40 U.S.C. §§ 3141-3144, 3146, and 3147, et seq.[1]
c. Federal Fair Labor Standards Act – 29 U.S.C. § 201, et seq.
d. Hatch Act – 5 U.S.C. § 1501, et seq.[2]
e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. § 4601, et seq.[1, 2]
f. National Historic Preservation Act of 1966 – Section 106 – 54 U.S.C. § 306108.[1]
g. Archeological and Historic Preservation Act of 1974 – 54 U.S.C. § 312501, et seq.[1]
h. Native Americans Grave Repatriation Act – 25 U.S.C. § 3001, et seq.
i. Clean Air Act, P.L. 90-148, as amended – 42 U.S.C. § 7401, et seq.
j. Coastal Zone Management Act, P.L. 92-583, as amended – 16 U.S.C. § 1451, et seq.
k. Flood Disaster Protection Act of 1973 – Section 102(a) - 42 U.S.C. § 4012a.[1]
l. 49 U.S.C. § 303, (formerly known as Section 4(f)).
m. Rehabilitation Act of 1973 – 29 U.S.C. § 794.
n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin).
o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.) (prohibits discrimination on the basis of disability).
p. Age Discrimination Act of 1975 – 42 U.S.C. § 6101, et seq.
q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
r. Architectural Barriers Act of 1968, as amended – 42 U.S.C. § 4151, et seq.[1]
s. Powerplant and Industrial Fuel Use Act of 1978 – Section 403 – 42 U.S.C. § 8373.[1]
t. Contract Work Hours and Safety Standards Act – 40 U.S.C. § 3701, et seq.[1]
u. Copeland Anti-kickback Act – 18 U.S.C. § 874.[1]

v. National Environmental Policy Act of 1969 – 42 U.S.C. § 4321, et seq.[1]

w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. § 1271, et seq.

x. Single Audit Act of 1984 – 31 U.S.C. § 7501, et seq.[2]

y. Drug-Free Workplace Act of 1988 – 41 U.S.C. §§ 8101 through 8105.

z. The Federal Funding Accountability and Transparency Act of 2006, as amended (P.L. 109-282, as amended by section 6202 of P.L. 110-252).

aa. Civil Rights Restoration Act of 1987, P.L. 100-259.

bb. Build America, Buy America Act, P.L. 117-58, Title IX.

EXECUTIVE ORDERS

a. Executive Order 11246 – Equal Employment Opportunity[1]

b. Executive Order 11990 – Protection of Wetlands

c. Executive Order 11998 – Flood Plain Management

d. Executive Order 12372 – Intergovernmental Review of Federal Programs

e. Executive Order 12699 – Seismic Safety of Federal and Federally Assisted New Building Construction[1]

f. Executive Order 12898 – Environmental Justice

g. Executive Order 13166 – Improving Access to Services for Persons with Limited English Proficiency

h. Executive Order 13985 – Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

i. Executive Order 13988 – Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation

j. Executive Order 14005 – Ensuring the Future is Made in all of America by All of America's Workers

k. Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad

FEDERAL REGULATIONS

a. 2 CFR Part 180 – OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).

b. 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. [4, 5]

c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment.

d. 14 CFR Part 13 – Investigative and Enforcement Procedures.

e. 14 CFR Part 16 – Rules of Practice for Federally-Assisted Airport Enforcement Proceedings.

f. 14 CFR Part 150 – Airport Noise Compatibility Planning.

g. 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.

h. 28 CFR § 50.3 – U.S. Department of Justice Guidelines for the Enforcement of Title VI of the Civil Rights Act of 1964.

i. 29 CFR Part 1 – Procedures for Predetermination of Wage Rates.[1]

j. 29 CFR Part 3 – Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States.[1]

k. 29 CFR Part 5 – Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act).[1]

l. 41 CFR Part 60 – Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and Federally-assisted contracting requirements).[1]

m. 49 CFR Part 20 – New Restrictions on Lobbying.

n. 49 CFR Part 21 – Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964.

o. 49 CFR Part 23 – Participation by Disadvantage Business Enterprise in Airport Concessions.

p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.[1, 2]

q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

r. 49 CFR Part 27 – Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance.[1]

s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation.

t. 49 CFR Part 30 – Denial of Public Works Contracts to Suppliers of Goods and Services of Countries That Deny Procurement Market Access to U.S. Contractors.

u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).

w. 49 CFR Part 38 – Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.

x. 49 CFR Part 41 – Seismic Safety.

FOOTNOTES TO ASSURANCE (C)(1)

[1] These laws do not apply to airport planning sponsors.

[2] These laws do not apply to private sponsors.

[3] 2 CFR Part 200 contains requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation shall

apply where applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

[4] Cost principles established in 2 CFR part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.

[5] Audit requirements established in 2 CFR part 200 subpart F are the guidelines for audits.

SPECIFIC ASSURANCES

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this Grant Agreement.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this Grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this Grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this Grant Agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this Grant Agreement which it will own or control.

4. Good Title.

a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this Grant Agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere

with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.

b. Subject to the FAA Act of 2018, Public Law 115-254, Section 163, it will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this Grant Agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this Grant Agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this Grant Agreement.

c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.

d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.

e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.

f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in this Grant Agreement and shall ensure that such arrangement also requires compliance therewith.

g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance-Management.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under 49 U.S.C. § 44706, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this Grant, the total cost of the project in connection with which this Grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The

accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.

b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this Grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this Grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of $2,000 for work on any projects funded under this Grant Agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor under 40 U.S.C. §§ 3141-3144, 3146, and 3147, Public Building, Property, and Works), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this Grant Agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in 49 U.S.C. § 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this Grant Agreement, and, upon approval of the Secretary, shall be incorporated into this Grant Agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this Grant Agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. Planning Projects.

In carrying out planning projects:

a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.

b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.

c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.

d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.

e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.

f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.

g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.

h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for:

   1. Operating the airport's aeronautical facilities whenever required;

   2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

   3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or

facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.

b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to:

   1. Furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and

   2. Charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.

d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.

e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable

classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling) that it may choose to perform.

g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.

h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.

i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and

b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for

which a Grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:

   1. If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.

   2. If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor’s acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.

   3. Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at 49 U.S.C. § 47102), if the FAA determines the airport sponsor meets the requirements set forth in Section 813 of Public Law 112-95.

b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.

c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of 49 U.S.C. § 47107.

26. Reports and Inspections.

It will:

a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the

public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;

c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this Grant Agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and

d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:

   1. all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and

   2. all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:

a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or

b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. Airport Layout Plan.

a. Subject to the FAA Reauthorization Act of 2018, Public Law 115-254, Section 163, it will keep up to date at all times an airport layout plan of the airport showing:

1. boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;

2. the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities;

3. the location of all existing and proposed non-aviation areas and of all existing improvements thereon; and

4. all proposed and existing access points used to taxi aircraft across the airport's property boundary.

Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.

b. Subject to the FAA Reauthorization Act of 2018, Public Law 115-254, Section 163, if a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary:

1. eliminate such adverse effect in a manner approved by the Secretary; or

2. bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, color, and national origin (including limited English proficiency) in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4); creed and sex (including sexual orientation and gender identity) per 49 U.S.C. § 47123 and related requirements; age per the Age Discrimination Act of 1975 and related requirements; or disability per the Americans with Disabilities Act of 1990 and related requirements, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program and activity conducted with, or benefiting from, funds received from this Grant.

a. Using the definitions of activity, facility, and program as found and defined in 49 CFR §§ 21.23(b) and 21.23(e), the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by or pursuant to these assurances.

b. Applicability

   1. Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.

   2. Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter, or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.

   3. Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

   The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

   1. So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or

   2. So long as the sponsor retains ownership or possession of the property.

d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this Grant Agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

   "The (**[Selection Criteria: Sponsor Name]**), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award."

e. Required Contract Provisions.

   1. It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation (DOT), and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.

2. It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.
3. It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
4. It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability as a covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:
    a. For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
    b. For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.

g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:
    1. Reinvestment in an approved noise compatibility project;
    2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
    3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
    4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
    5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

    If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development

project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:

   1. Reinvestment in an approved noise compatibility project;
   2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
   3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
   4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
   5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.

d. Disposition of such land under (a), (b), or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

If any phase of such project has received Federal funds under Chapter 471 subchapter 1 of Title 49 U.S.C., it will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services in the same manner as a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 U S.C., or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this Grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by

the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (https://www.faa.gov/airports/aip/media/aip-pfc-checklist.pdf) for AIP projects as of [Selection Criteria: Project Application Date].

35. Relocation and Real Property Acquisition.

a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.

b. It will provide a relocation assistance program offering the services described in Subpart C of 49 CFR Part 24 and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.

c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

The sponsor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its Disadvantaged Business Enterprise (DBE) and Airport Concessions Disadvantaged Business Enterprise (ACDBE) programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. §§ 3801-3809, 3812).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. Competitive Access.

a. If the airport owner or operator of a medium or large hub airport (as defined in 49 U.S.C. § 47102) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that:

   1. Describes the requests;
   2. Provides an explanation as to why the requests could not be accommodated; and
   3. Provides a time frame within which, if any, the airport will be able to accommodate the requests.

b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

EXHIBIT E

REQUIRED FEDERAL PROVISIONS

A. Compliance with Nondiscrimination Provisions. During the performance of this Agreement, LICENSEE, for itself, its assignees, and successors in interest (hereinafter collectively referred to as "LICENSEE") agrees as follows:

1. **Compliance with Regulations:** LICENSEE will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Agreement.

2. **Non-discrimination:** LICENSEE, with regard to the work performed by it during the term of this Agreement, will not discriminate on the grounds of race, color, or national origin in the selection and retention of contractors, including procurements of materials and leases of equipment. LICENSEE will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Agreements, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by LICENSEE for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential contractor or supplier will be notified by LICENSEE of LICENSEE's obligations under this Agreement and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** LICENSEE will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of LICENSEE is in the exclusive possession of another who fails or refuses to furnish the information, LICENSEE will so certify to LESSOR or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of LICENSEE's noncompliance with the Non-discrimination provisions of this contract, LESSOR will impose such sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to cancelling, terminating, or suspending the Agreement, in whole or in part.

6. **Incorporation of Provisions:** LICENSEE will include the provisions of paragraphs one through six of this Exhibit B, Section (A) in every contract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. LICENSEE will take action with respect to any contract or procurement as LESSOR or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if LICENSEE becomes involved in, or is threatened with litigation by a contractor, or supplier because of such direction, LICENSEE may request LESSOR to enter into any litigation to protect the interests of LESSOR. In addition, LICENSEE may request the United States to enter into the litigation to protect the interests of the United States.

B. Real Property Acquired or Improved Under the Airport Improvement Program. LICENSEE for itself, its heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that in the event facilities are constructed, maintained, or otherwise operated on the property described in this Agreement for a purpose for which a Federal Aviation Administration activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, LICENSEE will maintain and operate such facilities and services in compliance with all requirements imposed by the Nondiscrimination Acts and Regulations listed in the Pertinent List of Nondiscrimination Authorities (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

C. Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program. LICENSEE for itself, its heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, and (3) that LICENSEE will furnish its services in compliance with all other requirements imposed by or pursuant to the List of Nondiscrimination Acts And Authorities.

D. Title VI List of Pertinent Nondiscrimination Acts and Authorities. During the performance of this Agreement, LICENSEE, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq*., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);

ii. 49 CFR Part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);

iii. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

iv. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq*.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;

v. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq*.), (prohibits discrimination on the basis of age);

vi. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

vii. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

viii. Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR Parts 37 and 38;

ix. The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

x. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

xi. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); and

xii. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

E. General Civil Rights Provision. LICENSEE agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. If LICENSEE transfers its obligation to another, the transferee is obligated in the same manner as LICENSEE. This provision obligates LICENSEE for the period during which the property is owned, used or possessed by LICENSEE and the airport remains obligated to the Federal Aviation Administration. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

F. Right of Re-entry. In the event of breach of any of the above Nondiscrimination covenants, LESSOR will have the right to terminate the Agreement and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the Agreement had never been made or issued.

G. Subcontracts. LICENSEE agrees that it shall insert the above six provisions (Section (A) through Section (F)) in any agreement by which LICENSEE grants a right or privilege to any person, firm, or corporation to render accommodations and/or services to the public under this Agreement.


EXHIBIT A
Attitude Aviation/Gradetech - Boneyard
License Agreement Fencing Plan
A - Install Manual Slide Gate
- Install Fence w/top bar
- Existing Fence
A

Attitude Aviation, Inc.

Price to Modify Fencing at Livermore Airport Storage Yard

January 18, 2024

330’ of 6’ Black Chain Link Fence	$30,360.00
20’ Rolling Gate	$ 3,400.00
	$33,760.00

Sam Rivinius
Attitude Aviation, Inc.
925-456-2276

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 6.1**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Judy Erlandson, Acting Public Works Director

SUBJECT: Public Hearing to consider protests related to the non-payment of solid waste, recycling, and organics handling services provided by Livermore Sanitation for collection on the County Assessor tax roll.

RECOMMENDED ACTION

Staff recommends the City Council hold a Public Hearing to:

1. Consider protests related to the non-payment of solid waste, recycling, and organics services;
2. Adopt a resolution overruling protests and confirm the 2022 and 2023 assessments if applicable; and,
3. Direct staff to forward a finalized copy of the assessment report to the County Tax Assessor.

SUMMARY

Currently, Livermore Sanitation, Inc. (LSI) has approximately 29,000 accounts. Of those, 88 are more than 12 months behind on payment. These debts are from unpaid charges from Fiscal Years 2022 and 2023 (7/2022 - 6/2024). Despite repeated notifications from LSI, and four notices from the City of Livermore, the accounts continue to be significantly overdue. As provided for in Government Code section 25831 and Livermore Municipal Code section 8.08.160, LSI may assign to the City all of LSI's rights to collect these delinquent accounts for the City to pursue collections.

DISCUSSION

Per Livermore Municipal Code 8.08.030, all properties are required to subscribe to solid waste, recycling, and organics services provided by Livermore Sanitation, Inc. (LSI). Additionally, the Municipal Code states that property owners are responsible to pay for solid waste, recycling, and organics service at rates approved by the City Council.

Due to the possibility of waste accumulation and vermin infestation, LSI is not permitted to discontinue providing service for non-payment. Continual service also helps preserve property values and quality of life by reducing illegal dumping and blighted neighborhoods.

LSI has two billing cycles; residential accounts are billed quarterly, and commercial accounts are billed monthly. According to the Third Amended and Restated Agreement between the City of Livermore and LSI for Solid Waste, Recyclable Materials, and Compostable Materials Services (Franchise Agreement), if LSI does not receive payment after 30 days from the date of the invoice, a notice is sent to the account holder. If an account lapses to 60 days past due, a second notice, if applicable, is sent to the account holder and property owner. Concurrently, residential service is reduced to one 20-gallon garbage cart with no recycling or organics service. Commercial service is reduced to one 32-gallon garbage cart with no recycling or organics service. Collection calls to the account holder are documented and invoices including the outstanding amount are continued.

In addition to LSI's collection efforts, the City of Livermore sends four notices to affected property owners advising of intent to assess their property. This year, the first notice was mailed on April 3, 2024. The second notice was mailed on June 14, 2024. The third notice was mailed on June 28, 2024. The fourth notice was mailed on July 15, 2024. All letters advised the property owner of the scheduled Public Hearing on July 22, 2024.

Upon confirmation by the City Council, City staff will send the final assessment list to a consultant to verify addresses and then send the information to be placed on the County tax roll at a cost of approximately $500. All assessments are cleared in five years, or once a property is sold by the owner or Alameda County, and past due funds are paid to LSI.

As of the writing of this report, of the approximately 29,000 LSI accounts, 88 accounts are more than 12 months past due. This accounts for 0.3% of all LSI accounts. These debts are unpaid charges from Fiscal Year 2022 and 2023. Of the 88 accounts, there are 3 commercial accounts, 1 multi-family account, and 83 residential accounts that are more than 12 months past due. Of the 88 accounts, there are 16 accounts scheduled for assessments this year that have been assessed in previous years.

The amount and number of accounts eligible for assessment may decrease after publication of this report since account holders and property owners may settle their account until 7:00 pm on the evening of the July 22, 2024 Public Hearing. This payment cutoff date is necessary in order for this assessment to be included in the 2024-2025 County Tax Assessor's billing.

If confirmed by the City Council, all outstanding debt that is more than 12 months overdue will be assigned by LSI to the City, for the City to pursue collections as provided for in Government Code section 25831 and Livermore Municipal Code section 8.08.160.

Staff recommends that the City Council consider protests, and adopt a resolution confirming the 2024 assessments, directing staff to forward a finalized copy of the assessment report to the County Tax Assessor.

FISCAL AND ADMINISTRATIVE IMPACTS

The net value of the assessments is approximately $88,591 which represents debts that are at least 12 months old. This will be the amount remitted to the City and passed through to LSI when received.

COMMUNITY PILLAR

3: Environmental Stewardship

GOAL

2: Manage the City's Solid Waste Contract

ATTACHMENTS

1. Resolution
2. Exhibit A - Assessment List

Prepared by: Anna Zamboanga
Recycling Specialist

Approved by:



Marianna Marysheva
City Manager

Fiscal Review by:



Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION CONSIDERING AND OVERRULING OBJECTIONS AND PROTESTS TO NON-PAYMENT OF SOLID WASTE, RECYCLING, AND ORGANICS HANDLING SERVICES PROVIDED BY LIVERMORE SANITATION FOR COLLECTION ON THE COUNTY ASSESSOR TAX ROLL AND CONFIRMING ASSESSMENTS

The City of Livermore ("City") initiated collection procedures for delinquent payments and penalties for waste collection services as authorized by Livermore Municipal Code section 8.08.160 and Government Code sections 38790.1 and 25831, which included causing notice of the hearing to be mailed to landowners for the properties listed in Exhibit A not less than 10 days before the public hearing to confirm the assessments.

On July 22, 2024, the City Council conducted a public hearing to hear any and all objections or protests by landowners liable to be assessed for delinquent fees, identified in the attached Exhibit A, for unpaid invoice amounts.

The City Clerk of the City of Livermore has, within the time required by law, prepared the assessment list and caused it to be posted in the same locations as the agenda for the City Council's meeting on July 22, 2024, with the time shown when said list has been submitted to the City Council for confirmation.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore as follows:

1. All objections and protests, if any, have been overruled by motion of the City Council.

2. The delinquencies and penalties listed in the attached Exhibit A are hereby confirmed by the City Council as submitted.

3. The outstanding amounts of overdue solid waste accounts with Livermore Sanitation Inc. shall become an assessment on the property for the unpaid invoiced amount and placed on the County tax roll.

4. The City Manager is authorized to take whatever actions are necessary and appropriate to carry out the purpose and intent of this Resolution.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason Alcala
Jason Alcala
City Attorney

Exhibit A – Lien Assessments

APN	Service Address	Potential Lien Amount
98-290-22	**1116 E STANLEY BLVD**	9017.79
98-385-60	**763 EL RANCHO DR**	2039.25
99B-5206-23	**1628 PINEHURST CT**	1760.80
98-243-1-4	**363 N K ST**	1700.14
903-13-113	**506 SELBY LN**	1546.44
98A-434-5	**137 ESTATES ST**	1524.02
98A-610-24	**3659 CARRIGAN CMN**	1524.02
99B-5209-135	**2195 DEL MONTE ST**	1524.02
99-302-87	**878 ALEXANDER ST**	1524.02
99-320-25	**404 ANNA MARIA ST**	1507.20
98-292-9	**1320 VENTURA AVE**	1502.02
98-350-14	**588 BERNAL AVE**	1396.19
99-1341-69	**3113 SALISBURY CT**	1372.08
99-306-132	**725 EL CAMINITO**	1296.47
99A-2908-64	**4610 AMY CT**	1289.10
98-220-5	**658 N O ST**	1289.10
99-1306-13	**239 QUARTZ CIR**	1252.51
99B-5355-21	**826 BERRYESSA CT**	1252.51
97-81-4-3	**1323 2ND ST**	1221.00
98-391-110	**773 PARTRIDGE CMN**	1206.58
99-308-98	**827 WALL ST**	1206.58
99-31-53	**4831 ZINNIA CT**	1172.80
99B-5304-52-3	**6265 ALTAMAR CIR**	1172.80
98-410-3	**2906 WORTHING CMN**	1127.27
97-85-6-8	**1167 HOLMES CT**	1110.96
98-402-41	**539 HUMBOLDT WAY**	1078.06
99B-5301-94	**6472 OWL WAY**	1042.37
97-145-24	**1947 DE VACA WAY**	1009.36
99-1333-18	**1004 LARKSPUR DR**	973.44
99-1359-31	**2529 ORVIETO CT**	973.44
99-79-62	**2813 BRIARWOOD DR**	986.94
97-91-30-1	**1271 AARON ST**	962.48
98-304-25-1	**1374 OLIVINA AVE #BACK**	955.90
99-33-51	**1000 BLUEBELL DR**	905.98
99-1309-21	**1665 HONEYSUCKLE RD**	905.98
98-304-25-1	**1374 OLIVINA AVE**	889.80
97-151-9	**1676 SORRENTO PL**	880.62
99-307-44	**749 MORAGA DR**	880.62

99-1315-14	**5358 SUNFLOWER CT**	868.60
99A-2903-124	**4713 MULQUEENEY CMN**	868.60
97-152-46	**2933 1ST ST #1004**	860.83
905-12-172	**26 BELLINGTON CMN #1**	846.35
99-313-81	**438 ARMIDA CT**	845.05
99B-8116-38	**5721 EDELWEISS WAY**	782.36
99B-5405-3	**6970 EDGEWATER LN**	782.36
98-304-24	**1372 OLIVINA AVE**	782.36
99B-8132-29	**914 FLURRY DR**	781.05
99-186-122	**610 CURLEW RD**	804.42
98A-417-13	**3532 MADEIRA WAY**	804.42
97-108-18	**318 S LIVERMORE AVE #112**	758.78
97-112-3	**2452 2ND ST**	719.12
99B-5208-26	**5579 OAKMONT CIR**	718.43
98A-610-43	**3746 CARRIGAN CMN**	742.84
905-12-171	**211 WILDROSE CMN #7**	696.40
98-227-1-13	**556 N LIVERMORE AVE**	668.51
98-409-5	**2713 HOLLINGBURY CMN**	664.92
99-985-3-2	**979 S LIVERMORE AVE #201**	684.88
98-265-38	**2869 KENNEDY ST**	659.83
99B-5210-103	**5569 HAGGIN OAKS AVE**	676.90
98-243-6-7	**374 N L ST**	665.96
99-302-94	**789 DEL MAR AVE**	644.92
99-303-45	**1130 EL CAMINITO**	656.43
97-152-98	**2755 1ST ST #1502**	640.54
98A-402-68	**1090 NIELSEN LN**	645.96
99A-1437-54	**1069 ROXANNE ST**	636.90
97-81-4-3	**1345 2ND ST**	617.52
98-292-5-1	**1367 LAMBAREN AVE**	609.30
99-27-6	**1374 ASTER LN**	582.01
99-327-66	**649 JADE PL**	567.72
98A-612-39	**3573 RIDGECREST WAY**	546.05
97-14-6-1	**186 S K ST**	558.88
99-1315-20	**5343 MOONFLOWER WAY**	549.36
99-76-27	**1187 CROMWELL ST**	533.14
99-314-56	**373 EDYTHE ST**	513.03
98A-414-14-2	**3542 EAST AVE #E**	514.96
97-152-26	**266 WOOD ST #404**	514.96
97-9-3-8	**182 S P ST**	514.96

98-264-11	**3075 CALLAGHAN ST #A**	513.14
97-91-1-1	**1208 MARGUERITE ST**	460.46
99-1322-112	**1025 BELLFLOWER ST**	434.90
99-317-8	**1348 EL PADRO DR**	412.14
99-39-4	**1574 HEATHER LN**	412.14
905-13-37	**32 MERITAGE CMN #200**	389.38
98-233-6-4	**1663 LINDEN ST**	389.38
98-281-2	**183 N LIVERMORE AVE**	309.44
98A-447-100	**3969 PRINCETON WAY**	336.66
99A-2915-1	**5792 DAPHNE DR**	330.58
99-313-3	**518 SONOMA AVE**	92.60

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 6.2**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

SUBJECT: Hearing to consider a request for a Vesting Tentative Tract Map, Site Plan Design Review, Development Agreement, Consistency Determination, Conditional Use Permit, Master Sign Program Amendment, and Development Code amendment to develop vacant land located southwest of the Portola Avenue and Isabel Avenue intersection with for-sale residential townhome and condominium units and for-rent apartments with mixed commercial and office uses and a public park and public plazas, known as Isabel Crossing.

RECOMMENDED ACTION

The Planning Commission and staff recommend the City Council take the following actions:

1. Adopt a resolution adopting an Addendum to the Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report, in accordance with the California Environmental Quality Act.
2. **Introduce an ordinance** and waive the first reading approving Development Code Amendment (DCA) 24-001;
3. Adopt a resolution approving Specific Plan Amendment (SPPA) 24-001;
4. **Introduce an ordinance** and waive the first reading approving Development Agreement (DA) 22-001;
5. Adopt a resolution approving Subdivision (SUB) 22-008, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Master Sign Plan Amendment (MSP) 24-001; the proposed Master Plan; the Alternative Affordable Plan; the requested Density Bonus Waivers and Incentive/Concessions; and the No Net Loss findings;
6. Direct the Planning Manager to file a Notice of Determination, in accordance with the provisions of the California Environmental Quality Act, subject to Project approval; and
7. Direct the City Clerk to record the Development Agreement, in accordance with the provisions of the California Government Code, subject to Project approval.

SUMMARY

The Isabel Neighborhood Specific Plan (Specific Plan) guides development in the northwestern part of Livermore. It seeks to create a complete neighborhood with a mix of uses that is walkable, bikeable, and served by transit. The City Council adopted the amended Specific Plan and its Supplemental Environmental Impact Report in November 2020. The proposed site and project are one of several new developments within the Specific Plan area. The project proposes 1,299 for-sale condominium units, duplexes, triplexes, townhomes, and apartments with associated open space, landscaping, parking, and public street frontage improvements. The project also includes mixed-use buildings with approximately 75,000 square feet of retail on the ground floor along Main Street and Gateway Avenue, approximately two acres of a public park and plazas, and off-site public infrastructure, including separated bike lanes and bus stop improvements.

The Project is consistent with the General Plan, Climate Action Plan, Active Transportation Plan, Specific Plan, as amended, Airport Land Use Compatibility Plan, Livermore Development Code, as amended, and the citywide Design Standards and Guidelines, with the exception of the specific standards waived by state Density Bonus Law. The Project would make progress towards meeting the City's current Regional Housing Needs Allocation (RHNA), would result in a net surplus of Lower Income RHNA units, and exceeds the affordable housing requirements, with 363 affordable units. The Project provides high-quality architectural design, in a style that reflects Livermore's heritage. The proposed landscape design includes native species, low-water-using plants, and recycled water. The proposed Development Agreement is consistent with the General Plan, secures a range of community benefits for Livermore such as extra bike lanes, financial contributions, public art, and affordable housing, and ensures the Project will be constructed as proposed and within a reasonable period of time. The proposed Specific Plan and Development Code amendments are consistent with the General Plan, would help implement the Specific Plan, and would provide the City Council with additional development flexibility given current market conditions and state housing laws. The use and density are consistent and compatible with surrounding properties and the Livermore Municipal Airport, the site is of a size and shape that can accommodate the use, and the project will be adequately served by all necessary utilities and services.

The Project conforms with the provisions of the California Housing Crisis Act and State Density Bonus Law. An EIR Addendum was prepared, consistent with the California Environmental Quality Act, that demonstrates no significant impacts beyond those previously identified in the EIR would occur. Ultimately, the Project is consistent with all state and local requirements, implements the Council's vision for a walkable and bikeable transit-oriented development, secures physical, financial, and intangible community benefit, and provides a range of broader community benefits intrinsic to the Project, creating a high-quality place to live, shop, dine, and recreate. The Location Map is shown in Attachment 3 and Development Plans are shown in Exhibits C, D, and E of the Project resolution.

DISCUSSION

BACKGROUND

In 2018 the City Council adopted the Isabel Neighborhood Specific Plan. In November of 2020, the City Council adopted the amended Isabel Neighborhood Specific Plan (Specific Plan) to acknowledge that Valley Link would have a commuter train station at Isabel and I-580 instead of BART and to implement focused land use changes. The Specific Plan covers approximately 1,138 acres in the northwest part of Livermore surrounding the Isabel Avenue/580 Interchange.

The Specific Plan establishes the land uses, allowable densities, development locations, and necessary

public improvements to create a complete neighborhood, access to open space, arroyos, and scenic views, a well-connected pedestrian and bicycle network, high quality design, community gathering spaces, and compatibility with existing uses. The Isabel Neighborhood will address citywide goals by providing increased transportation options, housing choices, and supporting economic vitality. Residents and employees will have access to regional and local transit, a variety of amenities, and basic services for meeting daily needs, such as a nearby grocery store, restaurants, and office space.

The Specific Plan would create a complete transit-oriented neighborhood that includes approximately 4,095 new attached single-family and multi-family housing units, approximately 1,000 of which will be affordable units. In addition, the Specific Plan includes new commercial and office space, three new neighborhood parks, pedestrian and bicycle facilities, and infrastructure improvements. Digital copies of the Specific Plan and Environmental Impact Report are provided on the City's website.

The Specific Plan streamlines environmental and design review in the Isabel Neighborhood. However, development projects within the Plan are required to undergo the City's typical entitlement process, which requires Planning Commission and City Council approval of larger residential subdivisions and mixed-use projects. To date, the City Council has approved approximately 750 residential units in the Specific Plan, across four separate Development projects. Apart from the Isabel Crossing project, approximately 285 additional residential units are currently in the development pipeline to be considered by the City Council in the near future.

DESCRIPTION, CONTEXT, AND ANALYSIS

The complete project description, site context, and analysis of consistency with all applicable State and local standards is provided in the attached Staff Analysis memo, that was reviewed by the Planning Commission (Attachment 1).

PLANNING COMMISSION AND PUBLIC COMMENT

On July 2, 2024, the Planning Commission considered the Project. Primary topics of discussion included active transportation, affordable housing, No Net Loss, and the proposed Specific Plan/ Development Code amendments. Prior to the meeting, the Project received 10 letters of support, including from Las Positas College, the Chamber of Commerce, and Interfaith Housing (Attachment 12). Several speakers commented during the public hearing, all in support of the Project. One speaker was concerned with the concentration of affordable housing units, while three others advocated for local trades and unionized labor. Ultimately, the Planning Commission unanimously approved the Project with the following recommendations, which have been incorporated into the Project Conditions of Approval:

1. To the extent practicable, the pedestrian trail located on the east side of Planning Area S1 should be designed to accommodate bicyclists, and should connect directly to Isabel Avenue.
2. In all locations where feasible, pedestrian curb ramps shall be directional.
3. To the extent practicable, the pedestrian bulbouts along Isabel Avenue shall be extended to shorten crossing distance.
4. Project bike racks shall be evenly distributed across the site and shall be located within 50 feet of commercial entries.
5. Community Development Department staff shall coordinate with Livermore Amador Valley Transit Authority staff to explore bus stops within the Project site, where feasible.
6. To the extent practicable, A Street and Gateway Avenue should be modified to ensure dedicated

bicycle lanes are located along the curb face, and separated from the travel lane with automobile parking.

The Staff Analysis reviewed by Planning Commission describes how the proposed Isabel Neighborhood Specific Plan Master Planning Policy amendment would only apply to the Specific Plan core area (Subareas 3a, 3b, and 3c). However, the proposed Specific Plan text amendment erroneously omitted this requirement. Subsequent to the Planning Commission meeting, staff corrected the error, and presents the revised text amendment to the City Council for consideration in Exhibit C of the Specific Plan Amendment resolution. Staff supports focusing the Master Planning Policy amendment within the core area since these are the densest and mixed-use areas of the plan, and require flexibility given current market conditions and state legal climate.

During the Planning Commission meeting, the applicant provided testimony that the requested Density Bonus Waiver related to landscape area was no longer needed, since the Project meets the required standard. Planning Commission recommended that the applicant submit a new Density Bonus letter removing this request. The applicant has submitted a revised letter for the Council's consideration and is included as Attachment 10. Staff supports the change and has found that more than 10 percent of the project site is landscaped, exceeding the requirement. The full Planning Commission meeting minutes are provided in Attachment 13, and each Planning Commission Resolution is attached to the City Council Resolutions and Ordinances.

FISCAL AND ADMINISTRATIVE IMPACTS

There are generally positive fiscal impacts for the City associated with the project as summarized below. Staff time allocated to land use entitlement review is mostly offset by required entitlement application fees, and plan checking and building permit fees would cover all required post-entitlement work. The increase in demand for water, sewer, and stormwater services would be offset by required impact fees and utility connection fees.

All Project infrastructure will be constructed by the Developer, who would be reimbursed through the formation of a new Infrastructure Community Facilities District (Infrastructure CFD). Staff time associated with formation and management of the Infrastructure CFD would be reimbursed by the Infrastructure CFD itself. Private infrastructure would be maintained by the Project's private Master Homeowners' Association (HOA). The Isabel Neighborhood Specific Plan Maintenance CFD (Maintenance CFD) would cover the maintenance costs for all public infrastructure within the project site like public streets, landscape strips, medians, plazas, and stormwater retention areas.

All Class IV separated bike lanes would be maintained by the City using the General Fund because they are being used by the broader community. Maintenance of all private surface improvements like private landscaping, alleys, signage, etc. would be paid for by the Project’s HOA. Livermore Area Parks and Recreation District (LARPD) would maintain the Neighborhood Park.

According to the Fiscal/Economic Analysis report prepared by Kosmont (Attachment 9), the Project would provide an estimated $1 million net annual tax surplus at full buildout, accounting for both utility and service demand (e.g. police and fire) and property and sales taxes paid to the City. Further, the Project would provide over 3,700 construction jobs onsite during the construction period, and an estimated $615 million in total economic output during construction (representing new labor income and goods and services produced within Livermore).

During operations at full buildout, the Project would generate $43 million in new local retail spending, provide 200 new jobs, with an estimated $70 million total annual economic output (representing new jobs, new spending, and new wages). The Project represents an approximately $600 million initial investment into the City of Livermore. As required by the Development Agreement, Livermore would also be designated as the point of sale for all construction material/supplies purchased of $5 million or more, resulting in further sales tax increases during construction.

ENVIRONMENTAL DETERMINATION

In 2020, the City Council certified a Supplemental Environmental Impact Report for the Isabel Neighborhood Specific Plan (EIR). The EIR analyzed the impacts of the Specific Plan at full buildout. As described in the Environmental Resolution, an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report was prepared for the Project. Although the Project is different than what was analyzed in the EIR, with a different street layout, modified proportion and location of office and commercial uses, a different park location, and a land use change from office to residential, the Addendum finds that the overall Project impacts are less significant than those analyzed in the EIR. For these reasons, no new EIR is required, and the Project meets all requirements of the California Environmental Quality Act, per CEQA Guidelines section 15164.

COMMUNITY PILLAR

2: Economy that Prospers

GOAL

4: Implement the Isabel Neighborhood Specific Plan

GUIDING DOCUMENTS

General Plan
Isabel Neighborhood Specific Plan

ATTACHMENTS

1. Memo - Staff Analysis - Isabel Crossing
2. Memo - Utilities and Infrastructure - Isabel Crossing
3. Map - Location - Isabel Crossing
4. Map - Transportation Infrastructure - Isabel Crossing
5. Map - Existing Land Use
6. State Law - No Net Loss Summary
7. Policy - Housing Element Sites Inventory Excerpt
8. Policy - Master Planning - Isabel Neighborhood Specific Plan
9. Study - Kosmont Economic Analysis
10. Letter - Density Bonus Request
11. Letter - LVJUSD

12. Letters - Public Support
13. Draft Minutes - Planning Commission Meeting
14. Resolution - CEQA
15. Exhibit A - Planning Commission CEQA Resolution
16. Exhibit B - Specific Plan EIR Addendum
17. Exhibit C - Addendum Appendix Volume A
18. Exhibit D - Addendum Appendix Volume B
19. Ordinance - Development Code Amendment
20. Exhibit A - PC Development Code Resolution
21. Exhibit B - Livermore Development Code Text Amendment
22. Resolution - Specific Plan Amendment
23. Exhibit A - Planning Commission Specific Plan Amendment Resolution
24. Exhibit B - Specific Plan Map Amendment
25. Exhibit C - Specific Plan Text Amendment
26. Ordinance - Development Agreement
27. Exhibit A - Planning Commission Development Agreement Resolution
28. Exhibit B - Development Agreement
29. Resolution - Project
30. Exhibit A - Planning Commission Project Resolution
31. Exhibit B - Planning Commission Consistency Determination Resolution
32. Exhibit C - Architectural Plans
33. Exhibit D - Landscape Plans
34. Exhibit E - Civil Plans
35. Exhibit F - Proposed Master Plan
36. Exhibit G - Conditions of Approval

Prepared by: Jake Potter
Senior Planner

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

LIVERMORE
CALIFORNIA

PLANNING COMMISSION MEMORANDUM

TO: Chairperson Anderson and
Members of the Planning Commission

PREPARED BY: Jake Potter, Senior Planner
Jennifer Ackerman, Assistant Planner

REVIEWED BY: Stephen Riley, Planning Manager
Ben Murray, Principal Planner

DATE: July 2, 2024

SUBJECT: Vesting Tentative Tract Map 8659 (SUB) 22-008, Development Agreement (DA) 22-001, Consistency Determination (CD) 24-004, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Specific Plan Amendment (SPPA) 24-001, Master Sign Program Amendment (MSP) 24-001, and Development Code Amendment (DCA) 24-001 for 1,299 units and approximately 90,000 square feet of non-residential uses comprised of office, commercial, and residential amenity space, located at the southwest corner of Portola Avenue and Isabel Avenue, known as the Isabel Crossing Project ("Project").

PROJECT DESCRIPTION

The applicant for the proposed Project, known as Isabel Crossing, would develop the vacant site at the southwest corner of Isabel Avenue and Portola Avenue with a master-planned community offering a range of housing options with 1,299 dwelling units with approximately 15,000 square feet of ancillary amenity space such as lobbies, gyms, and community spaces, approximately 75,000 square feet of office and commercial uses, a main street with public plazas, a new neighborhood park, private recreation center and pool, public trails, bike paths, bike lanes, and a public art program.

This proposed mixed-use development on approximately 45 acres would include duplexes, triplexes, flat condominiums, apartments, and three-story townhomes. Unit sizes for condominiums range from 949 to 2,006 square feet, apartments range from 453 to 1,242 square feet, and townhomes range from 1,177 to 2,409 square feet.

The applicant proposes a total of 363 new affordable housing units, comprising 28 percent of the total number of units, which is 103 units more than the City's requirement.

This includes 10 affordable for-sale townhomes, 47 affordable for-sale condos and 306 affordable for-rent apartments. Affordable for-sale units will be deed restricted (18 for median-income buyers and 39 moderate-income buyers), and rental units will be available to qualified renters of very low (65 units), low (113 units), median (65 units), and moderate (63 units) income levels, as shown on page 43 of Exhibit C to the Project resolution.

The 75,000 square feet of commercial space would be on the street level of multi-story buildings with residential condominiums and apartments located above. Commercial spaces, including retail, office, and grocery uses would front landscaped streets internal to the Project site along Main Street and Gateway Boulevard.

Isabel Crossing provides significant new public open spaces and recreational facilities. These include a public neighborhood park, a private recreation center and multiple public plazas. The Project also includes substantial new infrastructure and transportation features, including a network of internal and area connector streets with new signalized intersections, wide sidewalks, new bus stops, pedestrian trails, and dedicated new bike lanes within walking distance of the future hydrogen-powered Valley Link commuter train station. Vehicular access would be provided by two intersections along Portola Avenue, two intersections along Isabel Avenue, one intersection along Shea Center Drive, and one intersection at the east end of Gateway Avenue.

The proposed Project will require the following approvals:

1. Subdivision (Vesting Tentative Tract Map), Pursuant to Livermore Development Code Section 10.02, that the Project site will be subdivided to create 27 new lots that include private streets, residential and mixed-use buildings, pocket plazas, and a neighborhood park. In addition, this map will create internal public streets including the extension of Gateway Avenue and creation of Main Street.

2. Site Plan Design Review Pursuant to Development Code Section 9.07, this review allows each planning area to be analyzed for consistency with the Isabel Neighborhood Specific Plan's development and design standards.

3. Conditional Use Permit Pursuant to Development Code Chapter 9.03, and Specific Plan Table 2-1, a Conditional Use Permit is required to allow multi-family residential uses in the Specific Plan's Neighborhood Commercial zone, which is being proposed in Planning area S1 with residential units over a grocery store and general retail.

4. Development Agreement Pursuant to Development Code Section 9.04, the Development Agreement addresses the obligations of the developer and the City to facilitate development of the proposed Project and vest development standards and fees for the developer. The Development Agreement includes timing and responsibilities for master Project infrastructure and site improvements, affordable housing, commercial uses, community facilities district, public art, public safety

infrastructure, etc. and application of fee credits to the developer. The Development Agreement includes benefits to the City including $1.2 million contribution to the Community Benefit Fund, $800,000 to the Social Opportunity Endowment Fund, $2 million early park fee payment, and designating Livermore as the point of sale for the construction materials sales tax.

5. Specific Plan Amendment Pursuant to Development Code Section 9.08, this amendment is necessary for modifications to the master planning and affordable housing policies. For example, the Project differs from the Specific Plan with regard to the density, land use and the provision of affordable housing.

6. Development Code Amendment Pursuant to Development Code Section 9.14, this amendment is necessary to allow for an alternative means of compliance with the affordable housing ordinance (Development Code Section 10.06.050) for only the core area of Specific Plan covered by this Project.

7. Density Bonus Waiver Requests Pursuant to Development Code Section 6.02.030 and state law, the applicant is requesting use of waivers or reductions of certain development standards (as set forth in the Density Bonus Request Letter, Dated June 28, 2024 as Attachment 10.

8. General Plan Consistency Determination Pursuant to Government Code Section 65402(a), the City must find the proposed abandonment of existing utility, landscape and emergency vehicle access easements consistent with the General Plan.

9. Master Sign Program Amendment Pursuant to Development Code Section 4.06, Master Sign Program #01-029, approved in 2001 for KLA-Tencor 1, will be removed from three of the parcels on the Project site (APNs 903-10-46 through 48). This Master Sign Program covers the adjacent development to the west and will continue to govern future sign applications for that development.

The Project will also include the approval of a Master Plan pursuant to the Specific Plan Master Planning policy, approval of the Alternative Affordable Housing Plan, consistent with the proposed Specific Plan and Development Code Amendments, and a No Net Loss analysis in conformance with California Government Code Section 65863.

PROJECT SITE CONTEXT

The Isabel Crossing site is approximately 45 acres in size and located southwest of Portola Avenue and Isabel Avenue, as seen on the location map in Attachment 3. The site is situated near the Montage residential development to the north, office uses to the west (Lam Research and Fremont Bank), Interstate 580 to the south, and the vacant Bay Area Rapid Transit (BART) owned parcel to the east across Isabel Avenue, as well as the future site of a Shea Homes Aura 164-unit townhome/condominium development.

The Project site is currently undeveloped and gradually slopes down towards Interstate 580 to the south. Isabel Avenue generally extends north-south along the eastern side of the site with a separated sidewalk, curb, and gutter and is not landscaped. Portola Avenue runs generally east west along the northern boundary of the site where it is lined with sidewalk, curb and gutter, and deciduous trees and shrubs.

The following table shows the General Plan and Zoning designations and current land use of the adjacent properties.

	General Plan	**Zoning**	**Current Use**
North	Isabel Neighborhood Specific Plan	Village, Open Space, and Transition (Subarea 2b)	Approved INSP residential (Shea 2b) existing Montage neighborhood and open space buffer
South	Isabel Neighborhood Specific Plan	No zoning. Caltrans Right of Way/ Interstate 580	Interstate 580
East	Isabel Neighborhood Specific Plan	Open Space, Transition, Core, Office Core, Ground Floor Retail/Overlay Flex Space (Subarea 3a)	Directly adjacent to Isabel Avenue and vacant beyond
West	Isabel Neighborhood Specific Plan	Office Core and Center (Subarea 3e and 3d)	Lam Research and Fremont Bank offices
Project Site	Isabel Neighborhood Specific Plan	Village, Center, Core, Office Core (Subarea 3b and 3c)	Vacant

STAFF ANALYSIS

General Plan

Land Use and Policy Consistency

The Project site has a General Plan land use designation of Isabel Neighborhood. The Isabel Neighborhood seeks to create a safe, vibrant, complete neighborhood that includes amenities for residents, workers, and students; ensure new development is compatible with existing development and community character; and support transit ridership and citywide goals for increased transportation options, housing choices, and economic vitality [Livermore General Plan Land Use Element, p. 3-23]. The proposal to develop the Project site with a mixed-use development is consistent with the land use designation and implements the General Plan goals for the Isabel Neighborhood.

For example, the Project would create a new complete and vibrant neighborhood, with a mixed-use main street commercial core served by a range of amenities, including a public park, public plazas, a private community pool, public art, and tree-lined streets. The Project is also compatible with surrounding development since the building heights step down towards the existing residential and office uses to the west and north and the buildings are designed with several traditional architectural features common in Livermore like brick, deep eave overhangs, and strong roof cornice elements.

The Project also supports transit ridership and mode shift by adding new bus stops and protected bike lanes, and by locating the Project near the future Valley Link commuter train station and existing LAVTA bus lines. Increased housing choices are provided for nearby students and faculty at Las Positas College and other individuals and families through a range of for-sale and for-rent units of differing sizes, including units reserved for individuals and families of very low to moderate incomes. Finally, the Project would increase the area's economic vitality by adding a mix of commercial and office uses, supporting jobs and a larger tax base.

The Project implements the following General Plan Objectives, based on its compact, mixed-use, walkable, and sustainable form with use of traditional architectural features and materials applied on modern architecture:

Land Use Element

- Objective LU-1.1 Locate new development so as to create a consolidated pattern of urbanization, maximizing the use of existing public services and facilities.
- Objective LU-1.2 Create neighborhoods that include a mix of uses and a range of housing types to meet the needs of all residents.
- Objective LU-3.1 Create neighborhoods near transit that include a mix of uses and a range of housing types to meet the needs of all residents.

Community Character Element

- Objective CC-2.1 Maintain and enhance Livermore's urban design quality and encourage high quality design in all new development and redevelopment.

Economic Development and Fiscal Element

- Objective ED-1.1 Implement policies and actions that will encourage existing businesses to remain and grow in Livermore and attract a range of new businesses to locate in Livermore.

Climate Change Element

- Objective CLI-1.2 Encourage and provide greater support for infill, mixed use, and higher density development in order to reduce Greenhouse Gas (GHG) emissions associated with vehicle travel.
- Objective CLI-1.3: Support measures that encourage alternative modes of transportation and alternative fuels in order to reduce emissions associated with vehicle travel.
- Objective CLI-1.4 Enhance existing water efficiency and conservation measures and adopt new programs that encourage recycled water use and water efficiency in order to reduce energy and GHGs associated with water use.
- Objective CLI-1.6 Expand the number of trees in Livermore in order to provide a larger carbon sink or area containing natural sources that retain more carbon than what those sources emit.

The specific land use mix and densities allowed onsite are governed by the Isabel Neighborhood Specific Plan, as described in the *Isabel Neighborhood Specific Plan* section of this Report.

Housing Element

Policy Consistency

In March 2023, the City Council adopted the new 2023 – 2031 Housing Element for Livermore, responding to new state housing law requirements. The Housing Element identifies a range of housing policies to further housing production in Livermore, shelter all segments of Livermore's population, and facilitate affordable housing. The Project implements the following policies:

- Policy 1.2: Facilitate the development of a range of housing types through area planning efforts.
- Policy 2.1: Facilitate the provision of affordable housing, infill development, and mixed-use projects in locations served by existing infrastructure, particularly transit services.
- Policy 3.1: Facilitate the production of affordable housing through regulation of and incentives to new development.

Regional Housing Needs Allocation

California Government Code Section 65584 establishes the Regional Housing Needs Allocation (RHNA) process, which projects each CA region's housing needs, and through each regional government, assigns each local jurisdiction a quantity of residential units that need to be planned for. The RHNA process includes both an overall quantity of residential units and a quantity of units for each affordability level. The RHNA process occurs in eight-year cycles. In the current 6th RHNA Cycle (2023-2031), Livermore was assigned 4,570 total units, of which 2,075 need to be Low Income units (which also includes the Very Low-income units in Livermore).

Housing Element Sites Inventory

California Government Code Section 65583 requires each local jurisdiction to include in their Housing Element a Sites Inventory (Inventory) that accommodates all of the jurisdiction's required RHNA units. If existing zoning is not sufficient to accommodate the need, then sites must be rezoned. All Inventory sites must include the overall anticipated quantity of residential units and their unit affordability levels. The California Department of Housing and Community Development (Department) is to review and approve each jurisdiction's sites inventory with the Housing Element. Housing Element review and approval is aligned with each RHNA cycle, so that each jurisdiction's current Housing Element also covers years 2023-2031. Together with the Government Code, the Department generally requires:

1. Lower Income units to be located within zoning districts that allow for 30 units an acre within the zone's density range. This means that, although all developments that are subject to Livermore's inclusionary housing ordinance provide lower-income units, only those units on sites that allow for 30 units an acre within the zone's density range can be counted on Livermore's Sites Inventory;
2. Inventory sites to be located on vacant parcels, unless active site redevelopment can be demonstrated; and
3. Only a portion of each Inventory site can be used for the purposes of calculating residential density, to account for realistic development capacity.

Livermore's Housing Element and Sites Inventory were approved and certified by the Department in 2023. A majority of the 6th cycle RHNA units were located in the Isabel Neighborhood Specific Plan (Specific Plan) area given that the Specific Plan allows for the highest densities in Livermore and contained a significant number of vacant parcels. Given the State's strict density requirements for Lower Income units, a majority of Livermore's Lower Income RHNA units were also located within the Specific Plan area and the Isabel Crossing Project site. In particular, approximately 1,500 RHNA units were located on the Project site, of which, approximately 1,000 were designated as Lower Income units. An excerpt of the Sites Inventory with the Project site highlighted is shown in Attachment 7.

Housing Element Sites Inventory Lower Income Units – No Net Loss Analysis

California Government Code Section 65863 establishes the state's No Net Loss standards (summary attached as Attachment 6). Generally, the standards require that:

1. Each local jurisdiction's Housing Element Sites Inventory accommodates all required RHNA units at all times.
2. If the City approves a Project that contains less units than anticipated in the Sites Inventory, or modifies the Zoning to allow for less units than anticipated in

the Sites Inventory, then the Sites Inventory must have enough remaining sites/units to accommodate the jurisdiction's RHNA requirement for all required affordability levels. Or, if there are not enough units in the remaining Sites Inventory to accommodate the RHNA requirements, then the City must increase the amount of residential units permitted (aka "upzoning") elsewhere in the City to satisfy the RHNA requirement.

Given the high concentration of RHNA Low Income units in the Specific Plan and given that the Specific Plan and Development Code Affordable Housing Inclusionary policies cannot keep pace with the required supply of Low Income RHNA units, staff anticipated No Net Loss reviews would be required in the Specific Plan. Staff further anticipated other sites within the Specific Plan or General Plan Update Focus Areas could accommodate the unmet supply. The table below summarizes the Isabel Crossing Project's unit counts compared to the Sites Inventory RHNA requirement.

Project Unit Count Compared to the Sites Inventory RHNA Requirement

	Lower Income	*Moderate Income*	*Above-Moderate Income*
Housing Element Sites Inventory RHNA Requirement	998	0	471
Proposed Isabel Crossing Project	178	185	963
Housing Element Buffer[1]	208	N/A	N/A
Net Difference	-612	+185	+462

As described in the *Affordable Housing* section of this report, the Project exceeds the Specific Plan's required quantity of affordable units and provides 178 Lower Income Units. Further, as shown in the table above, the Project exceeds the quantity of Moderate and Above-Moderate units assumed in the Housing Element, increasing Livermore's surplus in these RHNA categories. However, as anticipated, the Project does not provide the 998 Lower Income units assumed in the Housing Element Sites Inventory. The existing Sites Inventory includes a buffer at other sites to accommodate some loss in Lower Income units. However, as shown in the above table, together with the buffer, the Project results in a 612-unit deficit. There are no other sites in the Sites Inventory that can accommodate the deficit. Therefore, pursuant to State No Net Loss standards, another site must be upzoned to accommodate the unmet capacity.

Staff has identified a suitable site within the Specific Plan that can be upzoned and meets all No Net Loss Requirements. If the two vacant parcels to the east across

[1] The Housing Element Sites Inventory Buffer is the quantity of units within each income category above the RHNA requirement. The Buffer represents excess capacity on various sites around the City and is typically used to absorb No Net Loss projects.

Isabel Avenue (APN 903-10-37-4 and 903-10-36-3), currently owned by BART, were upzoned from the Office Core non-residential designation to the Core residential designation, they could accommodate the Isabel Crossing Project's entire deficit plus result in a 120-unit Sites Inventory surplus for Lower Income units. For this reason, staff recommends the Planning Commission recommend the City Council amend the Specific Plan to rezone the parcels to the east (identified in Exhibit B to the Specific Plan Amendment resolution) to result in No Net Loss of Sites Inventory Lower Income units.

Staff has prepared the required findings that satisfy all No Net Loss requirements in the Project resolution and the required Specific Plan Amendment findings in the Specific Plan Amendment resolution. Further, as described in the *Affordable Housing* section of this report, staff proposes a Specific Plan and Development Code Amendment to increase the Lower Income inclusionary requirement (but lower the moderate-income requirement) for for-sale units in the Specific Plan. This would generate more Lower Income units in the Specific Plan in the future and help the Inclusionary Ordinance keep better pace with current RHNA requirements. The required Development Code Amendment findings can be found in Exhibit A to the Development Agreement Ordinance. With the rezoning, Specific Plan Policy, and Development Code Affordable Housing Inclusionary Ordinance modifications, the City would be better positioned to respond to current RHNA cycle needs for providing Lower-Income units.

Isabel Neighborhood Specific Plan

Goals and Policies

The Specific Plan contains a range of land use strategies to advance the plan's vision and objectives, including the following:

- Allowing for a range of housing types, nonresidential uses, and public open spaces;
- Encouraging a livable and accessible neighborhood with an active street life;
- Concentrating development of the highest intensity closest to the Valley Link station to support transit ridership
- Promoting compatibility with existing residential uses;
- Advancing housing and economic development goals; and
- Establishing a more cohesive identity for the Isabel Neighborhood as the area sees redevelopment and new development

The Project implements the Specific Plan's walkable, enlivened, and transit-oriented community vision by providing a mix of uses and product types, including duplex, condominium, townhouse, and apartment residential types, ground floor commercial and office, and open space parks and plazas. The uses provide synergy with each other. For example, the residential supports the commercial by creating foot traffic at different times of day and provides more local patrons, while the commercial supports the residential by allowing for daily needs to be met without requiring auto trips and creating nearby

amenities, in some cases within the same building. In addition, Main Street will remain active with ground-floor commercial, open plaza areas, outdoor seating, wide sidewalks, and pedestrian crossings. The Project is located within a ½ mile of future Valley Link commuter rail, directly adjacent to existing and proposed bus service and stops, and proposes separated bicycle lanes on all frontages, allowing for a wide range of transit modes and catering to a broad cross section of resident transportation needs. The Project steps down at the peripheries near existing development north and west, promoting compatibility, and proposes a cohesive Art Master Plan to differentiate the area as a unique district.

Finally, the Project improvements will increase the city's property tax base, the commercial space expands the City's sales tax base, and the residential units help the City provide for a diverse mix of housing types to meet community needs. The Specific Plan also establishes a variety of Goals and Policies around key planning principles, such as: Land Use, Transportation, Parks, Public Facilities and Infrastructure, Urban Design, Environment, and Financing. The Project meets all the Specific Plan Goals and Policies related to these planning principles, as identified on page 37 of Exhibit C - Architectural Plans.

Use, Density, and Master Planning

Specific Plan Requirements

In order to appropriately manage growth, ensure compatibility of uses, and secure adequate housing supply, the Specific Plan contains individual zoning designations and distinct subareas. Each designation establishes the allowed uses, development standards, and densities, while each subarea establishes the required quantity of residential units.

In order to further promote cohesive and ordered development, the Specific Plan encourages Master Planning, which means subdividing and/or designing an entire subarea or subareas together with one application (see Master Planning Policy, Attachment 8). The intent of the Master Planning Policy is to allow for mixing of permitted densities and uses within a subarea or subareas, as long as all development standards are met and the required quantity of residential units is provided, essentially creating one large mixed-use zone. Master Planning is only available to developers if they meet the required target density of the subarea(s), or the minimum density if they demonstrate significant constraints within a subarea.

The Project site is located within Subareas 3b and 3c, which are the Specific Plan core and to be the densest, most walkable, and mixed-use areas of the Specific Plan. For that reason, the subareas contain a range of designations, including Village, Center, and Core residential designations, and Neighborhood Commercial, Office Core, Open Space, and Ground Floor Retail/ Overlay Flex Space non-residential designations (see Specific Plan Land Use Map, page 3 of Attachment 5). Further, Subareas 3b and 3c require a minimum of 1,236

residential units, a target of 1,477 units, and a maximum of 1,717 units, the highest quantity in the Specific Plan.

Project Conformance

The Project proposes 1,299 residential units, which exceeds the minimum required in Subareas 3b and 3c. As described in the City Obligations Section of the Development Agreement (Exhibit B to the Development Agreement Ordinance), in the course of applying for Building Permits, the Community Development Department Director may authorize up to an approximately five percent reduction in units (representing 63 total units) to allow for flexibility in construction, as is typical for larger development projects. In no case will the Project drop below 1,236 units, ensuring the minimum residential requirement is met. Further, if a reduction in units is to occur, it is required to come from the market-rate units, and not the affordable units, ensuring the Project continues to meet its inclusionary obligations.

The Project will also contain both residential and non-residential designations, as required by Subareas 3b and 3c, proposing a mix of residential densities and product types across the site, open space through parks and plazas, and commercial and office space centered along Main Street, as shown on sheet SP-4 on the Proposed Plans.

Proposed Master Plan

Although the Project contains the required quantity of residential units and the required mix of uses, the Project has elected to Master Plan, as encouraged by the Specific Plan's Master Planning Policy. This means the individual residential densities and land uses have been averaged and distributed across Subareas 3b and 3c, rather than located as shown on the Specific Plan conceptual land use map. The proposed Master Plan can be found as Exhibit F to the Project resolution. For this reason, the Project land use map is distinct from the Specific Plan's conceptual land use map (as shown on pages 36 and 37 of Exhibit C to the Project resolution). Key differences include:

1. *Residential Densities*. Residential densities have been reduced in the northern and western parts of the site and increased in the southern part of the site.

   Duplex and townhouse units have been placed in the north and west to promote compatibility with existing surrounding land uses, since these product types are the Project's shortest, at three stories in height. Further, according to the *Housing Density Economic Hardship* study prepared by Kosmont, in the Livermore market, the residual land value for lower density for-sale townhomes is substantially higher than higher density for-rent apartments (see Kosmont studies, Attachment 9). The Project is providing a range of community benefits like commercial space, additional open

space, and additional affordable housing, which have lower residual land values along with contributions to the Community Benefit Fund and Social Opportunity Endowment Fund. To offset costs of such uses, lower density product types are needed to raise capital, reduce financial risk, and ensure Project solvency.

In order to offset the density reductions of duplex and townhouse units, the Project density has been increased at the southern part of the site. This location is suitable for taller buildings with higher density, given their proximity to the future Valley Link station and distance from existing development. The increased density ensures the Project continues to meet its minimum Specific Plan residential density and Moderate and Above-Moderate RHNA obligations. Further, as described in the *Affordable Housing* section of this report, the higher densities provide an opportunity for a 100% Lower Income affordable Project to be constructed, which provides critical Lower Income units near the amenities of Main Street and the Project's commercial core.

Overall, the Specific Plan conceptual land use map called for mid-level densities across the entire site, while the Project generally concentrates densities in its core and reduces density at the northern and western periphery. Taken together, the lower- and higher-density product types provide a greater range of housing types and price points for Livermore individuals and families than originally envisioned.

2. *Office Uses*. The Project's office uses have been shifted from the southern part of the site to Main Street. In this way, office and commercial uses are more appropriately collocated, promoting synergy and concentrating economic activity in one location, thus creating a vibrant streetscape, similar to Livermore's Downtown. As described in the *Density Bonus* section of the report, the Project's total office square footage has been reduced, pursuant to state law.

3. *Main Street Commercial.* Compared to the conceptual Specific Plan land use map, the Project's Main Street commercial corridor has been shifted east by one block. This promotes better commercial and truck access to nearby Major Streets, like Isabel Avenue, aligns the commercial uses more appropriately with denser residential product types to increase foot traffic and eyes on the street and concentrates larger building footprints and commercial activity away from existing nearby uses. As described in the *Density Bonus* section of the report, the Project's total commercial square footage has been reduced, pursuant to state law.

4. *Open Space.* The Specific Plan calls for approximately two acres of open space within the Project site, provided in one large greenspace. The Project

provides approximately two acres, but splits the open space up into one 1.5 acre park located near the lower-density residential, and three smaller plazas, adjacent to the mixed-use commercial blocks. In this way, the Project still provides a large green space for individual and family recreation, but better disperses open space around the site, providing for additional outdoor gathering, recreation, and dining areas nearby commercial uses, enhancing their function.

5. *Circulation Network.* The conceptual internal roadway, sidewalk, and bike lane network has been modified to better align with existing intersections and property lines, and to facilitate the proposed site plan.

As described above, the Specific Plan Master Planning Policy only allows for a Project to be Master Planned if: 1) The Project meets the Subarea(s)' target density; or 2) The Project demonstrates significant constraints within the Subarea(s), as determined by the Community Development Department Director. In this case, the 1,299-unit Project exceeds the minimum density, but does not meet the target density of 1,477 units. However, the Developer has submitted the *Housing Density Economic Hardship* and *Commercial and Office Economic Feasibility* economic studies from Kosmont, as also referenced above.

The studies note that: 1) there is not currently sufficient demand for the quantity of Project commercial space envisioned by the Specific Plan; and 2) That new office development is financially infeasible given that construction costs are higher than anticipated net operating incomes. Ultimately, taken together, the studies demonstrate that the required non-residential land uses and target density of Subareas 3b and 3c present a significant financial constraint for the Project.

Staff has reviewed the studies and confirms their conclusions and finds there to be a significant financial constraint within Subarea 3b and 3c, allowing for master planning within the Subareas without requiring the target density be met. Further, staff supports the proposed Master Plan layout based on the analysis above. The proposed Master Plan would increase compatibility with surrounding properties, allow for increased affordable housing opportunities, provide a wider range of housing options, create a more vibrant and accessible Main Street, and better distribute open space areas around the site.

In order to satisfy the intent of the Master Planning Policy, the Specific Plan requires a cleanup amendment to allow for distributing land uses across a Subarea or Subareas, in addition to allowing for residential density averaging. The amendment would also clarify which development standards are applicable for density-averaged product types. In this way, the Master Planning Policy would function to provide more flexibility within Subareas, better encourage Subareas to be designed comprehensively, more effectively create mixed use zones within the Specific Plan core, as envisioned by the Specific Plan, and clarify the proper development standards applicable to each product type.

For all these reasons, staff recommends the Planning Commission recommend the City Council: 1) Allow for Master Planning at a residential density below the Specific Plan target density; 2) Approve the proposed Master Plan; and 3) Approve the proposed cleanup amendment to the Specific Plan Master Planning Policy. The Master Plan land use map can be found on page 37 of Exhibit C - Architectural Plans, the required Master Plan findings can be found in the Project Resolution, the proposed Specific Plan amendment language can be found in Exhibit C to the Specific Plan Amendment resolution, and the required Specific Plan Amendment findings in the Specific Plan Amendment resolution.

As described in the *Density Bonus* section of the report, the Project's total office and commercial square footage has been reduced, separately from the master planning process and pursuant to state law.

Affordable Housing

Specific Plan Requirements

As in the state and the greater Bay Area region, there is an urgent and significant need for affordable housing in Livermore. In support of the City Council's priority to increase and expand affordable housing opportunities, the Specific Plan contains affordability requirements for all new development. Each new residential project in the Isabel Neighborhood is required to designate 20 percent of the units as affordable, with different affordability level requirements depending on if the unit is for-sale or for-rent. The Project will provide condominium/ townhome units and rental apartments of one, two, and three bedrooms. According to the *Housing Density Economic Hardship* economic analysis by Kosmont, the average area condominium/ townhome sales price is approximately $900,000, while the average monthly apartment rent is $3,100. Such costs are out of reach of many Livermore residents and employees, particularly those in the service industry, students, or first-time home buyers.

For this reason, it's critical the Project provide necessary affordable housing. As described in the *Development Agreement* section of this report, given the critical need, staff negotiated with the Developer to provide more affordable units than required, and deeper levels of affordability than required, including a 100% lower-income affordable parcel within the Project, to be constructed by an affordable housing developer.

Project Conformance with Specific Plan Affordable Housing Policies

The proposed Affordable Plan is shown on the Project Plans on page 43 of Exhibit C to the Project resolution . A comparison of the Project's provided versus required affordable units, based on the requirements of the Specific Plan, is below:

Provided Versus Required Affordable Units

	Lower Income (% of total)	*Median Income (% of total)*	*Moderate Income (% of total)*	*Total (% of total units)*
Required	62 (4.7%)	60 (4.6%)	137 (10.5%)	259 (20%)
Proposed	178 (13.7%)	83 (6.3%)	102 (7.8%)	363 (28%)
Net Difference	+116 (+9%)	+23 (+1.7%)	-35 (-2.7%)	+104 (+8%)

As shown in the table above, the Project vastly exceeds the established affordable requirements, providing 104 total extra affordable units, which equates to an overall Project affordability of 28%. Further, the Project provides 116 more lower income units than required, with a small reduction in moderate income units. Lower Income units are the most highly subsidized and most difficult units to secure. Like many other Bay Area cities, Livermore struggles to meet the Lower Income RHNA requirements. Over the course of the 6th RHNA cycle (the next seven years), Livermore has to plan for approximately 2,100 Lower Income RHNA units, and this Project will help the City towards meeting this requirement.

For reference, the 2024 City Council adopted income limits for a family of four to qualify for for-sale housing at Low, Median, and Moderate incomes. The income limits are $112,150 for Low-Incomes, $147,900 for Median Incomes, and $177,500 for Moderate Incomes. According to the US Census Bureau, the most recent data (2018-2022, in 2022 dollars) shows that median household income in Alameda County is $122,488 and the median household income in Livermore is $152,590.

Proposed Alternative Means of Compliance to Meet Affordable Housing Requirements

In addition to the affordable quantity and depth requirements in the Specific Plan, Livermore's Inclusionary Ordinance in Development Code Section 10.06.050 generally requires all affordable units to be equivalent to market-rate units. That is, affordable units need to have similar sizes, bedroom counts, and amenities. Further, affordable units need to be dispersed around the site [Livermore Development Code 10.06.050 (D)(7)(8)(9)]. The Inclusionary Ordinance does allow the City Council to authorize an Alternative Means of Compliance to these requirements if the alternatives are economically equivalent [Livermore Development Code 10.06.050 (E). Alternatives include: Accessory Dwelling Units (ADUs), Offsite Construction, In-Lieu Fees, and Dedication of Land.

Although the Project exceeds the required affordable quantity and depth of affordability requirements in the Specific Plan, all the affordable units are concentrated in the mixed-use commercial blocks and the higher-density residential product types, with no affordable units located in most duplex/ townhome Planning Areas, as shown on the proposed affordable plan (page 43 of Exhibit C - Architectural Plans). Further, the Development Agreement allows for the affordable units in Planning Areas S1, C2-A, and S4 to match the smallest market-rate unit

sizes, but the affordable units must contain the same number of bedrooms as the market-rate units. For these reasons, the Project does not meet the Inclusionary Ordinance's comparability requirements and is seeking an Alternative Means of Compliance.

The Project proposes to designate 28% of the residential units as affordable, including 13.7% as Lower Income, in exchange for concentrating the units primarily into the mixed-use commercial and high-density residential blocks. As required by the Inclusionary Ordinance, if pursuing an Alternative Means of Compliance, the Project must demonstrate that the alternative is economically equivalent to the required affordable housing requirements in the Ordinance [Livermore Development Code 10.06.050 (E). The Developer has submitted the *Affordable Housing Economic Equivalency Analysis*, by Kosmont. The analysis finds that the proposed affordable plan, with 104 extra affordable units and close to triple the required number of Low-Income units, represents an increased Developer investment of approximately $15 million over their costs if they met the requirements of the Inclusionary Ordinance.

Therefore, the proposed Affordable Plan exceeds the economic value of the Specific Plan's affordable requirements, satisfying the equivalence requirements of the Inclusionary Ordinance. Staff has reviewed the study and confirmed its conclusions that the proposed Affordable Plan is economically equivalent to the requirements of the Specific Plan and Inclusionary Ordinance.

Further, staff supports the proposed Affordable Plan based on the analysis above. The proposed Affordable Plan will provide for a higher quantity of overall affordable units than required, even exceeding the Specific Plan's goal of 25% affordability for the entire INSP area. In addition, the Affordable Plan will provide nearly triple the required quantity of Lower Income units, help the City towards satisfying the 6th Cycle RHNA Lower Income requirements, and provide for more units affordable to individuals and families in the service sector, students, and other underserved communities.

However, the proposed Affordable Plan is not one of the alternatives listed in the Inclusionary Ordinance. In order to allow for concentrating affordable units in exchange for increasing the quantity and depth of affordability, the Specific Plan and Inclusionary Ordinance require an amendment. The proposed amendment would create a new Alternative Affordable Plan process unique to the Specific Plan core area (Subareas 3a, 3b, and 3c). The amendment would allow for the City Council to consider any affordable alternative in these areas as long as the alternative is economically equivalent to the requirements of the Inclusionary Ordinance. In this way, a Developer is still responsible for their required share of affordable housing, but the City Council is allowed more flexibility and creativity in implementing the Inclusionary Ordinance and providing needed affordable housing in an evolving economy and changing regulatory environment.

Further, as described in the *Housing Element* section of this report, Livermore's existing Inclusionary Ordinance cannot keep pace with the high quantity of Lower Income units required in the 6th RHNA cycle. Although this project is providing a high quantity of Lower Income units, previous for-sale Specific Plan projects have not provided any, as allowed by the existing Specific Plan and Inclusionary Ordinance (The current INSP requires for-sale projects to provide a minimum of 5% median and 15% moderate income units of their total units, and no Lower Income units).

Therefore, staff recommends amendments to both documents, requiring future for-sale products in the Isabel Neighborhood to provide a minimum of 7.5% Lower Income units and 7.5% Moderate Income Units, as is currently required in all other locations citywide, except Downtown. This will ensure all future Specific Plan projects will provide Lower Income units, helping the City better satisfy the 6th Cycle RHNA Lower Income requirements.

For all these reasons, staff recommends the Planning Commission recommend the City Council: 1) Find that the proposed Alternative Affordable Plan is economically equivalent to the Specific Plan affordable requirement; 2) Approve the proposed Alternative Affordable Plan; and 3) Amend the Specific Plan and Development Code Inclusionary Ordinance to allow for an Alternative Affordable Plan and to amend the for-sale affordable requirements. The Alternative Affordable Plan map can be found on page 43 of Exhibit C - Architectural Plans, the required Alternative Affordable Plan findings can be found in the Project Resolution, the proposed Specific Plan amendment language in Exhibit C to the Specific Plan Amendment resolution, the required Specific Plan Amendment findings in the Specific Plan Amendment Resolution, the proposed Development Code Amendment language in Exhibit B to the Development Code Ordinance, and the proposed Development Code amendment findings in the Development Code Ordinance.

Livermore Airport Land Use Compatibility Plan

The Livermore Municipal Airport is located approximately three quarters of a mile southwest of the Project site. In order to protect the airport's operations and to ensure safety and compatibility of surrounding uses, the County established the Livermore Airport Land Use Compatibility Plan (Compatibility Plan), which is also incorporated into the City's General Plan. The Compatibility Plan applies to all properties within the Airport Influence Area, which generally extends from Santa Rita Road to North Livermore Avenue, and from Stanley Boulevard to north of the City Boundary.

A majority of the Isabel Neighborhood is located within the Influence Area, including the Project site. During its adoption, the Specific Plan was found to be consistent with the Compatibility Plan with respect to building heights, uses, and noise levels. As stated in Chapter 6.1 of the Specific Plan, the areas planned for new residential development are outside of the airport's noise contours. These areas would experience airport-generated noise levels of less than 65 decibels (dB) Community Noise Equivalent Level (CNEL).

The dominant sources of ambient noise would include the freeway, local street traffic, the Valley Link operations, and other activities related to the new neighborhood. Sound attenuation measures that will likely be required to reduce interior noise levels within new residences will also help reduce single-event noise from aircraft overflights. The Specific Plan Policies address noise and other environmental impacts that the Developer must comply with Specific Plan Goals and Policies.

Given that the Project is within the allowed density and use of the Specific Plan, it is also consistent with the Compatibility Plan, with the exception of the INSP height requirements based the Scenic Corridor Policy, as stated in the Specific Plan and the General Plan. Although some of the proposed buildings will exceed the INSP Scenic Corridor height limits, the exceeded amount is still consistent with the Airport Land Use Compatibility Plan (ALUCP). Comments from the Alameda County Planning Department regarding the Project's impacts on airport operations, and conversely, the airport's impacts on the Project are summarized below:

- The Isabel Project is located outside the Noise Compatibility Zones, so noise is not a concern.
- The development is located in Safety Zone 6, the Traffic Pattern Zone. All uses described for the Project – townhomes, mid-density apartments, parks, small and medium outdoor assembly areas (the closest use for the described plazas), offices, restaurants, retail and other commercial uses – are permitted uses. In Zone 6, there are no maximum non-residential intensities or minimum open land requirements.
- The heights described are below the FAR 77 Surface height for the area (547 feet MSL)
- ALUCP Policy 3.3.4.6 requires the purchasers of renters newly subdivided lands and condominium conversions within the Airport Influence Area be informed that their property is near the airport. This would apply to the Isabel Project, though it appears that the Isabel Neighborhood Specific Plan calls for an even more regular notification cycle in policy P-ENV-1.

The Compatibility Plan and Specific Plan require the provision of avigation easements and buyer awareness measures for properties within the Influence area [Specific Plan P-ENV-1]. The Engineering Conditions of Approval (Exhibit G to the Project resolution) include the avigation easement requirements. To ensure airport operations remain protected and property owners remain informed about potential noise impacts, staff has included the following Condition:

> Prior to occupancy of the first building, applicant shall record the deed notification as provided in the Livermore Executive Airport - Airport Land Use Compatibility Plan, Chapter 3.3.4.6, on all properties in the Project site for which this discretionary development permit is issued, as follows:
>
> NOTICE OF AIRPORT IN VICINITY

> This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

Further, the Project is conditioned to require Federal Aviation Administration (FAA) review of each Planning Area, ensuring crane operations during construction and the buildings' overall heights at buildout will not impede aircraft maneuvers or airport operations.

Given that the Project will provide avigation easements, all future residents will be notified of nearby airport operations, the Project is required t undergo FAA review, and that all proposed uses are Permitted in Zone 6, the Project fully complies with the Livermore Airport Land Use Compatibility Plan, required Municipal Airport standards, and airport operations will remain unaffected.

Development Agreement

Background

Government Code Section 65864 (implemented by Livermore Development Code Chapter 9.04) allows local jurisdictions and private parties to enter into Development Agreements in order to vest certain development rights and to meet local public purposes. Generally, Nexus is not required for such public purposes, in that, if agreed to by both parties, cities and counties can negotiate for infrastructure, financial contributions, or other community benefits above and beyond those required in local development ordinances. Further, developers can negotiate for certain vested rights, financing tools, and other surety, as long as the Project is consistent with local development ordinances. Development Agreements are commonly used across the state to improve development certainty, encourage local investment, strengthen the public planning process, and provide for more local public facilities.

On May 9, 2022, the City Council directed staff to begin Development Agreement (Agreement) negotiations with the Project Developer. For approximately the last two years, staff has been engaged in such negotiations. The Agreement forms the core of the proposed Project, and informs the design review, land subdivision, environmental review, and Specific Plan amendment portions of the Project, as described in this report. The negotiations consisted of a range of mutual concessions and compromises, incorporating City Council priorities, General Plan goals and policies, Strategic Plan pillars, and Developer financial and timing considerations. Staff and the Developer support the Agreement and present the final proposal to the Planning Commission for review. The City Council is the final deciding body for Agreement approval, the details of which are described below.

Description

The proposed 20-year Development Agreement generally trades vested rights and developer financing tools for a range of community benefits. Each community benefit is over and above the City's typical development requirements and would not have been secured without the Agreement. The required Development Agreement findings can be found in Exhibit A to the Development Agreement Ordinance. Each community and developer benefit category is included in the table below, and further described in subsequent sections.

City/Community Benefits	**Developer Benefits**
Alternative Transportation Infrastructure	Vested Rights
Commercial Uses	Community Facilities District
Affordable Housing	Fee Reimbursements and Credits
Architecture and Design	
Public Art	
Financial Contributions	
Public Safety Infrastructure	
Construction Sales Tax	
Economic and Fiscal Benefits	

City/Community Benefits – Alternative Transportation Infrastructure

In addition to the Project's required frontage improvements, as described in the *Subdivision* section of this report, City staff was able to secure approximately one mile of additional bike lanes, a fully protected bike intersection, two additional bus stops, a 1,500-foot-long median with trees, and two protected pedestrian intersections, in support of Specific Plan goals to create a walkable, bikeable, transit-oriented development.

The bike lanes would fill critical bike system gaps along North Canyons Parkway, Portola Avenue, Gateway Avenue, and Shea Center Drive, and would consist of Class II (standard striped lane), III (sharrow), and IV (fully separated from auto traffic) bike lanes. Together with the Project and previously approved Specific Plan projects, the extra bike lanes will create a continuous separated, Class IV bike lane in both east and westbound directions along Portola Avenue/ North Canyons Parkway from Tranquility Circle to Collier Canyon Road. In addition, the westbound separated bike lane will nearly extend to Independence Drive. This would allow cyclists from the Project or the previously approved Specific Plan projects to travel from their homes to Cayetano Park, the new commercial main-street of the Project, or the surrounding business park separated and more protected from auto traffic.

Through the Agreement, the City would also secure its first four-way protected bike intersection at Portola Avenue and Isabel Avenue, ensuring cyclist safety in all directions and from the Project site to Las Positas College. Further, the two extra bus stops would be located on the northbound leg of Isabel Avenue south of

Portola, and on the westbound leg of Portola Avenue, near the Cayetano Park entrance. The two extra stops would ensure future bus service in all directions near the Project site. Further, the Portola bus stop would replace the existing, temporary, stop at the corner of Campus Hill Drive and Portola Avenue, ensuring a safer and more convenient ingress/ egress for passengers. All stops would be the new City design, where the adjacent bike lane dives behind a bus island, reducing conflicts between transit modes and maintaining an elevated pad for bus passengers.

Finally, the Agreement secures an approximately 1,500 foot long new landscaped and center median with trees and two new protected pedestrian intersections along Isabel Avenue. The new median and intersections will help reduce traffic speeds, increase pedestrian comfort, and better connect the Project to the future Valley Link commuter rail station.

Per the Agreement, all transportation improvements are required to be constructed within 48 months from Improvement Plan approval. The Livermore Amador Valley Transit Authority (LAVTA) has reviewed and approves of all bus stops and indicated the extra stops would facilitate future service at Specific Plan buildout. A map showing the general locations of the additional transportation infrastructure can be found in Attachment 4.

City/Community Benefits – Commercial Uses

During the Specific Plan's comprehensive public outreach program, the community expressed a strong need for a non-membership grocery store and commercial opportunities north of Interstate 580. For that reason, the Specific Plan included zoning designations that allowed for commercial and grocer uses. Such uses are also critical towards creating a complete neighborhood and reducing vehicle miles traveled, by providing commercial and residential uses in close proximity. However, the current commercial market is challenging, threatening the viability of the commercial uses.

According to the *Commercial and Office Economic Feasibility* study prepared by Kosmont, Livermore has recently seen negative absorption of commercial space, meaning more vacant commercial spaces over time. Further, the study notes that Livermore's taxable retail sales have grown less than one percent during the past five years, indicating stagnant overall commercial growth. The study also analyzed the potential retail demand within the Isabel Neighborhood and found that, at full buildout, and assuming today's level of demand, only about 75,000 square feet of commercial space could be supported by the local population in the area. This is less than the Specific Plan's target of 106,000 square feet. For all these reasons, the Specific Plan's required commercial uses may be difficult construct and tenant in today's market and in the near future even when new residents start moving in.

Ordinarily, once a zoning district or Specific Plan is approved, the City has few planning tools to ensure commercial uses are actually constructed. The market

primarily determines when, and how much, of a permitted use may be constructed at a given time. However, staff was able to secure incentives and requirements as part of the Development Agreement to encourage and facilitate commercial development within the Project, deliver a complete neighborhood, and ensure the City maintains commercial and grocer uses in the Specific Plan area.

The two incentives offered to the developer in the Development Agreement are as follows: 1) Fee reimbursements of approximately $9.5 million for delivery of the mixed-use buildings (discussed in the *Fee Credit and Reimbursement* section of this report); and 2) Dedicating $600,000 of the Developer's Community Benefit Fund contribution (discussed in the *Financial Contributions* section of this report) towards tenanting the commercial spaces. In this way, the City is providing a large financial incentive for the Developer to construct the commercial tenant spaces of the Project, and providing financial assistance in securing tenants for such commercial spaces.

The three requirements of the Developer in the Agreement are as follows: 1) Temporary Commercial Activation; 2) Delivery of commercial grocer tenant; and 3) Tying residential and commercial blocks together. As further described in the Agreement, the Developer is required to fund, manage and activate the neighborhood early in the development process. The temporary activation may include a range of activities, like food trucks, farmers markets, outdoor movies, etc., and the activation is required to remain until all three Commercial Blocks receive a Building Permit. In this way, the temporary activation primes the site for future commercial uses by driving activity and interest towards the Project early in the development process.

Further, given the community desire for a non-membership grocer, the Agreement requires the Developer to secure a permanent commercial grocer or food hall tenant in the S1 Planning Area within 24 months of Certificate of Occupancy of the Building. If infeasible, another food-based business may tenant the space, but a portion of the floor area must be dedicated to selling fresh foods. Finally, each Commercial Block must obtain a Building Permit prior to adjacent residential obtaining its first building permit. Given that residential uses are more lucrative in this market, this further incentivizes commercial development, in that the Developer cannot build the adjacent high-value residential uses until the lower-value commercial receives its Building Permit.

<u>City/Community Benefits– Affordable Housing</u>

As described in the *Affordable Housing* section of this report, through the Development Agreement, staff negotiated for a substantial increase in affordable units beyond that required by the Specific Plan. The Project provides 28 percent overall affordability, with 13.7 percent Lower Income units. The Specific Plan

requires 20 percent and 4.7 percent, respectively. Therefore, the Project provides more affordable units and deeper levels of affordability than normally required.

In addition, the Agreement ensures delivery of Lower Income units by requiring the Developer to work with an affordable developer to develop a 100 percent affordable product in Planning Area S3-A. The Developer is also required to post an $11.4 million Low Income Housing bond/ cash payment as surety. If the 100 percent affordable project does not close escrow on state Low Income Housing Tax Credit financing within six years of the effective date of the Agreement, then the City may call the bond, take ownership of the land at no cost to the City, and construct the affordable project itself. In this way, the Agreement ensures delivery of a majority of the Project's Lower Income units, either the affordable developer or the City with an affordable developer partner will develop the site, consistent with the Project approvals. The affordable units within each Commercial Block are required to be constructed concurrently with the market rate residential and commercial components of each block, and prior to adjacent market-rate residential Planning Areas.

City/Community Benefits – Architecture and Design

Pursuant to state Senate Bill 330, the Housing Crisis Act of 2019, local jurisdictions are required to use only objective design standards in design review applications. Livermore currently maintains a mix of objective and subjective standards, and staff is currently in the process of drafting new objective design standards. In the meantime, Livermore's subjective design standards cannot be used as a basis for Project denial, and thus, carry less legal authority. Therefore, the Housing Accountability Act has substantially changed the design review process, ensuring only quantified standards may be utilized.

However, Development Agreements afford more flexibility, in that they are contractual. If both parties agree to certain Project designs during the course of negotiations, objective or not, then the designs are required as part of the Project approvals. In this case, staff and the Developer toured the Downtown and other key projects throughout the City to demonstrate the architectural heritage and high quality of design in Livermore. In response to staff input, and as described in the *Site Plan Design* Review section of this report, the Developer has provided a contemporary and traditional hybrid design. The design incorporates many subjective elements of Livermore's heritage, like brick facades, deep eave overhangs, first floor gallery space, and numerous other details like brick courses, material changes, and more traditional window designs. Given new state laws and in the absence of comprehensive objective design standards, such features are more achievable through an Agreement or a willing developer.

City/Community Benefit – Public Art

The City's Art in Public Places program requires each Project to contribute an amount no less than 1/3 of one percent of total construction costs to the City's Art

Program. The contribution can be made through physical on-site art pieces, or through an in-lieu fee. In-lieu fees are then used for public art pieces around the City.

In this case, to satisfy Specific Plan goals of creating a unique new district, and to ensure the Project site maintains a cohesive art aesthetic, staff negotiated with the Developer to work with an art consultant to design a comprehensive Art Master Plan for the Project. The City will then deposit all art fees collected from the Project into a special fund, to be used to implement the Art Master Plan. The Commission for the Arts will approve the Art Master Plan subsequent to Project approval. As described in Exhibit P of the Agreement, the Art Master Plan may include physical art pieces, cultural programming, or dedicated art gallery space in one of the Commercial buildings. Staff anticipates an art fee contribution of approximately one-to-two million dollars in today's market, providing ample funds for distinct art pieces and programming.

This unique approach ensures all Project art fees will be spent inside the Project, including a requirement that some of the funds be utilized to create larger and more iconic art pieces at key Project entries. and ensures the art pieces will be part of a cohesive design aesthetic that signifies the boundaries of a new mixed-use neighborhood. Conceptual locations for the large art are shown on sheet L1-4 of the Landscape Plans (Exhibit D to the Project resolution).

City/Community Benefits – Financial Contributions

Livermore maintains a range of funds to support various uses and programs within the City. The Social Opportunity Endowment Fund was established to provide a long-term, stable funding source for delivering human services to low-income City residents. The Community Benefit Fund was established to fund infrastructure or other special capital projects required by the City. The Park Fund was established to hold Park Fees generated from each development project, to be used to construct park facilities in the City. Currently, payment into the Social Opportunity Endowment Fund and the Community Benefit Fund is not required. Furthermore, normal Development Impact Fees will still be collected at time of Building Permit Issuance for the Project.

As part of Agreement negotiations, the Developer has agreed to pay $800,000 into the Social Opportunity Endowment Fund, and $1.2 million into the Community Benefit Fund. These contributions are to be paid in three distinct development phases: Final Map, Certificate of Occupancy, and Tract Acceptance. Therefore, the Developer will pay $2 million worth of extra fees for the Project.

In addition, given the City's current Capital Improvement Plan and need for park funds, the Developer has also agreed to pay $2 million worth of required park fees earlier than normal, at formation of the Community Facilities District instead of Building Permit. In this way, the required park funds will be deposited to the City sooner in time. Staff expects the funds to become available in one-to-two years,

instead of three-to-four, helping to fund current park needs in the Capital Improvement Program.

City/Community Benefits – Public Safety Infrastructure

The City maintains a Security Ordinance that establishes a minimum set of standards to increase residential and commercial building resistance to unlawful entry. It requires certain design features for windows doors, alarms, and other security equipment. However, recently, the Livermore Police Department completed its Real Time Awareness Center and has begun to request a more comprehensive set of security technology be installed with new development.

Although not required as part of the Security Ordinance, as part of the Development Agreement, the Developer has agreed to install a series of closed-circuit television cameras and vehicle license plate reader cameras along the periphery and within the Project site. The cameras will be connected via fiber optic lines to the Real Time Awareness Center and will help increase the Police Department's situational awareness and keep residents safe. Further, the Project will provide alternative access points of entry on each commercial building for police and fire crews, helping public safety teams respond during a crisis. The Developer will also explore other features like motion-detecting light sources and each commercial block will be required to submit a comprehensive security plan. Taken together, these public safety features will help keep Livermore residents safe and provide new tools for the City's public safety teams. The Livermore Police Department has reviewed and approves of the additional law enforcement features. A map of the camera equipment can be found in Exhibit R of the Agreement.

City/Community Benefits – Construction Sales Tax

The Livermore Development Code contains no construction sales tax requirements. However, as allowed by state law, staff has negotiated with the Developer to designate Livermore as the point of sale for all construction materials of $5 million or more used for the Project. In this way, irrespective of where the materials were manufactured, Livermore will receive the whole sales tax benefit, instead of the sales tax being distributed through the County pool. Given the size of the Project, this provision could provide millions of dollars in extra sales tax revenue to Livermore during construction.

City/ Community Benefits – Economic and Fiscal Benefits

According to the *Fiscal / Economic Analysis* report prepared by Kosmont, in addition to the Construction Sales Tax described above, the Project will provide an estimated $1 million in net new annual tax revenue at full buildout, accounting for Project utility and service needs. Further, the Project would provide over 3,700 construction jobs onsite during the construction period, and an estimated $615 million in total

economic output during construction (representing new labor income and goods and services produced within Livermore). During operations at full buildout, the Project would generate $43 million in new local retail spending, provide 200 new jobs, with an estimated $70 million total annual economic output (representing new jobs, new spending, and new wages). The Project represents an approximately $600 million initial investment into the City of Livermore.

Developer Benefits – Vested Rights

As allowed by the state Government Code, the Development Agreement vests, or locks in place, all Project approvals for the 20-year duration of the Agreement. Therefore, the Developer maintains the right to develop and use the Project site in accordance with the approved plans. In addition, the applicable fees are vested, subject to annual increases. Therefore, the Project will not be subject to any new fee over the 20-year life of the Agreement. The vesting provides certainty for the Developer in financing, sale, and construction of the Project.

Developer Benefit – Community Facilities District

State Government Code Section 53311 - 53368.3 (the Mello-Roos Act) permits local jurisdictions to enact localized special tax districts that sell bonds and levy taxes in order to fund new public infrastructure, called Community Facilities Districts, or CFDs. Normally, this occurs by: 1) The City establishing the tax district; 2) A developer or the City funding and installing public infrastructure upfront; 3) Bonds being sold to and purchased by private investors; 4) The bond proceeds reimbursing a developer or the City for infrastructure costs; 5) The residents within the tax district paying an additional special tax on their property; and 6) Private investor being paid back principal and interest by special taxes.

Essentially, residents of a particular neighborhood indirectly finance public infrastructure through increased taxes. In this way, residents of the neighborhood are financing the infrastructure that they use and that supports their neighborhood. Typically, such infrastructure includes streets, sidewalks, and utility lines like water, sewer, and stormwater. This law is a powerful financing tool that is commonly used across California to help pay for new infrastructure and offset tax limitations established by Proposition 13. The City Council has previously authorized infrastructure CFDs in other areas of Livermore, like at The San Fransisco Premium Outlets.

The Developer proposes a new CFD be established for the Project site to cover the Project's horizontal public infrastructure (streets, sidewalks, utilities, etc). Exhibit S of the Agreement contains a map showing all eligible infrastructure. City staff is supportive of forming a CFD in order to secure necessary Project infrastructure and as part of the overall Agreement negotiations. Further, staff have negotiated with the Developer to ensure the Project's total tax obligation will not be a substantial burden on future residents.

Proposition 13 sets a maximum base tax rate of one percent of the total assessed home value at sale. Typically, a two percent all-in tax rate, inclusive of all additional assessments, is the maximum acceptable rate for residential development and the highest that the market generally will bear. For this reason, the Agreement includes a requirement that the total property tax for each residential unit within the Project cannot exceed 1.86 percent of the total assessed home value at sale. This includes the *Ad Valorem* (regular base rate) property tax, any additional assessments (e.g. Mosquito Abatement, Landscape Maintenance, etc.), and the proposed infrastructure CFD. In this way, the Developer will be reimbursed over time for Project infrastructure, but the overall tax rate will not unduly burden new residents.

The Agreement also includes a range of other requirements that dictate timing and processing requirements, identify all eligible facilities, and ensure the City may utilize all sound municipal finance practices when forming and assessing the new district. The CFD term is not to exceed 35 years.

For all these reasons, staff recommends the Planning Commission recommend the City Council approve the Agreement with the negotiated CFD provisions. If the City Council approves this Agreement, it establishes the parameters for CFD formation. However, the Council would need to hold a range of subsequent public hearings in order to form the CFD, as required by the Mello Roos Act. The Agreement requires the CFD to be formed prior to Final Map approval, which staff expects to be within the next 1-2 years, if the Project is approved. City staff and legal counsel have reviewed and approved of the proposed CFD language Exhibit J of the Agreement includes the proposed CFD requirements.

<u>Developer Benefit– Fee Credit and Reimbursement</u>

CA Government Code Sections 66000 and 66410, which incorporate a range of laws like The Mitigation Fee Act and The Subdivision Map Act, allow local jurisdictions to levy impact fees, exactions, and in lieu fees on development projects to offset impacts to the community and ensure consistency with the General Plan. In conformance with these laws, Livermore imposes a variety of fees on Development projects, including for sewer, water, stormdrain, parks, auto traffic, and other impacts. Other local agencies like Zone 7 and the Livermore Valley Joint Unified School District impose their own impact fees as well. The Project will generate approximately $105 million in total impact and in lieu fees.

Livermore Municipal Code Chapters 3.27, 12.30, and 12.60 authorize the City to collect Transferable Development Credit (TDC) Fees, Traffic Impact Fees (TIF), and Park Facilities Fees. These fees are for open space acquisition, transportation improvements, and park facility improvements. Each of the fees also contain a methodology for calculating the total fee amount or a process for credit or reimbursement. Generally, the City may allow for fee credits or reimbursements for any improvements that serve the broader public, are not required as part of the Project, and are consistent with the General Plan.

As required by the Specific Plan and as negotiated for in the Development Agreement, the Project proposes onsite public park facilities with amenities such as children's play area, turf play areas, seating opportunities, shade trees and a meandering path, public plazas, and numerous offsite transportation improvements, including bike lanes and bus stops, as described in the *Alternative Transportation Infrastructure* section of this report. Landscape Sheets L2.1 - L2-5 show the locations of each of these facilities. Given that the improvements serve the broader public and are consistent with the General Plan and Specific Plan, staff has determined these improvements are eligible for fee credits. In total, the improvements are valued at approximately $8.2 million, and reduce the Project's fee load by the same amount. In this way, the City is incentivizing the construction of critical community-serving infrastructure called for in the Specific Plan and General Plan that may not have otherwise been constructed, and crediting the Developer for on- and- off-site improvements as part of the broader Agreement negotiations.

City staff has also allowed for fee reimbursements as part of the Agreement negotiations, given the Project's urban form. Similar to the Downtown, the increased densities and mixed-use nature of the commercial blocks place goods and services near residences and reduce sprawl. Further, the Project site is centered around existing bus service and future commuter rail service (Valley Link), ensuring non-automotive forms of transportation and compact development. For these reasons, the Project reduces vehicle miles traveled, reducing its impact on the City street network and warranting a TIF reimbursement. Further, Main Street would serve the broader public, given its enhanced streetscape improvements and the citywide draw of the commercial tenant spaces. The Project also provides a denser living environment within the City's Urban Growth Boundary, preserving open space areas outside the City and limiting growth pressures, warranting a lower TDC fee.

The fee reimbursements would come from the TIF and the TDC funds, and would only be made available if the commercial mixed-use buildings are built, since the commercial blocks achieve the reduced impacts and citywide attraction described above. Therefore, as required by ordinance, the reimbursements would be tied to a performance measure. Overall, the total reimbursement value is $9.5 million. In this way, the City is incentivizing the commercial blocks, which, as described in the *Commercial Uses* section of this report, are more challenging to construct in the current market environment, are a critical component of the Specific Plan, and are highly desired by the nearby neighborhood and will directly benefit the future residents.

Taken together, the total of all proposed fee credits and reimbursements is approximately $17,700,000, or about 20 percent of the total required Project fees. The total net fees payable after accounting for all proposed credits and reimbursements is approximately $87,300,000. The proposed fee language can be

found the Agreement. The City Engineer and Office of Innovation and Economic Development have reviewed and approved of the proposed fee language. As is standard practice, the full fee calculations will be conducted at Building Permit issuance, if the Project is approved, and fees will be paid over time as each tranche of Building Permits is submitted.

State Density Bonus Law

Background

The State of California encourages the production of affordable housing through its Density Bonus statute [California Government Code Section 65915-65918]. The state Density Bonus provisions are also reflected in Development Code section 6.02.030. These provisions allow projects that contain a certain percentage of affordable units to qualify for:

1. Density Bonus;
2. Waivers of development standards; and
3. Developer incentives/ concessions

The Density Bonus allows projects to exceed the maximum residential density on a particular parcel. Per Density Bonus law, the Developer may use Waivers to disregard any development standard that precludes the allowed density. An unlimited number of Waivers may be granted. The Developer may also use Incentives/Concessions to disregard a certain number of development standards if removing the standard would result in quantifiable cost reduction. The more affordable the project, the more Incentives/ Concession shall be granted, up to a maximum of five.

Each Density Bonus request shall be granted ministerially, in that the City cannot exercise discretion or judgement. Further, the Developer need not provide evidence as to why the Density Bonus shall be granted, state law automatically grants the request, unless the City makes certain written findings to deny the request. The findings are generally centered around life/ safety or environmental impacts. It is unlawful for the City to unduly deny a Density Bonus request, and the City would be open to lawsuit or other state corrective action. The City can review the request to ensure that the Developer is applying the Density Bonus law correctly.

The Developer is not proposing an actual Density Bonus request above the residential density that is allowed, but is proposing a series of Waivers and one Incentive/Concession, which is still allowed.

Waivers

As shown in the *Site Plan Design Review* section of this report, the Developer is seeking waivers for the different Planning Areas. The full list of Waivers can be found in the Developer's Density Bonus letter request (Attachment 10). Generally, the Waivers fall into the following Specific Plan development standard categories: Porch Separation, Private

Open Space Dimension, Front Setback, Commercial Ceiling Height, Building Height, and Commercial Floor Area Ratio (FAR). The Developer has indicated such Waivers are necessary since these Specific Plan standards physically preclude the Project as designed and, if followed, would cause the Project to lose density.

Most of the requested Waivers would not have a substantial impact on the Project compatibility, form, or function. For example, two porches within the townhome/ duplex product types would be approximately five to seven feet closer than allowed; other townhome/ duplex units meet the required private open space quantities, but the open space dimensions would be approximately one foot less than required; and certain ground-floor tenant spaces would have an average ceiling height of 14 feet, instead of the 16-foot requirement.

The Developer is seeking two more substantial Waivers though, including a reduction in commercial/retail Floor Area Ratio (FAR) and an increase in overall building height. FAR essentially limits the size of the commercial/retail space. As described in the *Commercial Uses* section of this report, the *Commercial and Office Economic Feasibility* study prepared by Kosmont demonstrates that Livermore's commercial retail market is largely stagnant, and that today's market calls for less commercial retail tenant space than the Specific Plan requires. Given that commercial space construction is challenging in today's market, and given that it displaces residential land area on the site plan, the Developer is requesting a reduction in the required commercial FAR, from approximately 106,000 square feet to 75,000. Staff supports the request in order to maximize the site's density, and concurs with the results of the commercial economic analysis.

The Developer is also requesting relief from the required maximum height limits established in the Specific Plan and Scenic Corridor policy within the General Plan. With the adoption of the Specific Plan in in 2018 and as amended in 2020, the City Council authorized amendments to the Scenic Corridor policy to allow for increased heights within the Project area. In the southern part of the Project site near the freeway interchange, the Specific Plan generally increased allowed building heights to between 475 and 485 feet above mean sea level. Given existing and proposed grades, the height limit generally allows for five story buildings. However, the applicant is proposing to exceed the required height limit by approximately six to twenty-one feet. Functionally, this means the three southern buildings on the Project site will exceed the height limit by one to two stories. One of those buildings is the 100 percent affordable building. Given the Project's proposed unit mix, the heights are necessary to achieve the Specific Plan's density requirements and to help the City meet its RHNA obligations, especially for Lower Income units. The Developer has prepared renderings and massing models demonstrating the increased heights, as shown on Sheet H-1 through H-13 in the Proposed Plans. For reference, the Shea Sage units closest to Interstate 580 are approximately 480 feet above mean sea level. The Project's tallest Planning Area along interstate 580 is approximately 495 feet above mean sea level.

City staff cannot make the required findings to deny any of the requested Waivers, the findings are shown in the Project Resolution. Therefore, the Planning Commission and

City Council are ministerially obligated to accept the proposed Waivers, pursuant to state law.

Incentives and Concessions

Given that the Project is providing 28 percent affordability, including almost 14 percent Lower Income units, the Project qualifies for two Incentives/ Concessions under state Density Bonus Law. In addition to the Waivers, the Developer is seeking one Incentive/ Concession to eliminate the required office FAR.

Although not required by state law, the applicant has provided an economic analysis of the current office market, as shown in the *Commercial and Office Economic Feasibility* study by *Kosmont*. The study notes that Livermore's office market has experienced negative absorption, meaning more vacant commercial spaces over time, large vacancy rates, and asking rents that cannot support construction prices. Therefore, office spaces in Livermore currently have a net negative residual land value and new office construction is financially infeasible or would result in a loss.

The Office of Innovation and Economic Development has reviewed the study and confirms its conclusions. Further, a reduction in office FAR would not endanger public health/ safety or the environment. For these reasons, staff cannot make the required findings of denial for the requested Incentive/ Concession, as shown in the Project Resolution. Therefore, the Planning Commission and City Council are ministerially obligated to accept the proposed Incentive/ Concession, pursuant to state law. Staff supports the proposed incentive/ concession, since it would allow for more active uses, like residential, in place of office uses that would likely be left unbuilt or unoccupied. Further, the elimination of office allows the City to better meet its RHNA obligations, and the Project still proposes to allow office uses along Main Street, although in lower quantities than envisioned by the Specific Plan.

Site Plan Design Review

The purpose of a Site Plan Design Review (Design Review) is to provide a process for the appropriate review of construction and development projects to ensure that all approved site and structural development is consistent with the General Plan, Specific Plan, and standards specified in the Development Code.

A Site Plan Design Review (Design Review) is one of several entitlements required for the Isabel Crossing Project approval. The Project is unique in that the scope is larger than any development in the City, it encompasses approximately 45 acres of vacant land zoned for different uses, it is the first master-planned transit-oriented development in the City, and the Design Review considers the master landscaping for Main Street, the open space parcels, the architecture, and development standards for each proposed parcel. When each parcel develops and before a Building Permit is issued, a secondary Design Review will be required for the landscaping inside all parcels (and surrounding some parcels). Future landscape Design Reviews will likely be at Staff level. If major changes

are proposed to the Project, Planning Commission and City Council approval would be required.

Development Standards

Chapter 2 of the Specific Plan identifies development standards for residential and non-residential uses. Development standards regulate the density/intensity, building heights, parking, open space, front, interior, rear, and side setbacks, building separation, alley and garage separation, porch separation, and building projections. These requirements are intended to promote compatibility between adjacent uses, protect key scenic views, and help establish a sense of neighborhood character.

Density is expressed as dwelling units per acre for residential uses, and intensity is expressed as floor area ratio or lot coverage. For mixed-use buildings containing residential and commercial uses, the calculation of floor area ratio is used. Setbacks are measured from the building to the property line.

The Specific Plan has four residential land use types and eleven non-residential land use types. The proposed Project will encompass two residential types (Village and Core) and four non-residential land use types (Neighborhood Commercial, Office Core, Ground Floor Retail/Overlay Flex Space, and Open Space).

The Project site is divided into 27parcels as shown on the Master Planning Parcel Summary, page 38 of Exhibit C to the Project resolution, of the proposed plans. A simplified version of the information is provided below. The mixed-use parcels are shaded in gray, and where a parcel exceeds minimum standards such as parking and open space, it is noted:

Parcel	**Zone**	**Building Type**	**Number of Units**	**Over minimum standards and/or requirements (indicated by "+" sign)**
N1	Village	3-Story Attached (Duplex and Triplex)	98	**Parking:** +11 guest **Open Space:** +34,803 SF common and +1,268 SF private
N2	Village	3-Story Attached (Duplex and Triplex)	56	**Parking:** +18 guest **Open Space:** +6,041 SF common
N3-A	Village	3-Story Attached (Duplex)	40	**Open Space:** +2,192 common
C1-A	Village	3-Story Attached (Townhouse)	62	**Parking:** +9 guest **Open Space:** + 10,770 SF common

C1-B	Core and Ground Floor Retail/Office	Apartments over Retail	114	**Parking:** +31 residential **Open Space:** +6,068 SF common
C2-A	Core and Ground Floor Retail/Office	Stacked Flat Condos over Retail	116	Parking: +39 residential **Open Space:** +3,187 SF common
C2-B	Village	3-Story Attached (Duplex and Triplex)	17	**Parking:** +11 guest **Open Space:** +572 SF common
C3	Village	3-Story Attached (Townhouse)	45	**Parking:** +10 guest **Open Space:** +961 SF common and +495 private
C5	Village	3-Story Attached (Townhouse)	84	**Parking:** +3 guest **Open Space:** +9,753 SF common and +920 SF private
S1	Core, Neighborhood Commercial, and Ground Floor Retail/Office	Stacked Flat Condos over Grocery	172	**Parking:** +16 residential +3 commercial **Open Space:** +6,171 common
S2	Village	3-Story Attached (Townhouse)	102	**Parking:** +16 residential +22 guest **Open Space:** +1,536 common
S3-A	Core	Apartments	152	**Open Space:** +2,3124 SF common
S3-B	Core	Apartments	200	**Open Space:** +8,075 common
S4	Village	3-Story Attached (Townhouse)	41	**Parking:** +13 residential +4 guest **Open Space:** +5,695 SF common
N3-B	Open Space	Neighborhood Park	N/A	
N3-C	Open Space	Recreation Center	N/A	

C1-C	Open Space	Pocket Plaza	N/A	
C2-C	Open Space	Pocket Plaza	N/A	
TS	Open Space	Town Square	N/A	

The Developer has prepared a matrix of required development standards and the Project's consistency with them in the Proposed Plans on sheets CM1-CM5. The matrix is organized by parcel. Where a particular development standard is met, the compliance is noted and where a development standard is not met, the matrix identifies the non-compliance. The Project is consistent with all required development standards such as setbacks, height, open space and parking, with the exception of the following Developer Density Bonus waivers:

1. In Planning Area N-1:
    a. A waiver or reduction from the applicable Specific Plan porch separation requirement for porches facing each other of 15 feet along paseos, where two particular porches in the Planning Area are separated by 7.5 feet and 9.9 feet, respectively.

2. In Planning Areas N-2 and N3-A:
    a. A waiver or reduction from the applicable Specific Plan dimension requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the Project provides certain units that include private open space that is 17 feet, 3 inches by 5 feet, 0 inches, for a total area of approximately 86.25 square feet.

3. In Planning Area CI-B:
    a. A waiver or reduction from the applicable Specific Plan front setback requirement of a 10-foot setback at the fourth floor of the proposed four-story apartment building; no setback is proposed (though decks are provided to break up the facades).
    b. A waiver or reduction from the applicable Specific Plan minimum 16-foot floor to ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.

4. In Planning Area C2-A:
    a. A waiver or reduction from the applicable Specific Plan front setback requirement of a 10-foot setback at the fourth floor of the proposed five-story apartment building; no setback is proposed (though decks are provided to break up the facades).
    b. A waiver or reduction of the applicable Specific Plan height limit of 490 feet Mean Sea Level (MSL), where a maximum height of approximately 499 feet MSL is provided for a portion of a building on the north end of the Planning Area.

c. A waiver or reduction from the applicable Specific Plan minimum 16-foot floor to ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.

5. In Planning Area S1:
    a. A waiver or reduction from the applicable Specific Plan minimum commercial FAR of 0.4:1, where an FAR of approximately 0.3:1 is provided, and
    b. A waiver or reduction of the applicable Specific Plan height limit of 485 feet above MSL, where a maximum height of approximately 497 feet above MSL is provided.

6. In Planning Area S2 and S4:
    a. A waiver or reduction from the applicable Specific Plan dimension and size requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the Project provides certain units that include private open space that is 14 feet, 2 inches by 5 feet, 4 inches, for a total area of approximately 73.3 square feet.

7. In Planning Area S3-A:
    a. A waiver or reduction of the applicable Specific Plan height limit of 485 feet MSL, where a maximum height of approximately 491 feet MSL is provided.

8. In Planning Area S3-B:
    a. A waiver or reduction of the applicable Specific Plan height limit of 475 feet MSL, where a maximum height of approximately 496 feet MSL is provided.

9. In All Planning Areas: a. A waiver or reduction of the applicable INSP requirement for a minimum of 10 percent of the project site area to be landscaped, where the Project provides approximately.

10. In All Planning Areas: a. A waiver or reduction of the applicable INSP requirement for a minimum of 16 trees per acre of site area, where the Project proposes approximately 10 trees per acre (465 total).

Design Standards

Chapter five of the Specific Plan (Urban Design) contains the Design Standards and Design Guidelines. The Standards are requirements, and the guidelines provide general direction on intended design features. The Project team and architect have worked closely with Staff on several iterations of design to produce a final design that is in

harmony with the Specific Plan's vision of creating a sense of place in this walkable, transit-oriented neighborhood that is a safe, vibrant, and attractive place to live and work.

Included in the Project design is the compatibility among existing and new residential uses. The scale (how the size or the buildings in relation to the human experience), privacy, light (both natural and artificial), and noise were all taken into consideration when applying the design standards to the siting of the buildings and determining the massing of the buildings.

Open Space, Public Plazas, Public Park and Private Recreation Area

The Project will offer well-designed open spaces within the Project. A quarter-acre town square on the southern corner of Gateway Avenue will feature an art installation, retail promenade, a gathering area with trellis, shade elements for outdoor seating, and will provide a Village Green which serves as a reservation of potential landing area for a future potential pedestrian bridge or tunnel connection across Isabel to the Valley Link station.

Across Gateway Avenue from the Town Square via enhanced pedestrian crosswalks will be a pocket plaza. This Plaza is located on the south end of the C1-B parcel (mixed use along Main Street) will feature accent paving at the bulb-out, art installations, and shaded out-door seating areas with attractive landscaping including a row of Hackberry trees. The plaza extends from the Gateway Avenue/Isabel intersection westward toward Main Street. On the other side of Main Street via an enhanced crosswalk, another pocket plaza featuring flexible seating, a flex space with string lights, seating notes, low wall, overhead shade structure, accent paving, and landscaping including Trident Maple, Crepe Myrtle, and Zelkova trees.

In the northern portion of the development along A Street, a private recreation center with two stories of amenity space and a community pool (parcel N3-C) will be available for the residents in the Village areas. To the east of N3-C is a one-and-a-half-acre neighborhood public park (N3-B). The park includes a children's playground, meandering loop trail, barbeques, picnic tables, and a large grassy field lined with Trident Maple, Coast Live Oak, California Sycamore, and Hackberry trees. Parking for these parcels is provided along A street and Main Street, and the recreation center parcel will contain two accessible parking spaces on-site.

Development Compatibility, Siting, and Building Massing

The citywide Design Standards and Guidelines referenced in the Specific Plan contain design requirements for new development. The documents aim to create new development that is compatible with existing development, yet is sited properly and broken down into subparts, as follows:

- B.2.1.5 Building design should respect the predominant characteristics of neighborhood development such as height, massing, setbacks, materials and architectural style.

- B.2.2.1 Planting strips between the sidewalk and the back of the curb are strongly encouraged. They should be a minimum of 5 feet in width.
- B.3.1.1 Neighborhood open space should be located to maximize its visual and functional benefits.
- B.6.2.1 Whenever possible, parking lots should be located behind residential structures, rather than along the primary frontage, to minimize visual impact to the street.
- C.1.1.2 Building massing should be varied by employing a variety of techniques, such as recessed porches, bay windows, dormers, and varying planes or setbacks.
- C.1.2.1 The massing of larger residential buildings shall be broken down to convey a sense of “home” and give individuality to each unit that lies within it.
- C.1.2.3 Facades of long buildings shall be architecturally subdivided into shorter segments every 25 to feet maximum.

The Village residential parcels will be a maximum of three stories in height, which is the same as the existing residential development to the north, known as the Montage Development (Montage). The proposed development site has a lower elevation than Montage and areas north of the Project site. The taller mixed-use buildings therefore result in a visually lower height when viewed in a broader perspective, especially looking south from Portola Avenue. The Project utilizes landscaped setback areas like the surrounding residential and office buildings. The proposed development will be approximately 270 feet from Montage to the north, approximately 200 feet from the office buildings to the west, and approximately 300 feet from the newly approved proposed residential development to the East known as Shea Aura. The siting of the proposed Isabel Crossing Project ensures sufficient light and air between its neighbors.

The Project provides open space in locations that are easily accessible by all residential units via the thoughtful pedestrian circulation and bike lanes see sheet L1-2 in the Landscape Plans. The Project as a whole slightly exceeds the minimum requirements for parking as shown on the Parking Analysis sheet on page 37 of Exhibit C to the Project resolution. Parking is provided by a mix of on-street and on-site for the Village areas, and on-street and within parking garages for the higher density Core areas and the commercial blocks. Therefore, parking creates minimal visual impact to the Project. In addition, on-street parking is punctuated by landscaped projections. The building massing is broken down by the use of colors, plane changes, porches, balconies, and materials, which gives each unit a sense of individuality.

Architectural Style

The Applicant’s architectural team worked with Staff through many iterations of design. The Citywide Design Standards and Guidelines and the Specific Plan, and a Staff-led architectural tour of inspirational buildings from Livermore’s Downtown and newer residential projects guided the architect’s team to produce the final products. The architect’s narrative below provides insight into the required details, colors, and materials that are used in each building of the proposed Project.

The Isabel Crossing Project is composed of numerous building types of various sizes and heights. It is our intention that this community feels cohesive within its variety. To achieve a visual order among buildings, a limited color and material palette has been conceived. An array of field colors, trim colors, accent colors, roofing, brick, and exterior light fixtures have been selected that could be employed on any building. The selected bricks have been drawn from the downtown of Livermore and its history of brick manufacturing. To further tie the Project into a whole, we have selected a white that will be used on all buildings as an element of continuity.

Lower Density Products

The lower density products within the master plan include three-story duplex, triplex, and row townhomes. Each building is composed of several different floor plans to create a variegated design. Where end conditions are visible to perimeter streets, enhanced end elevations are provided, often with wrapped porch elements.

The design aesthetic of the lower density products includes variations on traditional and contemporary motifs based on traditions of western U.S. Buildings. They will have various arrangements of brick as a base material, horizontal siding, vertical (board & batten) siding, and stucco. Buildings employ shed-roofed porches (some with gables introduced), and gables, sheds, and sloped roofs combined with flat roofs to maximize the area for solar panels. Flat roof parapets include a cornice trim.

Higher Density Products

The higher density products within the master plan include podium apartments and condominiums. A podium is a concrete structure containing parking either at-grade or below-grade. The podium structure also provides retail space as well as lobbies and building amenity spaces at street level. Above the podium are stacked flats of various sizes and types arrayed around central courtyards.

Buildings are composed in a traditional tripartite organization of base, middle and top. Each of the podium buildings employ different bricks in different patterns as base materials. Where parking is exposed at street edges, decorative grills will be inserted into openings. Above the base, each building utilizes combinations of stucco and horizontal siding, with belt courses, bay windows, articulated balconies with various railing details, with individualized cornice treatments. Window proportions and various articulations are contemporary interpretations of traditional arrangements of architectural forms influenced by sources such as Old Sacramento or old Fort Collins, CO, or downtown Livermore.

Landscape Design

The Design Standards and Guidelines and the Specific Plan contain landscape standards related to trees, shrubs, and ground covers. The standards establish minimum quantity, size, and locational parameters, as follows:

- DSG 1.4.1.a: At time of installation, trees should be a minimum 15-gallon pot size or 6 feet tall.
- DSG 1.4.1.b: At time of installation, all street trees should be 24-inch box size and comply with the City of Livermore Standard Details.
- DSG 1.4.1c: At time of installation, twenty percent of all trees should have a 24-inch box container size or larger.
- DSG 1.4.1.d: At time of installation, shrubs should have a minimum 5-gallon pot size.
- Isabel Neighborhood Specific Plan Table 2-2: Minimum on-site landscaping is 16 trees per acre for residential areas.

The project frontage along Portola Avenue will be planted with a double row of trees. Starting at the western portion of Portola Avenue and moving eastward along the Project site, Freeman Maple, California Sycamore, and Little Leaf Linden will be planted next to the existing street trees. The project frontage along Isabel Avenue will feature a double row of trees and will feature a new landscaped median. Beginning at the intersection of Isabel Avenue and Portola Avenue and moving south along the site there will be Little Leaf Linden and Freeman Maple. The median that separates the south bound traffic from northbound traffic will be planted with Columbia London Plane, Coast Live Oak, and Little Leaf Linden. No trees are being removed, and the master landscape plan will include 465 new trees. More trees will be required as the individual parcels develop, and the future applicants apply for the required Site Plan Design Review of the interior landscaping. The Project's landscape architect has provided the following narrative that describes the Isabel Crossing landscape:

> *The Isabel Transit Oriented Development in Livermore, California, offers an exciting opportunity to blend functionality with aesthetics, sustainability with community vibrancy. As we embarked on crafting its landscape design narrative, our vision intertwined seamlessly with the city's ethos, extending the essence of downtown Livermore into this new hub.*
>
> *At the heart of our inspiration was the promotion of bike and pedestrian connectivity. Bike racks and pedestrian-friendly amenities were strategically placed to encourage active transportation and reduce reliance on cars.*
>
> *Central to the Isabel Transit Oriented Development was the creation of vibrant public gathering spaces that evoked a strong sense of place. These*

spaces served as focal points for community interaction, cultural events, and relaxation. Plazas adorned with native plantings, shaded seating areas, and public art installations invite residents and visitors alike to linger, fostering a sense of belonging and civic pride. Whether it was a bustling farmers' market or a pickup soccer in the park, these gathering spaces reflect the diverse needs and interests of Livermore's residents.

Sustainability lay at the core of our design ethos, and native and pollinator plants played a starring role in shaping the landscape. By utilizing plant species adapted to the region's climate and soil conditions, we not only reduced water consumption and maintenance needs but also provided essential habitat for local wildlife. Through careful stewardship of the land, we strive to create a landscape that thrives in harmony with nature, embodying the spirit of sustainability for generations to come.

Lastly, our design narrative sought to extend the look and feel of downtown Livermore into the Isabel Transit Oriented Development, forging a seamless connection between old and new. Architectural elements inspired by Livermore's historic buildings, such as brick facades and wrought-iron accents, were incorporated into the design, paying homage to the city's rich heritage. Street furniture, lighting fixtures, and signage echoed the aesthetic character of downtown, creating a cohesive visual identity that celebrated Livermore's unique essence.

In summary, the landscape design narrative for the Isabel Transit Oriented Development was a testament to our commitment to creating a livable, sustainable, and vibrant community. Through thoughtful planning and collaboration, we hope to transform this space into a place that not only connects people and places but also nourishes community spirit.

The Project is conditioned to comply with the City's Water Efficient Landscape Ordinance (WELO) in order to conserve water, avoid invasive species, and ensure irrigation efficiency. The Project will use less water than allowed, contain no high-water using plans, utilize drip irrigation, and use recycled water for all Project irrigation. For these reasons, the Project promotes efficient use of water resources. Portions of the plant palette are California natives and pollinators that will attract birds, butterflies, and bees. In this way, the plant selection will be well suited to Livermore's climate and will promote increased biodiversity, furthering Specific Plan and Climate Action plans and goals.

All master landscaping will be maintained by the Community Facilities District. All landscaping within individual parcels will be maintained by future Homeowners' Associations. The proposed landscaping will complete the aesthetics of the high-quality architecture adding to a unique sense of place.

Fencing, Walls, Public Art, and Signage

The applicant has included a 3-foot-tall wall that will match the architecture of the homes and separate the parking lot of the parcel to the west, adjacent to parcel C-5 and C-3, as shown on sheet L1-3 in the Landscape Plans. Future fencing for the individual parcels would be included in the required Site Plan Design Review for the interior landscaping before building permit issuance.

A robust Art Master Plan for Public Art will be developed and approved, as outlined in Exhibit P of the Development Agreement and described in the Development Agreement section above. Art pieces will be phased in as the individual parcels develop, and as specified in the Art Master Plan, with respect to the master landscape areas. The Art Master Plan may include any combination of static art, programming, a gallery, and functional art.

Planning Commission will review and approve any proposed future Master Sign Program subsequent to Project approval. All future commercial and directional signs will be reviewed at staff level for consistency with a proposed Master Sign Program or the Specific Plan/ City's sign ordinance requirements. As shown on Sheets L1-5 and L1-6, Neighborhood entries will have either signage and/or features that welcome residents and guests to the neighborhood, consistent with Specific Plan polices.

This Site Plan Design Review is recommended for approval by the City Council on recommendation of the Planning Commission. The findings for the Site Plan Design Review are found in the Project Resolution.

Subdivision – Vesting Tentative Tract Map 8659

Government Code Sections 66410 - 66499.41, commonly referred to as the Subdivision Map Act: 1) Establish the statewide procedures by which land is subdivided (separated into smaller pieces) and combined; and 2) Establish the requirements for dedications, reservations, and exactions, which is the process by which local jurisdictions can require land, easements, or developer funds (fees) to be dedicated to public purposes like services and infrastructure when land is subdivided. Livermore Development Code Chapter 10 implements the Subdivision Map Act at the local level.

Generally, subdivision applications consist of maps showing the proposed division of land, any land reserved for public purposes, and proposed Project phasing, and improvement plans showing all public improvements and proposed grading. The applicant has provided the required documents in the Proposed Plans, and as described below.

Phasing and Timing

As discussed in the *Project Description* section of this report, the proposed entitlement package covers all Project building architecture and placement; all master landscaping along Project frontages and internal streets, plazas, and parks; all onsite and offsite public infrastructure; proposed master site grading; and the large lot Tentative Map. City subdivision standards require all horizontal public infrastructure, like roads, utility lines, and stormwater retention areas, to be constructed prior to Building Permit issuance and vertical construction of any structures. The Development Agreement further establishes timing requirements that stipulate when certain public infrastructure is to be completed.

In general, the Project infrastructure will be split into two phases, Phase 1 (the streets and utilities phase), and Phase 2 (the parks and plazas phase). Phase 1 includes most Project improvements, like all frontage improvements, offsite improvements, and internal improvements, including internal streets, sidewalks, bike lanes, street median, traffic signals, street trees, and street lighting; and all required utilities like water, sewer, and stormwater. Phase 2 includes primarily the public parks and plazas. Although the Developer intends to complete construction sooner, the Agreement requires Phase 1 construction to be completed in subphases, within two to five years of Improvement Plan approval, and Phase 2 construction to be completed when each adjacent Planning Area is constructed. This ensures the required and negotiated public infrastructure will be delivered within a reasonable amount of time. The full list of phased improvements and timing requirements can be found in the Agreement, and on Sheets TM 3.9.0 and TM 3.9.1 In the Civil Plans (Exhibit E to the Project resolution).

Once infrastructure is completed and lots are formed, the Developer has indicated they will sell a majority of the large lot parcels to subsequent home builders, who will then construct portions of the Project, consistent with the approved plans and Development Agreement. The Developer may retain some large lot parcels to construct themselves.

If the individual home builders wish to further subdivide each large lot shown in the Tentative Map on the Civil Plans into smaller lots, a subsequent subdivision entitlement would be required. In addition, the Project approvals do not include landscape plans for areas within each large lot Planning Area. The Conditions of Approval require subsequent approval of landscape plans for these areas prior to Building Permit issuance. Depending on proposed quantity of lots, Planning Commission and/or City Council approval of future subdivision and landscaping applications may be required.

If approved, staff anticipates full Project buildout would occur within 10 years from Project approval, starting with public utilities and improvements and followed by the townhouse/ duplex units. The mixed use commercial and higher-density residential blocks will likely take more time to construct, given current market conditions, and staff expects these to build out in the latter half of Project buildout.

Lot Size, Layout, and Circulation

The proposed Vesting Tentative Tract Map (Map) would subdivide the existing approximately 45-acre vacant Project site into 27 large lots and five major internal

streets. Of the total, 19 lots will be used for residential purposes, four will be used for park and plaza space, three will be used for mixed-use commercial buildings, and one will be used for the private recreation center.

The Specific Plan does not establish minimum or maximum lot sizes or dimensions for residential, commercial/office, or open space uses. However, for reference, the lot sizes range from approximately 0.16 to 2.8 acres. The largest lot accommodates the mixed-use Commercial Block that includes the grocery store, while the smaller lots generally accommodate the proposed public plazas. Each lot is adequate is size and shape to accommodate the proposed uses. The lots scale up in size for more intense uses like mixed-use commercial and higher-density housing, and are shaped to ensure proper ingress/ egress and access to all proposed internal streets.

The Project proposes to construct five new public streets within the site, with new connections to the existing street network on the north, east, and western Project boundaries. All proposed parcels would have access to the public right-of-way, in conformance with Subdivision Map Act standards. Primary Project entrances are located along Isabel Avenue. The new streets conform to all required City standards, including with respect to street width and shape. The new streets are also multimodal, promoting vehicular, pedestrian, and cyclist connections, and will be low-speed, neighborhood streets. For example, all streets will include public sidewalks that conform to all City dimension standards, and Street A will be specially designed to promote cycling, with a dedicated Class II bike lane. Other streets will include Class III bike lanes, where cyclists and autos share the road.

With the exception of the main Project entrance at Gateway Avenue, all streets are one lane in each direction, creating a narrower right-of-way that is easier for pedestrians to cross. All internal street intersections will feature four-way crosswalks that connect to the proposed sidewalk network. The Project conditions require a certified CASp Specialist to review and certify that all pedestrian improvements conform to all federal Americans with Disabilities Act (ADA) requirements. Main Street will feature additional enhancements to promote walkability, like angled parking and extra wide decorative sidewalks. In this way, the proposed streets create a neighborhood environment by ensuring low speeds, relatively narrow widths, special features, ample pedestrian crossings, and connecting to the citywide sidewalk network, and by supporting pedestrians, cyclists, and autos.

Emergency vehicles, trash trucks, and the service and delivery vehicles will primarily use Isabel Avenue to access the site. As described in the *Utilities, Services, and Subsurface Infrastructure* section of this report, the roadway widths are sized to accommodate all service and emergency vehicles.

The Project's proposed circulation network and pedestrian connections can be found on Sheet L1.2 of the Proposed Plans.

Utilities, Services, and Subsurface Infrastructure

Specific Plan EIR and Addendum

The Infrastructure and Public Services element of the General Plan and the City's Development Code require that all new developments have adequate provision of utilities and services like water conveyance, sewer conveyance, and urban fire protection. The Specific Plan Environmental Impact Report (EIR) and Project Addendum (Attachments 22-24) found that at Specific Plan buildout, the City's existing utility and service systems would have adequate capacity to serve all new development in the Isabel Neighborhood. The Project density is below the range contemplated by the Specific Plan, for this reason, existing utility and service systems will have sufficient capacity to serve the Project and no Project impacts will be greater than those analyzed in the EIR. As described in the *Development Agreement*

Water, Wastewater, and Stormwater

As described in the *Community Facilities District* section of this report, the Developer would construct all onsite public water, wastewater, and stormwater infrastructure, the costs of which would be financed by the Project's proposed infrastructure CFD.

The Project's water, wastewater, and stormwater service would be provided by the City. Connections would primarily occur into existing mains along Isabel Avenue, Portola Avenue, and Shea Center drive. The City Engineer has determined that all existing public utility lines, pump/ lift stations, and reservoirs are adequately sized to handle the increased water, sewer, and storm flows, and that the water treatment plant can accommodate all demand increases (Attachment 2). As required by state Public Resource Code Section 21151.9, the Project's EIR Addendum includes a Water Supply Assessment, which shows both the City of Livermore (retailer) and Zone 7 (wholesaler) have sufficient water supplies to serve the Project over the next 20 years (Attachment 2). The Project's stormwater would be primarily managed by a large underground vault, located beneath Planning Area S1, in addition to surface retention areas in the proposed street right-of-way (Sheets 3.4.0-3.4.5 on the Civil Plans).

Per City standards, water and sewer lines within each Planning Area and within the proposed public streets would be maintained by the City. The proposed stormwater lines within each Planning Area and the underground vault would be maintained by the Developer through the Project Homeowners Association (HOA). The Engineering conditions of approval require the Developer to enter into a Stormwater Maintenance Agreement to ensure proper storm facility maintenance and function. All storm infrastructure located within the proposed public streets would be maintained by the City, through the Specific Plan Maintenance CFD.

The Project conditions require trash capture devices be installed at all stormdrain inlets and that grease interceptors be installed on commercial and restaurant

sewer lines, in compliance with state and local standards and ensuring the City's utility infrastructure and the environment remain protected.

The Isabel Neighborhood also has unique access to recycled water, produced from the Livermore Water Reclamation Plant and generally used for irrigation purposes. The Project conditions require that the Project connect to the City's recycled water lines and that recycled water is used for all irrigation. In this way, potable water would be conserved.

The City Engineer has reviewed and approves of the proposed utility plan, found in Sheets 3.3.0 through 3.3.4 of the Civil Plans.

Dry Utilities and Solid Waste Collection

All dry utilities will be located within the proposed Joint Trench, to be run along all proposed public streets within the Project site. The Joint Trench will connect to an existing joint trench along Shea Center Drive and Gateway Avenue and will include electric and telecommunications service. Pacific Gas and Electric (PG&E) will provide electric service, while Comcast will provide telecommunications service. PG&E has reviewed the Project plans and provided no substantial comment, indicating sufficient capacity to serve the Project. As required by the Conditions of Approval and the Specific Plan EIR, the Project will not provide any gas infrastructure, satisfying the City's new electrification ordinance and Climate Action Plan goals. As further required by the Conditions of Approval, all existing and proposed dry utilities on the site will be undergrounded, improving the site's aesthetics and resiliency against natural hazards like winter storms.

Solid waste pickup would be provided by Livermore's solid waste franchisee, Livermore Sanitation. Solid waste within Livermore is primarily disposed of at the Vasco Road Sanitary Landfill and the Altamont Landfill. The Specific Plan EIR notes that the two landfills combined have over 15 million tons of remaining capacity. For reference, Livermore's current annual disposal tonnage is around 66,000 tons. At current rates, over the next 25 years, the landfills would have 90 percent capacity remaining. Therefore, there is sufficient solid waste capacity to serve the Project into the indefinite future.

Solid waste would be stored in townhome/ duplex unit garages and in rental/ mixed-use commercial building trash enclosures within the ground floor parking garages. Each garage and trash enclosure has sufficient space to accommodate trash, recycle, and organic bins, as required by the City's solid waste and recycling enclosure ordinance. Townhome/ duplex solid waste will be staged in front of unit garages for collection, as is typical for residential development in Livermore. As required by the Conditions of Approval, all rental/ mixed use buildings will be required to stage their bins in the public right-of-way during pickup days. Livermore Sanitation has reviewed the plans and conditions and found the Project provides functional and efficient trash truck access and pickup logistics.

Public Safety and Emergency Services

Fire Protection would be provided by the Livermore-Pleasanton Fire Department. The Specific Plan EIR notes that the Project site would be served by Fire Station #10 on Airway Boulevard. The Station can deploy front line apparatuses within 10 minutes, and the Fire Department can dispatch a ladder truck to serve the proposed five to seven story buildings. Given the proximity of Fire Station #10, current response times, and the ability to dispatch a ladder truck, existing facilities are sufficient to serve the Project. Although existing service capacity is adequate for the Project, the Fire Department is currently conducting a Community Risk Assessment to ensure that the incremental population increases across the City and within the Specific Plan do not further degrade fire service levels. The Risk Assessment will analyze whether a new fire station is needed within the Specific Plan area, among other analysis. The results of the Assessment will be completed by the end of summer 2024. Pursuant to Specific Plan policy, the Project will be required to implement the Risk Assessment recommendations. The Project's net increase in the City's tax base and contributions to the Community Benefit Fund will help fund the Project's fair share of any Risk Assessment recommendations.

All new internal streets have a sufficient width and intersection dimensions to accommodate emergency vehicles, including fire apparatuses, as shown by the vehicle turning templates on Sheet TM 3.5.1 through TM 3.7.4 on the Civil Plans. In addition, the Project proposes an Emergency Vehicle Access (EVA) road on the south side of Planning Area S1, in order to ensure aerial access to the S1 Building. Therefore, all Planning Areas have emergency vehicle access. Further, all mixed use commercial and high-density residential blocks are required to install Knox boxes, to allow fire crews access inside the building, contain ladder pads on the podium courtyards to allows for window rescue, and have stairwells that can accommodate fire crews and fire ladders. Therefore, all denser product types allow for adequate fire crew access. All buildings will have fire sprinklers, as required by the Fire Code. The Fire Department has reviewed and approves the proposed plans, finding they allow for required fire access. The Fire Department has also conditioned the Project to provide adequate fire hydrant, emergency responder radio, and fire lane marking placement around the site. For these reasons, the Project design ensures sufficient Fire Department access and fire safety.

The Livermore Police Department will provide law enforcement and public safety service to the site. The Specific Plan EIR notes that an additional 15 police officers would be needed at Specific Plan buildout. The Police Department generally increases staffing over time to keep up with the City's Population growth. Since time of EIR certification, the Police Department has hired a range of new professional staff, dispatchers, officers, and a new mental-health-crisis-focused Mobile Evaluation Team. The Police Department has also formed the new Real Time Awareness Center (RTAC) that provides live intelligence via cameras around the City. As part of the Agreement, the Project will provide approximately 45 new license plate reader and CCTV type cameras in key locations around the site.

Further, the Project is required to provide alternative law enforcement access at major building exits, and to develop a Security Plan for each commercial block. The Police Department has reviewed and approves of the proposed plans and law enforcement assets. Further, a new Police substation is planned for the future Valley Link Station across Isabel Avenue. For all these reasons, Police levels of service are adequate and the proposed Project design will ensure enhanced safety for Livermore residents.

Parks and Schools

The General Plan's Open Space and Conservation Element and the City's and Livermore Area Recreation and Park District's (LARPD) Parks, Recreation, and Trails Master Plan establish service level requirements for the amount of open space provided per resident. The standards require one neighborhood park per 3,000 – 5,000 residents. The service area is also to be one half to one mile. The Project proposes one neighborhood park and three plazas, totaling two acres in size. Given Livermore's current average household size of 2.75 persons, the Project is estimated to generate approximately 3,600 people. This results in one park per 3,600 people, which is consistent with the General Plan's required service level. Therefore, there are sufficient parklands to serve the Project. In addition, future Project residents have access to nearby Cayetano community park. LARPD will ultimately maintain the proposed park and has reviewed and approved of the proposed plans. The proposed park design can be found on the Landscape Plans, Sheet L2-1.

The Livermore Valley Joint Unified School District (School District) has reviewed the proposed Project and has found that existing school capacity at all grade levels is sufficient to provide for the Project (Attachment 11). Currently, the School District can accommodate an additional 2,000 students. Based on the projected student generation rates, the Project will likely generate around 650 students, ranging from Kindergarten through 12th Grade. Therefore, the quantity of the Project's projected students will not exceed current school capacity, and existing capacity is sufficient to accommodate the Project. In addition, schools closest to the Project – Rancho Las Positas Elementary, Lawrence Elementary, Junction TK-8, and Granada High School – have sufficient room to house these additional students. The School District will continue to monitor student population needs as the Project and the Specific Plan build out. If student generation rates are substantially higher than anticipated, the School District may explore adding a new school on School District property within the Specific Plan (at the northeast corner of the intersection between North Canyons Parkway and Constitution Drive). For all these reasons, school levels of service are sufficient to accommodate the Project and future needs of the Specific Plan.

Surface Improvements

In addition to the underground infrastructure described in the *Utilities, Services, and Subsurface Infrastructure* section of this report, the Project will provide a range of above-ground surface improvements as well such as streets, sidewalks and bike trails. Elements of the surface improvements have been discussed in other sections of this report, but are referenced here for clarity. As described in the *Phasing and Timing* section of this report, the surface improvements are to be completed in phases and between 24 and 60 months from improvement plan approval, and in conjunction with adjacent Building Permit approvals.

The surface improvements generally consist of: 1) Required frontage improvements; 2) Onsite Improvements; and 3) Offsite improvements, as also described in the *Lot Size, Layout, and Circulation* and *Alternative Transportation Infrastructure* sections of the report. The frontage improvements include approximately 0.85 miles of separated Class IV and standard Class II bike lanes; necessary lane reconfiguration; two new traffic signals; two new bus stops; CA Department of Transportation (Cal Trans) embankment landscaping; and additional street trees. The onsite improvements will consist of five new public streets, including sidewalks, crosswalks, intersections, landscape strips, street trees, and street lighting; an Emergency Vehicle Access road; new stormwater retention areas; a special Main Street with enhanced paving, street furnishings, and pedestrian features; three new Plazas of approximately 0.5 acres in size; and one neighborhood park of approximately 1.5 acres in size. The offsite improvements will consist of one mile of additional bike lanes, a fully protected bike intersection, two additional bus stops, and a 1,500-foot-long landscaped median on Isabel with trees.

The required and negotiated improvements conform to all Specific Plan active transportation standards requiring Class IV bike lanes and conform to all Specific Plan policies that seek to create a walkable, bikeable, and tree lined boulevard along Isabel Avenue and Portola Avenue. Further, the Project conforms to all required City Standard details for streets, bike lanes, and other improvements. The City Engineer, Livermore Amador Valley Transit Authority, and the Maintenance Division have reviewed and approve of the Project's proposed improvements. A list of all improvements can be found in the Development Agreement.

Community Facilities District for Maintenance

The Project would be required to annex into the Specific Plan's Maintenance Community Facilities District, as allowed by the Mello Roos Act. Together with all previously approved projects, the Project's residences would be required to pay a new tax assessment that would cover the costs of above-ground infrastructure maintenance within the Specific Plan (this is distinct from the assessment described in the *Community Facilities District* section of this report which pays for subsurface infrastructure construction). The Maintenance CFD would cover the maintenance costs for all infrastructure like public streets, landscape strips and medians, plazas, and stormwater retention areas. All bike lanes would be maintained by the City using the General Fund. Maintenance of all private surface improvements like private landscaping, alleys, signage, etc. would be paid for by the Project's Homeowners' Association.

Auto Traffic

In response to California Senate Bill 743, the Governor's Office of Planning and Research (OPR) updated the California Environmental Quality Act (CEQA) guidelines to prohibit the use of delay-based metrics (Level of Service) and instead use vehicle miles traveled (VMT) as the basis for analyzing CEQA traffic impacts. The Specific Plan Supplemental EIR found Specific Plan buildout would not result in significant VMT impacts, as measured on a per capita basis (with 15% reduction per capita as the threshold of significance). Given that the Project is within the density ranges contemplated by the EIR, no significant VMT impacts would result from the project. Further, the Project's CEQA Addendum included a VMT analysis that concluded the Project would result in lower VMT than anticipated in the EIR, given the proposed revised mix of office and residential uses. However, LOS-based methodology was also included in the EIR for significance determination, as summarized below.

The Supplemental EIR found that, when measured as Level of Service, Specific Plan traffic impacts would be significant and unavoidable at the N. Livermore/ Portola intersection (i.e. worse than mid-level D LOS, representing more than 45 seconds of average delay per vehicle) during the AM and PM peak hours and on Airway Boulevard and Isabel Avenue arterial segments. The City Council adopted a Statement of Overriding Considerations, finding the social, economic, and other Specific Plan benefits outweigh the unavoidable and adverse traffic impacts, and that the benefits justify Specific Plan adoption. The Project is consistent with the densities identified in the Specific Plan's Supplemental EIR.

Further, the Project Addendum included a Focused Transportation Analysis that found no significant impacts to LOS if the report's recommendations are met. The recommendations include two through lanes along westbound Gateway Avenue to reduce stacking onto Isabel Avenue; implementation of a TDM plan upon issuing a Certificate of Occupancy to reduce vehicle trips; and other items. The Project is conditioned to implement all required recommendations of the Focused Transportation Analysis. For example, the Project's first Certificate of Occupancy cannot be granted until the Project Homeowner's Association's Covenants, Conditions, and Restrictions (CC&Rs) include obligations to form a Transportation Management Agency/ Implement a Transportation Demand Management Plan. The TMA/ TDM must be formed within 180 days of the first Certificate of Occupancy. The TMA must also coordinate with all other Specific Plan HOAs, to ensure a comprehensive TDM program is achieved, consistent with the Specific Plan TDM Policy. For all these reasons, no impacts to LOS beyond those identified in the EIR would occur.

The City Traffic Engineer and the City Engineer have reviewed and approved of the VMT and LOS studies and the Project's proposed transportation network.

Grading and Soils

The applicant has provided a grading plan and a Geotechnical Report for the site. The existing site slopes down from north to south with an elevation change of approximately

25 feet and slopes from east to west with an elevation change of approximately 10 feet. The Project proposes to grade the site to create a generally level construction surface. Given the existing grade changes, cut and fill would need to occur onsite, as shown in on Sheet TM 3.2.5 of the Civil Plans.

Staff supports the proposed grading plan given that it facilitates the residential density contemplated by the Specific Plan, ensures functional utilities like stormwater, and has a grade that is similar in height to adjacent existing development. The City Engineer has found the grading plan to meet all City grading standards, and the geotechnical report has found the site suitable for development, if certain recommendations are met. The Project has been conditioned to implement the Geotechnical Report.

Conditional Use Permit

According to Section 9.03 of the Development Code, the purpose of a Conditional Use Permit (CUP) is to provide sufficient flexibility in the use regulations in order to further the objectives of the Development Code. A Conditional Use Permit involves the process for reviewing uses to ensure they are compatible with their surroundings. Unlisted uses might be allowed by the applicable review authority approving the Conditional Use Permit, when the uses are necessary to the development of the community and are in no way detrimental to existing uses or to those allowed in the zone. In approving this permit, the review authority may impose any conditions deemed reasonable and necessary to ensure that the approval will comply with the findings required. A CUP will run with the land upon change of ownership or use.

In Chapter Two of the Specific Plan, there is a Neighborhood Commercial zoning designation shown in Subarea 3b (Figure 2-3) – the Project is still consistent with this designation. This designation applies to one block at the intersection of Isabel Avenue and Gateway Avenue. It allows a range of commercial uses with an emphasis on neighborhood-serving uses such as grocery stores, restaurants/cafes, and personal services. Commercial retail uses must be located on the ground floor and oriented around plazas, pathways, and public streets. Other complementary uses may be located in upper stories of a mixed-use building or separate from the primary retail center. Parking may be provided in a variety of formats, including in surface lots, rooftop lots, and/or belowground. Retail development incorporates outdoor seating, pedestrian-oriented features, and community gathering spaces.

According to Table 2-1 (Permitted Land Uses), the Neighborhood Commercial designation does not allow residential development as a permitted use, however it does allow a residential component to mixed use Project with a Conditional Use Permit. The applicant is therefore requesting a Conditional Use Permit to allow for multi-family residential units above the retail ground-floor uses.

The Project Resolution contains the findings for the Conditional Use Permit. In summary, the proposed Project is consistent with the General Plan, Specific Plan, Zoning, and that it is compatible with the surrounding uses and proposed use. Staff supports the Conditional Use Permit because the residential above the commercial meets many of the

Specific Plan goals and its impacts are minimal compared to commercial uses below. There will be enough cueing distance on the surrounding streets for vehicular traffic and the parking for the residential portion is compliant with the Specific Plan.

Master Sign Program Amendment

The Project is located within a portion of the boundary of Master Sign Program #DR01-029, approved in 2001 to guide proposed signage for the proposed development of commercial uses by applicant KLA Tencor that were not built out. The proposed amendment would remove the Project Site from the Master Sign Program area. The removal of an outdated, unimplemented commercial sign program for the Project Site, which is not consistent with the Project, is consistent with the General Plan designation and applicable policies for the Project Site.

Consistency Determination

The site contains easements that will require abandonment and re-dedication to align with the proposed backbone infrastructure of the Project. Government Code Section 65402(a) requires that if a General Plan has been adopted, no real property shall be acquired by dedication or otherwise or sold for public purposes until the location, purpose, and extent of such acquisition or disposition has been reported upon by the planning agency (e.g. Planning Commission) as to conformity with its General Plan. This includes vacation of right-of-way in whole or in part. Therefore, the Planning Commission is the review authority for this Consistency Determination for this portion of the Project.

The Project Site contains easements in favor of the City, as described and depicted on page TM 2.0 of Vesting Tentative Tract Map No. 8659 on the Civil Plans and includes the following City easements:

- Easement No. 4: 44’ emergency vehicle access easement (EVAE), private access easement (PAE) and public utility easement (PUE) in favor of the City of Livermore (as shown on Parcel Map 9770, filed Sept. 10, 2008 in Book 310, Pages 3 through 8, inclusive of maps);
- Easement No. 5: 15’ PUE and sidewalk easement (SWE) in favor of the City of Livermore (Recording No: Book 293, Page 14, inclusive of maps);
- Easement No. 11: 30’ sanitary sewer easement (SSE) in favor of the City of Livermore (to be separately quitclaimed) (as shown on Parcel Map 9770, filed Sept. 10, 2008 in Book 310, Pages 3 through 8, inclusive of maps);
- Easement No. 12: 15’ PUE in favor of the City of Livermore (Recording No. 2008-189562 of official records).
- Any other easement vacations necessary for the Project.

The above easements are proposed to be abandoned or vacated, as they are not necessary for any public purpose and are inconsistent with the Project, as proposed. New easements necessary to provide public services to the Project Site and any surrounding areas or that are otherwise necessary to serve any other legitimate public purpose will be dedicated by the Project in a manner that is consistent with its proposed

design the Development Code, other applicable city codes, and state law. The proposed vacation of easements is consistent with relevant policies and objectives of the General Plan.

Sustainability

Environmental sustainability is defined as the ability to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations. The City's General Plan lists objectives for identifying, creating, and maintaining sustainable practices. Some of those objectives include using recycled water, solar energy, electric vehicle charging readiness, landscaping that includes native species and pollinators, transit-oriented zoning, stormwater treatment, residential and commercial waste management, recycling, etc.

As the Specific Plan states in Chapter Four, the Isabel Neighborhood is served by the City's recycled water system and is an ideal location to focus new development from a water planning perspective. The water infrastructure of the Isabel Crossing Project will connect to the "purple pipe" (recycled water) for use in landscaped areas and for firefighting.

All buildings will meet the stringent requirements of the California Green Building Code and the California Energy Code, requiring nation-leading efficiency in water conservation and energy consumption through careful design, state-of-the-art appliances, and high efficiency building systems. All residential units will have EV charging capability and EV Charging spaces will be provided in the higher density and mixed-use buildings, as shown on the Parking Analysis sheet on page 40 of Exhibit C to the Project resolution. The buildings will be all electric, consistent with Specific Plan/EIR mitigation. All new buildings will also be outfitted with solar panels. The Project is conditioned to meet the Livermore Electric Vehicle Charging Reach Code.

The landscape architect designed the landscaped areas with sustainability in mind by using native species, pollinators, and water efficient irrigation and low to moderate water demanding shrubs and trees. The Project is designed to be a walkable, livable neighborhood where an individual's needs can be met within the Project site. The proposed Valley Link station will make this area desirable for those wishing to use public transit and rely less on automobiles. The pedestrian connections, bike lanes, and bike parking throughout the site facilitates the transit-oriented theme of the development.

Each residential and commercial area will have three streams of waste collection: organics, recycling, and landfill. Livermore Sanitation will service the Project site on regular basis. Each townhouse unit will have space for bicycle parking and the higer-density products will have secure bicycle parking spaces. All Planning Areas will have guest bicycle parking on-site. Storm water treatment will take the form of using bio-retention areas and trash-capture devices to prevent unwanted debris from entering our waterways. The aforementioned Goals and Polices address these sustainability aspects and the Developer must comply with them.

PUBLIC OUTREACH AND PUBLIC COMMENT

The City began the planning process for the Isabel Neighborhood in 2015. Initial Specific Plan outreach was conducted prior to the adoption of the Specific Plan. Outreach is key to developing an effective and feasible plan, so the planning team created a webpage with information about the planning process, meeting dates, and set up a feedback comment box. Visioning outreach events were conducted, coordination with Valley Link, LAVTA, and other public agencies took place, community workshops on land use alternatives were facilitated, an online survey was created, meetings were held with surrounding neighborhoods, and an open house was held on the Preferred Plan.

The Isabel Crossing Project was presented by City Staff at a Neighborhood Meeting on February 27, 2024 at the Courtyard Marriot on Constitution Drive. Residential property owners north of the I-580 freeway, Las Positas College, and all adjacent properties received notices for the meeting and approximately 50 people attended. The Developer, Architect, and Landscape Architect were also present to answer questions. Most of the questions were about the Project's impact to the existing residential areas, such as parking and traffic, and utilities like water and sewer. Comments centered on existing residents wanting certain services available in the Isabel Crossing Project such as a grocery store and other convenient services that they would otherwise have to cross the freeway to find. In general, the attendees received the presentation positively and welcomed the Project. The Developer created and is still hosting a website (isabelcrossing.com) for the Project complete with renderings, narratives, and a question-and-answer portion.

Per Senate Bill 18 requirements, Staff sent letters of invitation on March 21, 2024, to comment on the Project to tribal elders from several local Tribes. The Tribes have 90 days to respond and request any consultation. The City received two responses requesting additional information, which Staff promptly provided. No consultations were requested.

Before the publishing of this Staff Report, Staff received seven letters of support (Attachment 12) from various community members and stakeholders, including Las Positas College, Livermore Chamber of Commerce, Wente Vineyards, Innovation Tri-Valley, and Interfaith Housing, Inc. In general, the support for the Project is for the following reasons:

- The Project provides affordable housing that is over and above the requirement and will add to the stock of work-force housing.
- The Project is well-suited for low-income seniors as it offers transportation opportunities.
- The Project offers the opportunity for food and services/conveniences within walking distance.
- The Project offers job opportunities in the commercial blocks.

- The Project offers small and medium-sized businesses an opportunity to establish themselves.
- The Project offers housing affordability options that would benefit Las Positas College students, faculty and staff.
- The Project features sustainability features such as the use of reclaimed water, drip irrigation, low-water usage landscaping, solar panels, EV charging, and efficiency energy usage.
- The Project will create new pedestrian and bike connections and will make non-vehicular travel safer.

LIVERMORE
CALIFORNIA

INTEROFFICE MEMORANDUM

Date: May 14, 2024

To: Stephen Riley, Acting Planning Manager

Via: Joel Waxdeck, City Engineer

From: Rick Teczon, Senior Civil Engineer

Subject: Isabel Crossing – Wet Utility Infrastructure Assessment

The utility infrastructure capacities and demands associated with existing and future development considered in the Isabel Neighborhood planning area have been assessed as part of the City's master planning efforts. Reference the following documents publicly available on the City's website:

- *2022 Storm Drain Master Plan*, prepared by Schaaf & Wheeler Consulting Civil Engineers
- *2017 Water Master Plan*, prepared by West Yost Associates
- *2017 Sewer Master Plan*, prepared by West Yost Associates

The proposed Isabel Crossing project is included in the utility infrastructure analyses documented is these master plans. In general, the proposed Isabel Crossing project's demands for stormwater drainage, potable water supply, and sewer collection have been analyzed and can be met by the City's existing and planned utility infrastructure.

Hydraulic analyses were conducted for conveyance (i.e. pipes, pump stations, and lift stations) and storage (i.e. reservoirs) infrastructure under both existing and buildout conditions. Existing utility infrastructure is in place within the Isabel Neighborhood planning area to serve the existing developed areas. Following is additional detail regarding the City's utility infrastructure assessments.

Stormwater Drainage Collection System

Based on the stormwater drainage flow projections, the following stormwater drainage collection system improvements were recommended in the *2021 Storm Drain Master Plan*:

- Improvements to the storm drainage pipe at Airway Boulevard between Modoc Place and the Arroyo Las Positas outfall.

- Construction of a floodwall along both banks of Arroyo Las Positas between Airway Boulevard and Isabel Avenue.

However, both recommended improvements were ranked as low-priority projects in the *2021 Storm Drain Master Plan*, and as such have not been incorporated into the City's Capital Improvement Plan. Furthermore, neither of these recommended improvements are identified in the *2021 Storm Drain Master Plan* as improvements required to mitigate the impacts of future development.

Potable Water Supply Distribution System

Based on the potable water demand projections for the Isabel Neighborhood land uses, no additional potable water supply system improvements were recommended in the *2017 Water Master Plan*, other than potential extension of distribution pipelines to provide service to new development.

Sewer Discharge Collection System

Based on the sewer flow projections for the Isabel Neighborhood land uses, the following collection system improvements were recommended in the *2017 Sewer Master Plan* to serve future planned development under the proposed Isabel Neighborhood Plan:

- Improvements to the gravity mains crossing Highway 580 and along Clubhouse Drive. These recommended improvements have not been incorporated into the City's Capital Improvement Plan based on further hydraulic assessment, as discussed below.

- Additional capacity at the City's Airport Lift Station. This recommended improvement has been incorporated into the City's current Capital Improvement Plan as Project No. 2025-12.

In addition to the gravity main and Airport Lift Station improvements identified in the master plan, the City subsequently assessed the capacity of the College Lift Station to serve the Isabel Neighborhood. Accordingly, HydroScience, at the City's direction, conducted a hydraulic assessment to confirm the previously identified gravity main capacities and to assess the performance of the existing College Lift Station, as documented in the *2021 Isabel Neighborhood Hydraulic Modeling and College Lift Station Evaluation Technical Memorandum*. HydroScience's assessment refined the existing hydraulic modeling included in the *2017 Sewer Master Plan* to improve accuracy and better reflect industry standards. Based on this assessment:

- The gravity mains crossing Highway 580 and along Clubhouse Drive were determined to not require upsizing.

- The College Lift Station pumps appear to be operating within acceptable parameters. However, there is less than one hour of combined emergency storage capacity at the College Lift Station wet well and collection system piping if the pumps were to fail at peak hour flow during dry weather or at any time during a 5-year storm.

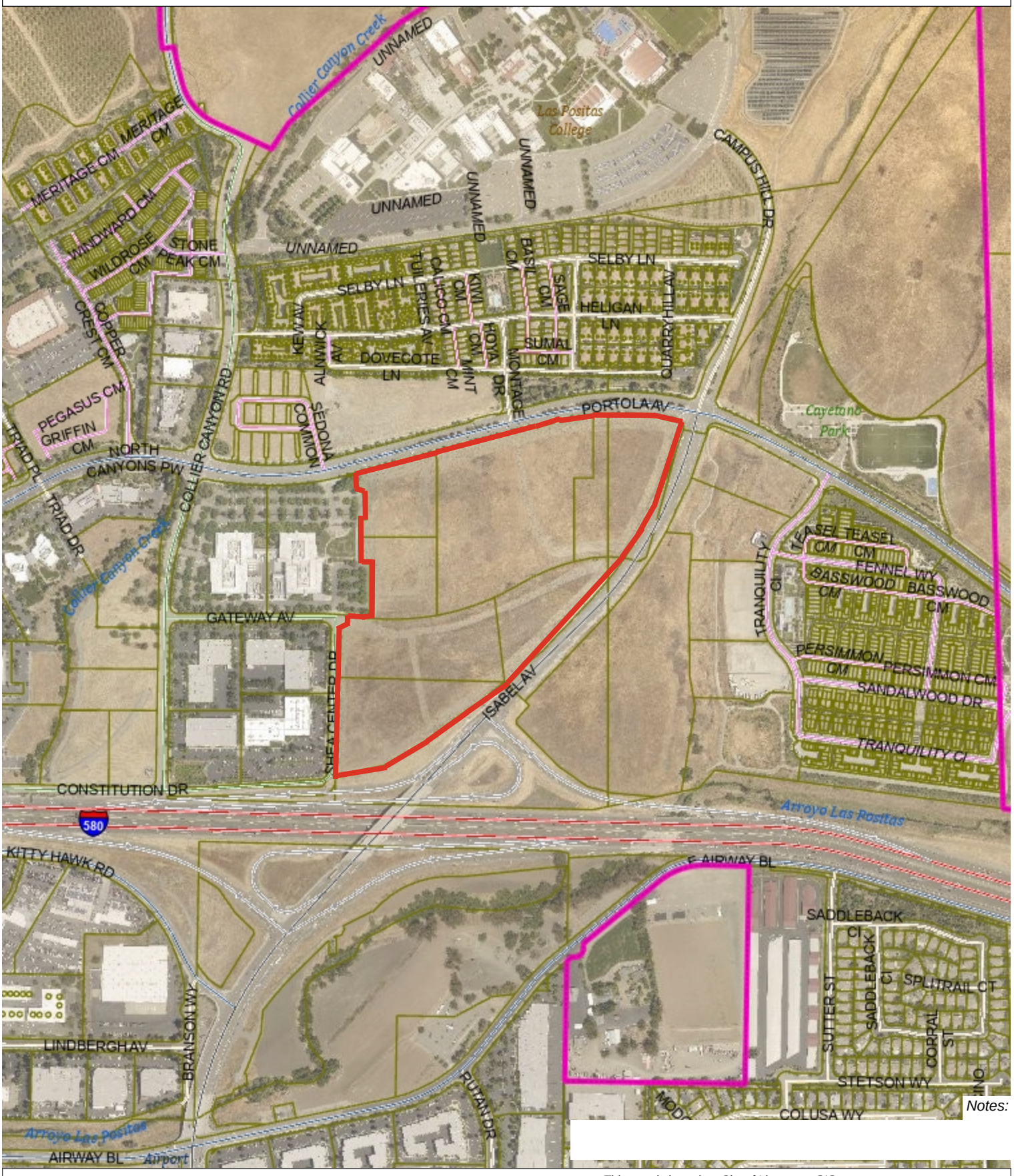
Based on these results, it appears that implementing the collection piping improvements identified in the *2017 Sewer Master Plan* (i.e. I-580 Crossing upsizing and Club House Drive upsizing) are not required prior to construction of the current development uses being considered in the Isabel Neighborhood. Furthermore, modifications to the College Lift Station do not appear to be required, although the addition of dedicated onsite emergency pumping facilities to expedite response time may be worth considering and the projected capacity demands for this lift station are right at the threshold for triggering a new sewer improvement project for the College Lift Station (i.e. peak flow slightly exceeds pumping capacity, but only for a brief period that can be accommodated by the wet well storage capacity). Accordingly, the existing collection system could accommodate buildout conditions included in Appendix B to the *2017 Sewer Master Plan* (Isabel Neighborhood Plan Sewer System Evaluation Project), which includes the proposed Isabel Crossing project, but would have no excess capacity for additions to the buildout condition.

Note that there are some model revisions and refinements recommended by HydroScience that the City will consider implementing during the next update to the sewer master plan and associated hydraulic model for the collection system.

LIVERMORE CALIFORNIA

Location Map

ATTACHMENT 3



Notes:

1,333.3 0 666.67 1,333.3 Feet

Scale: 1: 8,000

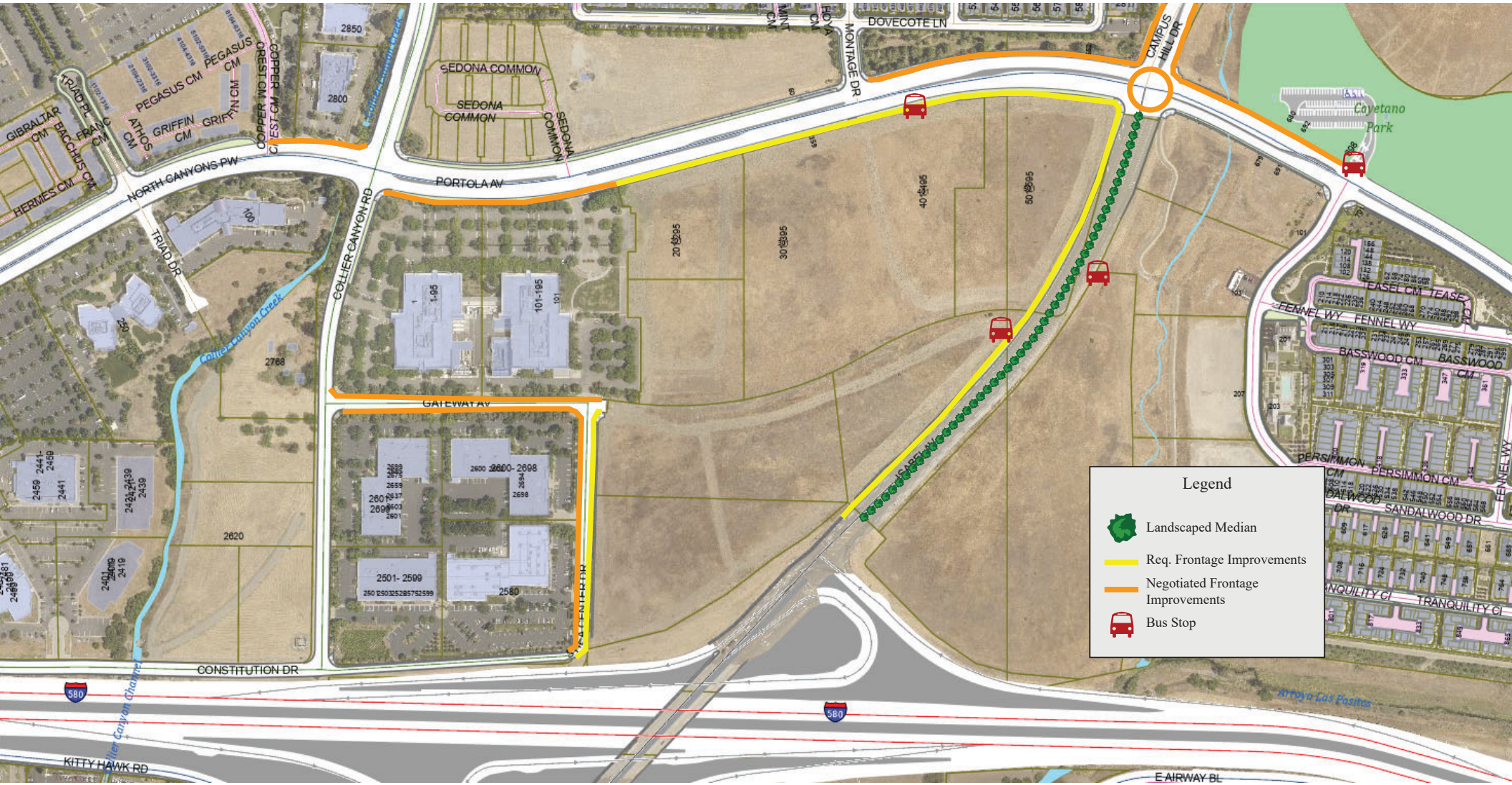
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Livermore IT, GIS Services

This map is based on City of Livermore GIS Information and reflects the most current information at the time of this printing. The map is intended for reference purposes only and the City and its staff is not responsible for errors.

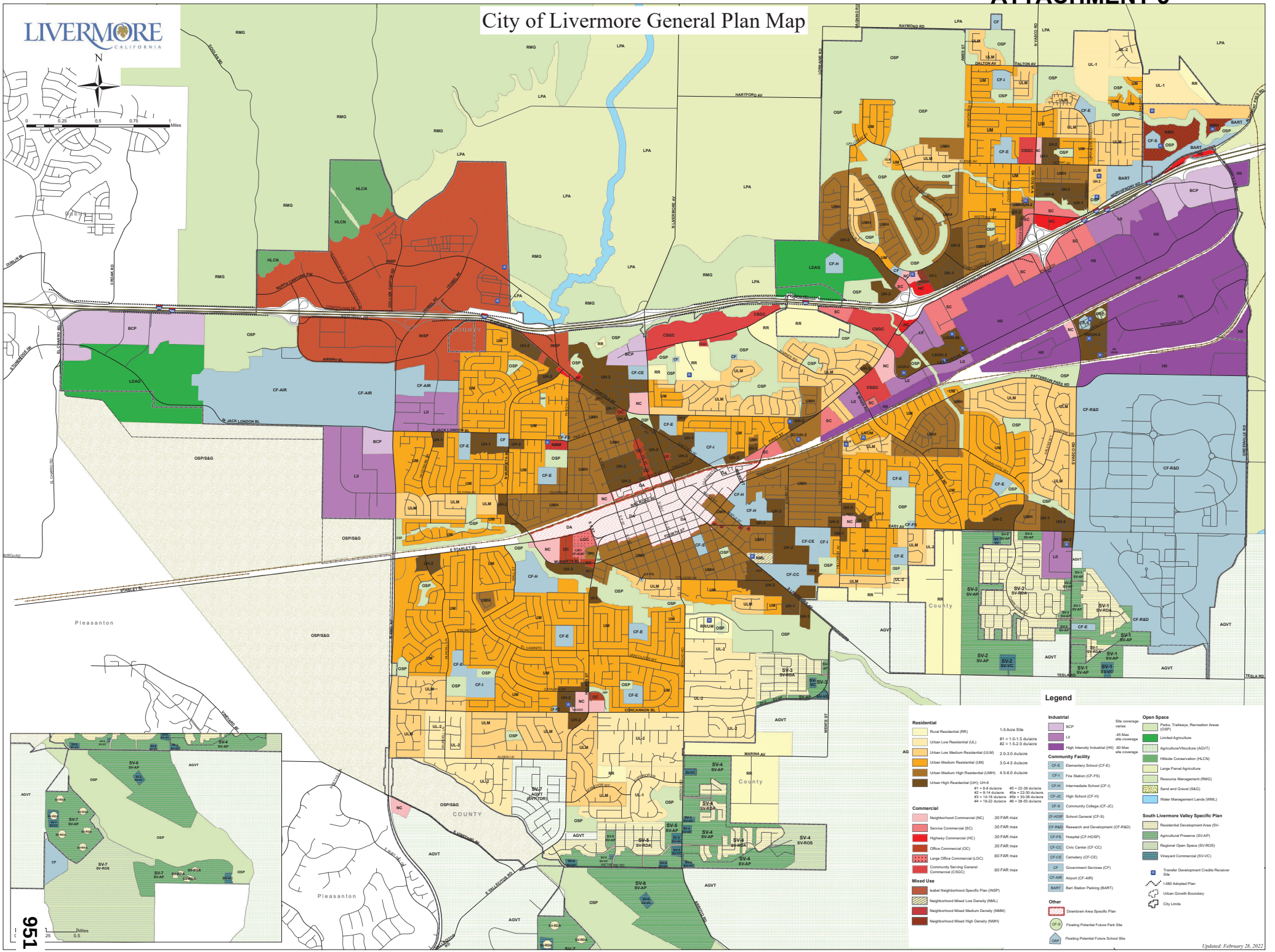
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Legend
Landscaped Median
Req. Frontage Improvements
Negotiated Frontage Improvements
Bus Stop
NORTH CANYONS PW
PORTOLA AV
COLLIER CANYON RD
TRIAD DR
GATEWAY AV
CONSTITUTION DR
KITTY HAWK RD
E AIRWAY BL
DOVECOTE LN
MONTAGE DR
CAMPUS HILL DR
SEDONA COMMON
Cavetano Park
FENNEL WY
BASSWOOD CM
PERSIMMON CM
SANDALWOOD DR
TRANQUILITY CI
Collier Canyon Creek
Arroyo Las Positas
580

ATTACHMENT 5

City of Livermore General Plan Map



ATTACHMENT 5

City of Livermore Zoning Map

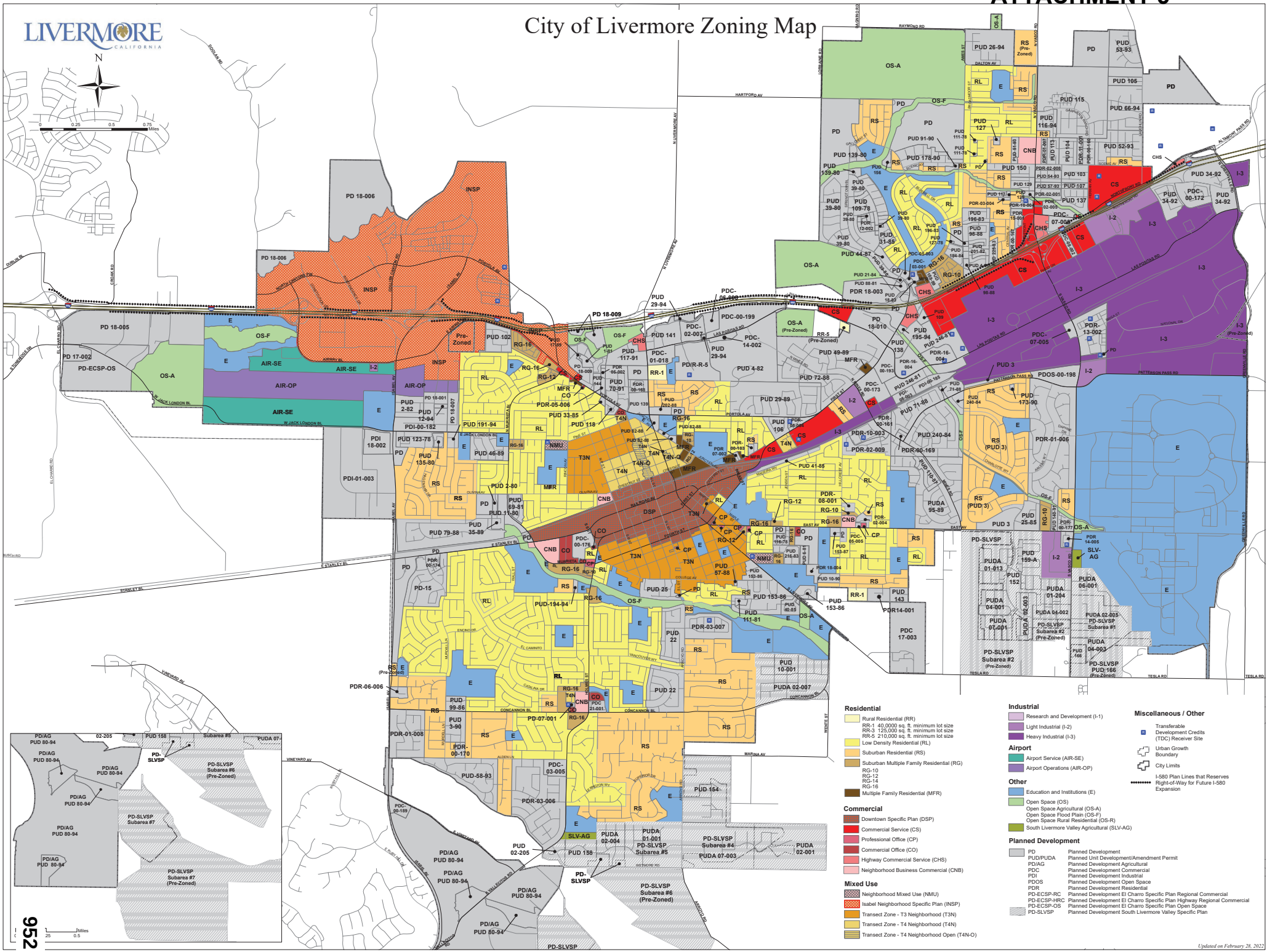
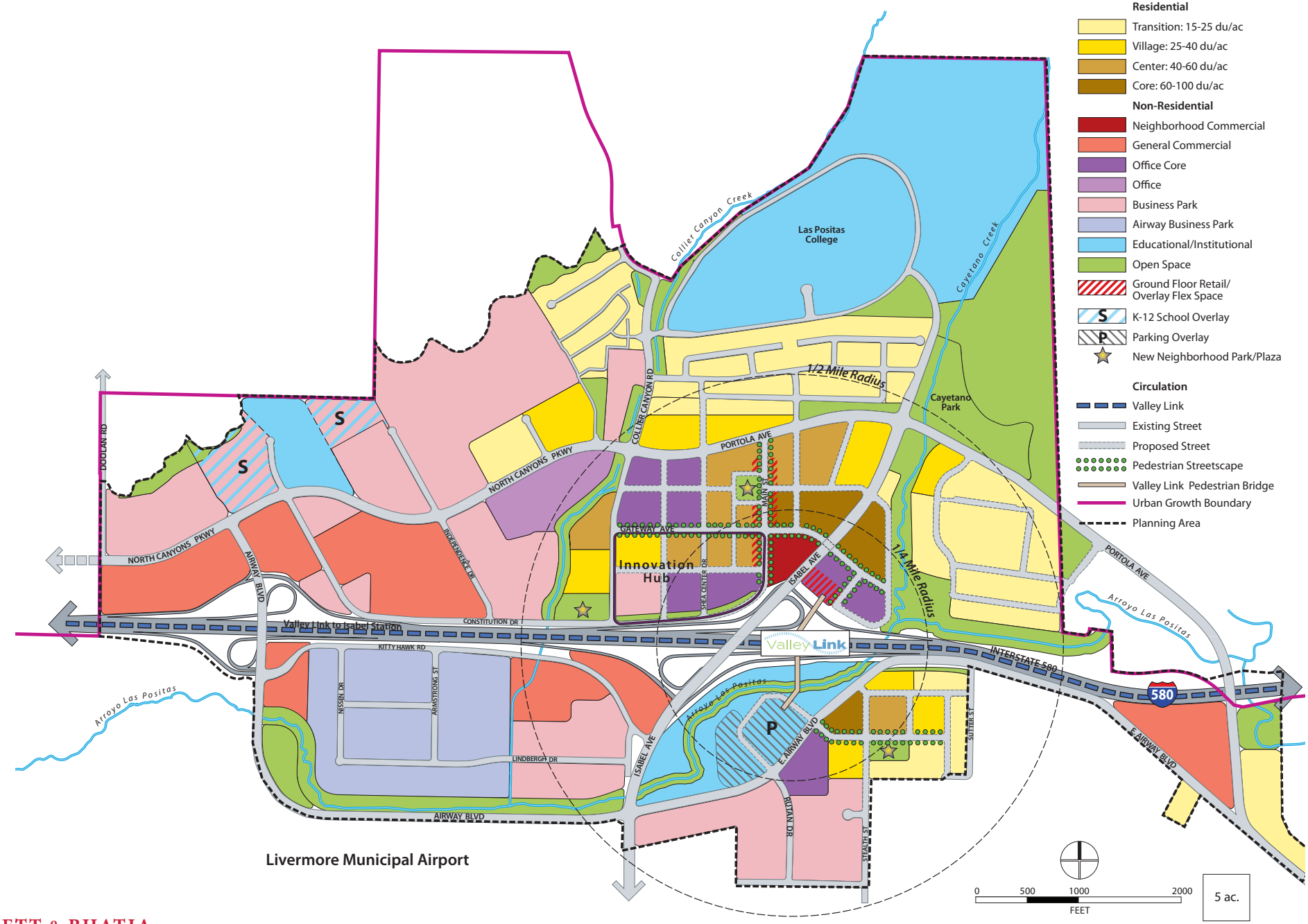


FIGURE 2-1: LAND USE DIAGRAM



DYETT & BHATIA
Urban and Regional Planners

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, Governor

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October 2, 2019

MEMORANDUM FOR: Planning Directors and Interested Parties

FROM: Zachary Olmstead, Deputy Director
Division of Housing Policy Development

SUBJECT: **No Net Loss Law**
Government Code Section 65863

The purpose of Government Code Section 65863 (No Net Loss Law), is to ensure development opportunities remain available throughout the planning period to accommodate a jurisdiction's regional housing need allocation (RHNA), especially for lower- and moderate- income households. This memorandum provides guidance on the implementation of Government Code section 65863, including amendments pursuant to Chapter 367, Statutes of 2017 (Senate Bill 166).

Summary of No Net Loss Requirements

- A jurisdiction must maintain adequate sites to accommodate its remaining unmet RHNA by each income category at all times throughout the entire planning period.

- A jurisdiction may not take any action to reduce a parcel's residential density unless it makes findings that the remaining sites identified in its Housing Element sites inventory can accommodate the jurisdiction's remaining unmet RHNA by each income category, or if it identifies additional sites so that there is no net loss of residential unit capacity.

- If a jurisdiction approves a development of a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, it must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level, or identify and make available sufficient sites to accommodate the remaining unmet RHNA for each income category.

- A jurisdiction may not disapprove a housing project on the basis that approval of the development would trigger the identification or zoning of additional adequate sites to accommodate the remaining RHNA.

If you have any questions, or would like additional information or technical assistance, please contact the Division of Housing Policy Development at (916) 263-2911.

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Background

Since 1969, California has required that all jurisdictions (cities and counties) adequately plan to meet the housing needs of everyone in the community. California's local governments meet this requirement by adopting Housing Elements as part of their general plan. To demonstrate the availability of land to accommodate future housing development, a Housing Element is required to include an inventory of housing sites, or "adequate sites", with sufficient capacity by income level to accommodate a jurisdiction's RHNA by income category. (Gov. Code, § 65583, subd. (a)(3).)

Example: RHNA By Income Category	
Very Low Income	300 Units
Low Income	260 Units
Moderate Income	250 Units
Above Moderate Income	650 Units
Total RHNA	1,460 Units

To expand the supply of housing, including affordable housing, and to ensure jurisdictions do not take actions to reduce the potential capacity for new development, the Legislature adopted the No Net Loss Law in 2002. The No Net Loss Law ensures that a jurisdiction maintains a sufficient supply of adequate sites in the Housing Element sites inventory throughout the RHNA planning period. This law was amended by Chapter 367, Statutes of 2017 (Senate Bill 166), which requires sufficient adequate sites to be available at all times to meet a jurisdiction's remaining unmet housing needs for each income category. To comply with the No Net Loss Law, as jurisdictions make decisions regarding zoning and land use, or development occurs, jurisdictions must assess their ability to accommodate new housing on the remaining sites in their Housing Element site inventories. A jurisdiction must add adequate sites if land use decisions or development results in a shortfall of sufficient sites to accommodate its remaining housing need for each income category.

What is an adequate site?

Pursuant to Government Code section 65583.2, an adequate site must be available and suitable to accommodate development. Factors include:

- Have infrastructure available or planned to support a housing development.
- Be available to be developed in the planning period. For non-vacant sites, this means that the existing use is not an impediment to additional residential development.
- Be appropriately sized (larger than half an acre and smaller than 10 acres) to accommodate lower income housing.
- For sites accommodating lower income households, the sites must have appropriate zoning as demonstrated by analysis, or by meeting prescribed densities.
- Identify the number of units (capacity) that can be realistically accommodated on the site.

For more information, visit the Department's Housing Element Building Block Webpage.

No Net Loss Law and Charter Cities

Pursuant to Chapter 856, Statutes of 2018 (Senate Bill 1333), the No Net Loss Law applies to all jurisdictions, including charter cities. This requirement was effective on January 1, 2019, and applies to the current and subsequent Housing Element planning periods.

Responsibilities and Requirements Under No Net Loss Law

No Net Loss Law can be divided into three statutory areas of responsibility for jurisdictions to consider when making land-use decisions related to sites and capacity identified in the Housing Element to accommodate the RHNA:

- Maintaining Sites (Government Code section 65863(a))
- Jurisdiction Actions Relating to Zoning (Government Code section 65863(b)(1))
- Approval of Development at a Lower Density (Government Code section 65863(b)(2))

Maintaining Sites

A jurisdiction must ensure their Housing Element sites inventory continues to have capacity at all times to accommodate the RHNA by income group throughout the planning period. This requires a careful accounting of development on the sites identified in the Housing Element and residential projects throughout the jurisdiction. Action by the jurisdiction to modify development standards in a way that would result in a lower density, limit or stop development on sites identified in the inventory, exchange sites in the inventory, or downzone sites would trigger No Net Loss unless the jurisdiction can make the required findings or identify alternative sites.

If, at any time during the planning period, the jurisdiction finds that there is a shortfall of sites to accommodate its remaining RHNA, the jurisdiction must take immediate action to correct the shortfall by amending its Housing Element sites inventory to either include sites previously unidentified with capacity to accommodate the shortfall, or sites that have been rezoned to correct for the shortfall. Failure to do so constitutes a violation of the No Net Loss law. Please note, Housing Element law requires the element to identify sufficient adequate sites to accommodate the RHNA for all income levels. However, many jurisdictions choose to include sites in their Housing Element inventory above and beyond what is required to accommodate RHNA, including sites that are not considered suitable to accommodate RHNA for lower-income households (e.g., sites less than one-half acre or larger than 10 acres). When making findings that the Housing Element continues to accommodate the remaining RHNA, jurisdictions should only consider capacity of sites in the inventory that was determined adequate. Jurisdictions should not consider inadequate or unsuitable sites as adequate or available to accommodate RHNA for the purposes of No Net Loss Law.

The lack of sites to accommodate the jurisdiction's RHNA represents a fundamental alteration to the jurisdiction's ability to meet Housing Element Law. Therefore, the amended inventory must (1) demonstrate sites to address the shortfall meet the adequate site requirements of Housing Element Law, pursuant to Government Code section 65585(b), and (2) be submitted to the California Department of Housing and Community Development (Department) for review to ensure compliance with state Housing Element Law. (Cal. Gov't Code §65580 et seq.) (Housing Element Law).

Helpful Hints

To ensure that sufficient capacity exists in the Housing Element to accommodate the RHNA throughout the planning period, create a buffer in the Housing Element inventory of at least 15 to 30 percent more capacity than required, especially for capacity to accommodate the lower-income RHNA. Jurisdictions can also create a buffer by projecting capacity less than what is allowed from the maximum density to allow for some reductions in density, or rezoning additional sites above what is needed to accommodate the RHNA.

Jurisdictions should keep an updated accounting of development on the sites in the inventory and throughout the jurisdiction to ascertain the impact that development has on accommodating the remaining RHNA. This can be done in any number of ways, but an example of one methodology can be found in the Resources section below, in addition to a program committing to such an update in the Housing Element.

Decisions to Carefully Consider – Development Limitations

No Net Loss Law explicitly states that at no time may a jurisdiction take an action to permit or cause the sites inventory to be insufficient to meet its remaining RHNA without triggering the statute. The only exception is the 180-day timeframe for replacing capacity from the approval of a development at a lower density that results in a shortfall of sites to accommodate the RHNA (see page 8.) Therefore, a jurisdiction should carefully consider the introduction or adoption of development limitations (e.g., development standard limitations, policies or ordinances that affect the development potential of a site, development moratorium). A jurisdiction should carefully examine the effect of these types of actions on development capacity and consult with their legal counsel prior to approval.

Zoning and Development Standard Modifications – Changes in development standards may affect the potential capacity of a site. For example, an increase in parking requirements, reductions in height limitations or lot coverage, new design requirements, or modifications to set-back requirements, all impact the buildable area of a site and could reduce the housing unit potential. Zoning and development standard modifications should be carefully considered to ensure that they do not impact the potential capacity of a site in a jurisdiction's inventory.

Growth Control Ordinances – If a jurisdiction considers adoption of an ordinance or other measure that limits growth or development potential through unit or population caps, or limits where development can occur through the use of buffers, or by phasing development, it must consider the statewide shortage of housing and the requirements of No Net Loss Law. The adoption of one or more of these types of ordinances could prevent a jurisdiction from accommodating its RHNA either by affecting a site in the inventory, or by limiting development as a whole. Proposed growth limiting ordinances should be prudently drafted so as not to impact the accommodation of the remaining RHNA throughout the planning period. Otherwise, implementation of the ordinance may violate No Net Loss Law.

How do growth control ordinances relate to the RHNA?

Government Code section 65302.8 requires findings be made to ensure that a jurisdiction can continue to fulfill requirements of Housing Element Law, including the accommodation of the RHNA. Findings include a description of the following:

- The jurisdiction's RHNA.
- The specific housing programs and activities being undertaken by the jurisdiction to achieve RHNA objectives.
- How the public health, safety, and welfare would be promoted.
- Fiscal and environmental resources available to the local jurisdiction.

Moratoriums – Pursuant to Government Code section 65858, jurisdictions may adopt a 45-day interim ordinance prohibiting any uses, including housing, that may be in conflict with a contemplated general plan, specific plan, or zoning proposal. This applies to a general plan, specific plan, or zoning proposal that the legislative body, planning commission or the planning department is considering, studying, or intends to study within a reasonable time. While the ordinance may be extended for other uses, a moratorium on the development of multifamily housing cannot be extended unless specific findings are made. In addition, regardless of its duration, a moratorium that affects sites in the Housing Element inventory may be in conflict with the No Net Loss Law, as the law requires a jurisdiction to maintain capacity at all times to accommodate the RHNA. A jurisdiction should consult counsel prior to enacting a moratorium on housing.

Jurisdiction Actions

Jurisdiction actions include downzoning or other actions taken by a jurisdiction to reduce a parcel's allowable residential density. This can be done through a change in zoning or an imposition of density limitations that preclude that ability to achieve densities assumed in the Housing Element sites inventory. If the parcel to be downzoned is identified in the Housing Element, a jurisdiction must make written findings, supported by substantial evidence, that:

- The reduction is consistent with the jurisdiction's adopted general plan, including the Housing Element. For example, this finding could be made if downzone does not change the land use and zoning designation.

- The remaining sites identified in the Housing Element are adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction's remaining share of the RHNA for the planning period. The finding must include a quantification of the remaining unmet need for the jurisdiction's RHNA at each income level and the remaining capacity of sites identified in the Housing Element to accommodate that need by income level.

If a jurisdiction cannot make these findings, it may take action to reduce the residential density of a parcel only if it identifies or rezones additional sufficient adequate sites with an equal or greater residential density in the jurisdiction so that there is sufficient residential unit capacity appropriate to accommodate the RHNA by income level. Actions to identify additional sites or rezone must occur before or concurrently with any action or approval to reduce a parcel's density. Sites identified or rezoned must meet the following criteria:

- Must be considered an adequate site pursuant to the requirements of Government Code section 65583.2.
- If the capacity to be replaced was on a site that was zoned by-right pursuant to Government Code section 65863.2 (h) and (i), then the replacement site must also satisfy those requirements.

As these actions taken by the jurisdiction represent a fundamental alteration to the Housing Element, the Housing Element sites inventory must then be amended and, pursuant to Government Code section 65585(b), be submitted to the Department for review to ensure the compliance with state Housing Element Law, prior to, or concurrently with, any action or approval to reduce a parcel's density.

Helpful Hints

If unsure as to whether new sites identified or rezoned will meet Housing Element adequate sites requirements, contact the Department's Housing Policy Division for a Housing Element reviewer to provide technical guidance.

Rezoned sites may include sites previously identified in the sites inventory that are rezoned to a higher density zoning designation than identified in the sites inventory.

Decisions to Carefully Consider – Changes to Zoning

General Plan Updates – Sometimes land use inconsistencies arise during a general plan update when undertaken separately from the Housing Element. A jurisdiction updating the land use element of the general plan must consider the sites inventory of the Housing Element. If sites identified in the Housing Element site's inventory will be downzoned as part of the general plan update, other sites must be identified or rezoned to accommodate the resulting shortfall of capacity. Under state law, the land use element must be consistent with the Housing Element, and if the land use element does not permit the density in the Housing Element, the Housing Element or land use element must be amended to achieve consistency.

Approval of Development at a Lower Density

A jurisdiction must make written findings or identify additional site capacity if a development is allowed with a lower density than what was assumed in the sites inventory of the Housing Element. A lower residential density sometimes results from a jurisdiction either approving a development with residential units less than what was assumed for the site or affordable to a different income category than the site was assumed to accommodate. Lower residential density could also result from another use, such as commercial being approved on a site identified in the inventory for housing regardless of what the zoning allows.

What constitutes a "lower-density"?

For jurisdictions with an adopted Housing Element found in compliance with Housing Element Law:

- Fewer units will be developed on the site than projected in the sites inventory (capacity) or program of the Housing Element.

For jurisdictions out of compliance with Housing Element Law:

- A density that is lower than 80 percent of the maximum allowable residential density for that parcel, or 80 percent of the maximum density required by Government Code section 65583.2(c)(3), whichever is greater. For more information on default densities, please see the Department's Building Block website.

At the time of approval, the following written findings must be made, and supported by substantial evidence in the record:

- Remaining sites identified in the Housing Element are adequate to meet the jurisdiction's remaining RHNA for the planning period by income category.
- The findings should include a quantification of the remaining unmet need for the jurisdiction's RHNA at each income level and the remaining capacity of sites identified in the Housing Element, to accommodate that need by income level.

If the approval of a development at a lower residential density results in the remaining sites capacity becoming inadequate to accommodate the RHNA by income category, a jurisdiction has up to 180 days from the approval to identify, or rezone, "sufficient additional, adequate, and available sites" to accommodate the remaining RHNA for each income category. Sites identified or rezoned must meet the following criteria:

- Must be considered an adequate site pursuant to the requirements of Government Code section 65583.2.
- If the capacity to be replaced was on a site that was zoned by-right pursuant to Government Code section 65863.2 (h) and (i), then the replacement site must also satisfy those requirements.

A jurisdiction must report in the jurisdiction's Annual Progress Report (APR) any sites that have been identified or rezoned to accommodate the resulting shortfall due to the approval of a development at a lower density. APRs are required to be sent to the Department by all jurisdictions by April 1, pursuant to Government Code section 65400. For more information on completing this section of the APR, see the Department Webpage and select "Annual Progress Reports."

Who makes the findings?

The body that "takes action or approves" the jurisdiction action to reduce a parcel's density or approve a development at a lower density would make the findings. For example, if a zoning administrator approves a development at a lower density, as part of the approval, the administrator would include the appropriate findings. For instance, if the development approval is ministerial under the Streamlined Ministerial Approval Process (SB 35, 2017), the findings should be included as part of the plan review and approval. If the City Council is approving a zone change, it must include the findings in the resolution adopting the zone change.

Helpful Hints

The jurisdiction has only 180 days to complete any rezoning needed to accommodate a shortfall of adequate sites to accommodate the RHNA due to the approval of a development at a lower density. To ensure the rezones can be completed on time, it is recommended that the jurisdiction begin the rezone process early in the development application approval process.

Jurisdictions may post the sites inventory on their website with the capacity estimates from the Housing Element for developers to reference when considering projects on sites identified in the Housing Element.

Decisions to Carefully Consider – Development Approval

Jurisdictions out of compliance with state Housing Element Law - No Net Loss Law provisions related to approving a lower density development applies to all jurisdictions regardless of Housing Element compliance status. A jurisdiction that has not adopted a Housing Element within 90 days of the due date, or has a Housing Element out of compliance, must still comply with No Net Loss requirements, even though they may not have a Housing Element Law compliant sites inventory. If the jurisdiction does not have a current sites inventory to compare the project unit count, the determination of lower density would be required for all new housing development.

Denying an application - A jurisdiction may not deny a housing development application on the basis that approval of the development would trigger the identification, or zoning, of additional adequate sites to accommodate the remaining RHNA.

However, since the term "housing development" is used in the statute, it does not prevent a jurisdiction from denying a non-residential development on an identified site if it would trigger the identification, or rezoning, of additional adequate sites.

Requests for developer assistance with complying with No Net Loss Law – While the jurisdiction is solely responsible for compliance with No Net Loss Law, under limited circumstances the statute does allow a jurisdiction the option to require the applicant to assist the jurisdiction in meeting these provisions. Specifically, requests can be made if an applicant's initial development application requests a residential density that results in the remaining sites in the sites inventory being insufficient to accommodate it remaining RHNA. A jurisdiction cannot require developer assistance if the subsequent approval process results in a reduction of units.

Types of assistance required could include help with the identification of additional sites for potential rezones or community outreach. However, requests should be balanced with the potential impact on the overall viability of the project. Overly burdensome requirements may make a development project financially infeasible and could, in effect, constitute a denial of the project or may violate the Housing Accountability Act (Government Code section 65589.5.)

California Environment Quality Act (CEQA)

The act of identifying or making available additional adequate sites, in and of itself, to comply with the statutory requirements to accommodate the remaining unmet RHNA, does not trigger a CEQA review. However, if making available additional adequate sites requires an increase in density, a rezone, or other actions that constitute a "project" under CEQA, a CEQA analysis would be required.

When approving a site at a lower residential density, the possibility of a CEQA analysis should be considered since the CEQA review must be completed within the 180-day timeline to identify and rezone additional, adequate sites to accommodate the remaining RHNA by income category. The failure to complete a timely CEQA analysis would render the additional sites inadequate to accommodate the remaining unmet RHNA. This would be a violation of No Net Loss Law and could also render the Housing Element out of compliance with state Housing Element Law.

Failure to Comply with No Net Loss Law

In addition to violating of the No Net Loss Law, the failure to ensure that there are sufficient adequate sites to accommodate the unmet RHNA by income category throughout the entire planning period is also a violation of the Housing Element Law. This is because the Housing Element will also fail to identify adequate sites to accommodate the RHNA by income category. As a result, pursuant to Government Code section 65585 (i) and (j), the Department may revoke a jurisdiction's Housing Element compliance and/or refer the violation to the Attorney General. In addition, a third party may file an action to challenge the jurisdiction in court.

Resources

Identifying Your Remaining RHNA and Maintaining Capacity

A jurisdiction should implement an ongoing, project-by-project evaluation of each approved residential development to ensure that sufficient adequate site capacity is available to accommodate the remaining RHNA by income category throughout the planning period. This evaluation could also be used to complete the APR required to be sent to the Department by April 1 of each year.

The evaluation procedure could utilize a spreadsheet or tool, such as the No Net Loss Capacity Calculation Tool below, to subtract the number of residential units in each approved development from the RHNA to determine the remaining unmet RHNA by income category. The total number of approved units by income category could then be subtracted from the Housing Element's sites inventory site capacity by income category to determine the remaining site capacity.

No Net Loss Capacity Calculation Tool Example

Step 1: Determine remaining RHNA

- Identify the reported RHNA from permitted projects as reported in the Housing Element Annual Progress Report (Table B of the Annual Progress Report). If the jurisdiction has not yet completed those reports for the planning period, please go to the Departments Webpage and select "Annual Progress Reports."
- Identify any projects from the planning period that have received their approvals/entitlements and are anticipated to pull their building permits.
- Identify the number of units permitted or that have been approved/entitled in the current reporting year (including accessory dwelling units and other alternatives under Government Code section 65583.1.)
- Calculate the remaining RHNA to date.
- If determining potential No Net Loss capacity of a proposed development, subtract the units from the proposed development to get the remaining RHNA resulting from the proposed project.

Example:
City A has an application for a market rate project for 75 high-end multifamily apartments. This project is being proposed on a site identified in the inventory as having the ability to accommodate a portion of its very low- and low-income RHNA.

Table A: Remaining RHNA

	Very Low-Income	Low-Income	Moderate-Income	Above Moderate-Income
RHNA	300	260	250	650
Year	Reported Progress			
2014	-5	-15	-2	-50
2015			-5	-100
2016	-25	-25	-20	-60
2017				-250
2018	-15	-60	-25	-75
Project Name/APN	Projects approved/entitled anticipated to pull permits			
Siempre Verde 001-256-2154, -57				-4
Project Name/APN	Current Year Progress			
Hightop Condos 001-256-5574		-7		-75
Sunflower Apt 001-256-4475	-25	-50		
	Remaining RHNA To Date			
	230	103	198	36
Project Name/APN	Proposed Project RHNA			
Magnolia Luxury Apt 001-256-4472				-75
Remaining RHNA with Proposed Development				
	230	103	198	0

Step 2: Determine remaining capacity from the Housing Element sites inventory*

- Identify the total site capacity from the Housing Element by income category.
- List the capacity estimated in the Housing Element for an accessory dwelling unit (ADU), or other alternative site capacity methodology.
- List the capacity by income category as identified in the Housing Element inventory for each site identified in the inventory that has an approved/entitled or permitted project in the planning period (identified in the previous table).

Some projects will be developed on sites not identified in the Housing Element. These sites should not be included in the table below, as their capacity was not anticipated to accommodate a portion of the RHNA. They are included in the previous calculation to determine the remaining RHNA. As a result, the additional capacity from these projects can help mitigate loss in capacity from other projects, depending on their affordability.

- For each site rezoned that was identified in the Housing Element (but does not include a project per above) identify the adjusted capacity by income as result of the zone change.
- Calculate the remaining available capacity.
- Subtract the capacity identified in the inventory for the proposed development or rezone to calculate the remaining capacity in the sites inventory by income level.

Example Continued:

Table B: Remaining Capacity*

	Very Low-Income	Low-Income	Moderate-Income	Above Moderate-Income
Capacity from sites	325	370	260	800
Capacity from ADU or other alternative site capacity methodology	15	10		
Project Name/APN	Sites Inventory RHNA from Approved/Entitled or Permitted Project			
001-256-4758- 868				-160
001-256-5631	-25	-25		
001-256-5270 - 330				-60
Dell Webb Master Plan				-250
002-40526-7785	-50	-75		
002 -526 -7788			-15	
001-256-5575	-25	-155		
APN	Capacity changes due to rezone			
003-578-7584 (downzone to open space)			-30	
	Remaining Sites Inventory Capacity to Date			
	240	125	215	330
APN	Sites Inventory Capacity from Development or Rezone			
Magnolia Luxury Apt 001-256-4472		-75		
Remaining Sites Inventory Capacity with Proposed Development or Rezone				
	240	50	215	330

* Note: For most 5th cycle Housing Elements, jurisdictions will need to make assumptions on capacity by income category based on density and the analysis provided in the Housing Element, since the 5th cycle sites are not required to be identified by income category. However, for the 6th and subsequent cycles, sites will be required to identify capacity by income level. Some jurisdictions have chosen to combine low and very low- income RHNA for purposes of calculating site capacity, which should be reflected in supporting charts.

Step 3: Compare remaining RHNA with remaining sites inventory to determine if additional capacity will be needed.

- Input the remaining RHNA from Table A. (If this calculation is due to a proposed development, enter the remaining RHNA from the line “Remaining RHNA with Proposed Development”.)
- Input the remaining sites inventory capacity with a proposed development or rezone.
- Calculate the No Net Loss potential by subtracting the available capacity from the remaining RHNA. If the result is negative, there is a net loss in capacity, and the difference must be accommodated pursuant to No Net Loss Law.

Example:
Approval of the Magnolia Luxury Apartments would result in a net capacity loss of 53 units. City A would have to rezone or identify additional capacity for at least 53 low-income units.

Table C: No Net Loss Calculation

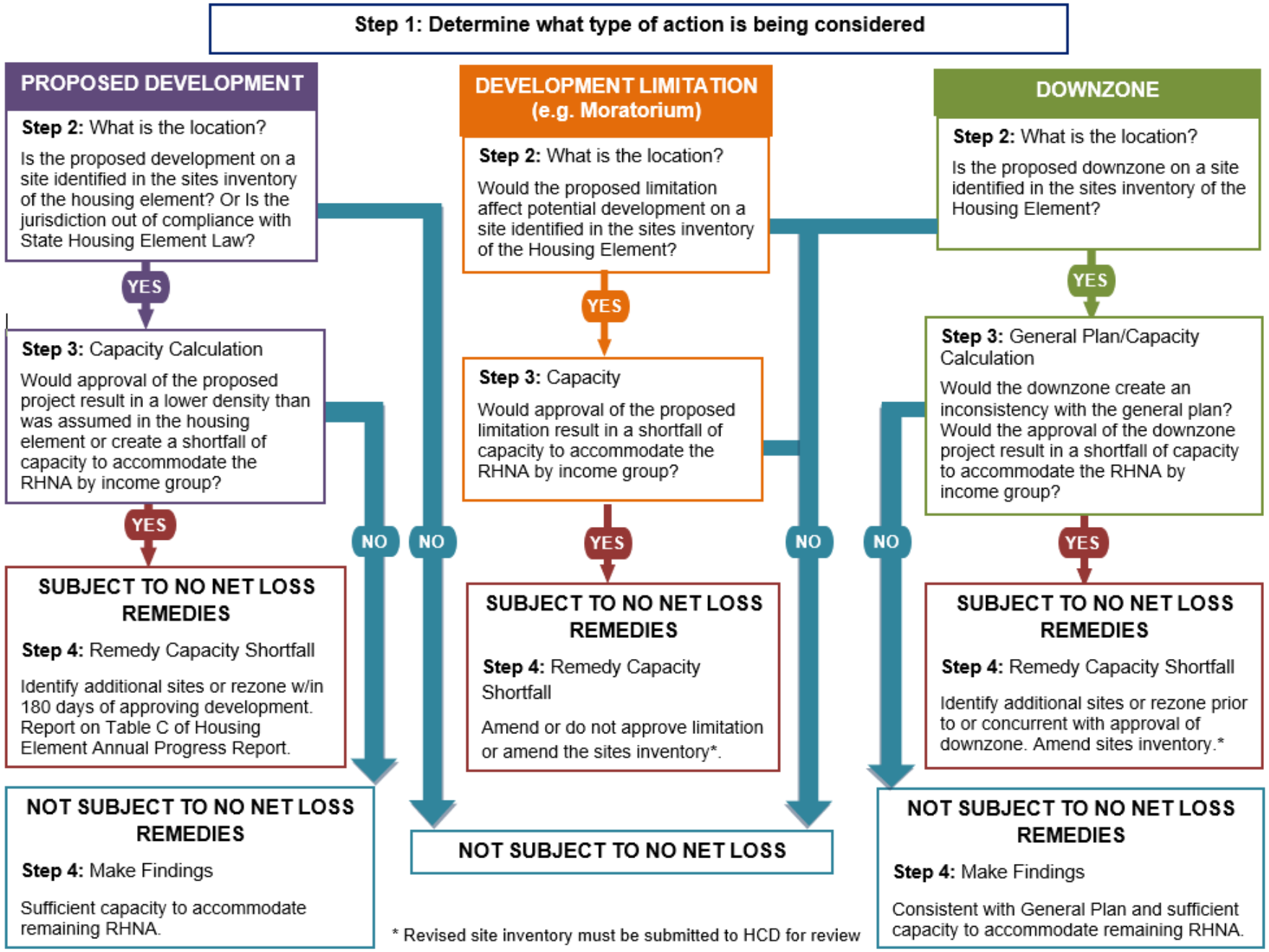
	Very Low-Income	Low-Income	Moderate-Income	Above Moderate-Income
Remaining Capacity (Table B)	240	50	215	330
Remaining RHNA (Table A)	230	103	198	0
No Net Loss Calculation	+10	-53	+17	+330

Please note: There may be many unique circumstances that do not fall neatly into the above example. This calculation tool is meant to be a framework to help jurisdictions think about the best way to identify potential No Net Loss situations.

No Net Loss Law Decision Flow Chart

The following flow chart is intended to help visualize how to determine if a project or a decision would be subject to No Net Loss Law and its remedies. Jurisdictions should consult with legal counsel prior to final determination on whether a project or decision triggers No Net Loss requirements.

No Net Loss Law Decision Flow Chart



Sample Housing Element Program

Sample Program: No Net Loss of Residential Capacity to Accommodate the RHNA by Income Category (Government Code section 65863)

To ensure sufficient residential capacity is maintained to accommodate the RHNA for each income category, within one year of adoption of the Housing Element, develop and implement a formal, ongoing (project-by-project) evaluation procedure pursuant to Government Code section 65863. The evaluation procedure will track the number of extremely low-, very low-, low-, moderate-, and above moderate-income units constructed to calculate the remaining unmet RHNA. The evaluation procedure will also track the number of units built on the identified sites to determine the remaining site capacity by income category and will be updated continuously as developments are approved.

No action can be taken to reduce the density or capacity of a site (e.g., downzone, moratorium), unless other additional adequate sites are identified prior to reducing site density or capacity.

If a development is being approved on an identified site at a lower density than what was assumed for that site identified in the Housing Element, additional adequate sites must be made available within 180 days of approving the development. A program to identify the replacement sites, and take the necessary actions to make the site(s) available and ensure they are adequate sites, will be adopted prior to, or at the time of, the approval of the development.

Time Frame: Within six months of adoption of the Housing Element, develop and implement a formal ongoing evaluation procedure pursuant to Government Code section 65863.

Subsequent to adopting an evaluation procedure, monitor rezones and development of residential units, and update Housing Element sites inventory. Housing Element sites inventory is posted on the Planning Department’s website and will be updated at least once a year.

At least annually, update the sites inventory in conjunction with Housing Element Annual Reports pursuant to Government Code section 65400, as necessary.

Responsibility: Community Development Department

Funding Source: General Fund

No Net Loss Law Statute (Government Code Section 65863)

65863.
(a) Each city, county, or city and county shall ensure that its housing element inventory described in paragraph (3) of subdivision (a) of Section 65583 or its housing element program to make sites available pursuant to paragraph (1) of subdivision (c) of Section 65583 can accommodate, at all times throughout the planning period, its remaining unmet share of the regional housing need allocated pursuant to Section 65584, except as provided in paragraph (2) of subdivision (c). At no time, except as provided in paragraph (2) of subdivision (c), shall a city, county, or city and county by administrative, quasi-judicial, legislative, or other action permit or cause its inventory of sites identified in the housing element to be insufficient to meet its remaining unmet share of the regional housing need for lower and moderate-income households.

(b) (1) No city, county, or city and county shall, by administrative, quasi-judicial, legislative, or other action, reduce, or require or permit the reduction of, the residential density for any parcel to, or allow development of any parcel at, a lower residential density, as defined in paragraphs (1) and (2) of subdivision (g), unless the city, county, or city and county makes written findings supported by substantial evidence of both of the following:

(A) The reduction is consistent with the adopted general plan, including the housing element.

(B) The remaining sites identified in the housing element are adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction’s share of the regional housing need pursuant to Section 65584. The finding shall include a quantification of the remaining unmet need for the jurisdiction’s share of the regional housing need at each income level and the remaining capacity of sites identified in the housing element to accommodate that need by income level.

(2) If a city, county, or city and county, by administrative, quasi-judicial, legislative, or other action, allows development of any parcel with fewer units by income category than identified in the jurisdiction’s housing element for that parcel, the city, county, or city and county shall make a written finding supported by substantial evidence as to whether or not remaining sites identified in the housing element are adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction’s share of the regional housing need pursuant to Section 65584. The finding shall include a quantification of the remaining unmet need for the jurisdiction’s share of the regional housing need at each income level and the remaining capacity of sites identified in the housing element to accommodate that need by income level.

(c) (1) If a reduction in residential density for any parcel would result in the remaining sites in the housing element not being adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction’s share of the regional housing need pursuant to Section 65584, the jurisdiction may reduce the density on that parcel if it identifies sufficient additional, adequate, and available sites with an equal or greater residential density in the jurisdiction so that there is no net loss of residential unit capacity.

(2) If the approval of a development project results in fewer units by income category than identified in the jurisdiction’s housing element for that parcel and the jurisdiction does not find that the remaining sites in the housing element are adequate to accommodate the jurisdiction’s share of the regional housing need by income level, the jurisdiction shall within 180 days identify and make available additional adequate sites to accommodate the jurisdiction’s share of the regional housing need by income level. Nothing in this section shall authorize a city, county, or city and county to disapprove a housing development project on the basis that approval of the housing project would require compliance with this paragraph.

(d) The requirements of this section shall be in addition to any other law that may restrict or limit the reduction of residential density.

(e) This section requires that a city, county, or city and county be solely responsible for compliance with this section, unless a project applicant requests in his or her initial application, as submitted, a density that would result in the remaining sites in the housing element not being adequate to accommodate the jurisdiction's share of the regional housing need pursuant to Section 65584. In that case, the city, county, or city and county may require the project applicant to comply with this section. The submission of an application for purposes of this subdivision does not depend on the application being deemed complete or being accepted by the city, county, or city and county.

(f) This section shall not be construed to apply to parcels that, prior to January 1, 2003, were either (1) subject to a development agreement, or (2) parcels for which an application for a subdivision map had been submitted.

(g) (1) If the local jurisdiction has adopted a housing element for the current planning period that is in substantial compliance with Article 10.6 (commencing with Section 65580) of Chapter 3, for purposes of this section, "lower residential density" means the following:

(A) For sites on which the zoning designation permits residential use and that are identified in the local jurisdiction's housing element inventory described in paragraph (3) of subdivision (a) of Section 65583, fewer units on the site than were projected by the jurisdiction to be accommodated on the site pursuant to subdivision (c) of Section 65583.2.

(B) For sites that have been or will be rezoned pursuant to the local jurisdiction's housing element program described in paragraph (1) of subdivision (c) of Section 65583, fewer units for the site than were projected to be developed on the site in the housing element program.

(2) (A) If the local jurisdiction has not adopted a housing element for the current planning period within 90 days of the deadline established by Section 65588 or the adopted housing element is not in substantial compliance with Article 10.6 (commencing with Section 65580) of Chapter 3 within 180 days of the deadline established by Section 65588, "lower residential density" means any of the following:

(i) For residentially zoned sites, a density that is lower than 80 percent of the maximum allowable residential density for that parcel or 80 percent of the maximum density required by paragraph (3) of subdivision (c) of Section 65583.2, whichever is greater.

(ii) For sites on which residential and nonresidential uses are permitted, a use that would result in the development of fewer than 80 percent of the number of residential units that would be allowed under the maximum residential density for the site parcel or 80 percent of the maximum density required by paragraph (3) of subdivision (c) of Section 65583.2, whichever is greater.

(B) If the council of governments fails to complete a final housing need allocation pursuant to the deadlines established by Section 65584.05, then for purposes of this paragraph, the deadline pursuant to Section 65588 shall be extended by a time period equal to the number of days of delay incurred by the council of governments in completing the final housing need allocation.

(h) An action that obligates a jurisdiction to identify and make available additional adequate sites for residential development pursuant to this section creates no obligation under the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) to identify, analyze, or mitigate the environmental impacts of that subsequent action to identify and make available additional adequate sites as a reasonably foreseeable consequence of that action. Nothing in this subdivision shall be construed as a determination as to whether or not the subsequent action by a city, county, or city and county to identify and make available additional

adequate sites is a “project” for purposes of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(i) Notwithstanding Section 65803, this section shall also apply to a charter city.

Table A: Housing Element Sites Inventory, Table Starts in Cell A2

Assessor Parcel Number	Consolidated Sites	General Plan Designation (Current)	Zoning Designation (Current)	Minimum Density Allowed (units/acre)	Max Density Allowed (units/acre)	Parcel Size (Acres)	Existing Use/ Vacancy	Infra-structure	Publicly- Owned	Site Status	Identified in Last/Last Two Planning Cycle(s) [Lower Income Only]	Lower Income Capacity	Moderate Income Capacity	Above Moderate Income Capacity	Total Capacity	Optional Information1
099 010003008		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	1.58	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			21	21	Isabel Neighborhood Specific Plan (INSP). Specific Plan was approved in late 2020 and the new zoning was applied. No applications for residential development inside the Specific Plan area have received buliding permits yet. This parcel and the rest of the INSP parcels listed below are those that allow for residential development in the SP.
099 010001830		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	10.31	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			140	140	INSP
099 134409100		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	9.96	self-storage	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			135	135	INSP
099 133102800		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	21.10	Agriculture and low density residential	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			286	286	INSP
903 001003704		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	100	11.66	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	270		158	428	INSP; partial part of parcel for lower income units - 4.31 acres
903 001400400		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	3.84	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			52	52	INSP
903 001005000		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	25	100	4.6	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	1		62	63	INSP; partial part of parcel for lower income units - 0.13 acres
903 001005100		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	60	100	0.13	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	1		2	3	INSP; partial part of parcel for lower income units - 0.11 acres
903 001004900		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	25	100	2.28	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	17		31	48	INSP; partial part of parcel for lower income units - 0.38 acres
903 001004800		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	25	100	14.06	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	486		191	677	INSP; partial part of parcel for lower income units - 10.74 acres
903 001005300		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	100	6.55	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	142		89	231	INSP; partial part of parcel for lower income units in subarea 3b - 0.20 acres; partial part of parcel for lower income units in subarea 3c - 2.94 acres
903 001004700		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	60	3.51	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	62		48	110	INSP; partial part of pacel for lower income units - 1.74 acres
903 001004600		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	60	3.53	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	90		48	138	INSP; partial part of parcel for lower income units - 2.50 acres
903 001002800		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	2.43	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			33	33	INSP
903 001002900		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	4.97	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			67	67	INSP
903 001003000		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	5.54	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			75	75	INSP
905 001000403		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	5.27	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			71	71	INSP
905 001000600		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	4.93	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			67	67	INSP
905 001500800		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	60	2.66	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	105		36	141	INSP; partial part of parcel for lower income units - 2.18 acres

Table A: Housing Element Sites Inventory, Table Starts in Cell A2

Assessor Parcel Number	Consolidated Sites	General Plan Designation (Current)	Zoning Designation (Current)	Minimum Density Allowed (units/acre)	Max Density Allowed (units/acre)	Parcel Size (Acres)	Existing Use/ Vacancy	Infra-structure	Publicly- Owned	Site Status	Identified in Last/Last Two Planning Cycle(s) [Lower Income Only]	Lower Income Capacity	Moderate Income Capacity	Above Moderate Income Capacity	Total Capacity	Optional Information1
905 001502900		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	25	60	3.03	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	68		41	109	INSP; partial part of parcel for lower income units - 1.42 acres
905 001502800		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	2.35	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			32	32	INSP
905 001502600		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	2.81	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			38	38	INSP
905 001502700		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	40	2.24	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements			30	30	INSP
903 001003602		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	60	100	0.07	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	1			1	INSP
903 001003603		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	60	100	0.64	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	37			37	INSP
903 001003702		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	15	100	0.11	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	1			1	INSP
903 001001801		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	60	2.5	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	90			90	INSP
903 001005200		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	60	100	2.80	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	179			179	INSP
903 001005400		Isabel Neighborhood Specific Plan	Isabel Neighborhood Specific Plan	40	60	0.42	Vacant	Yes - Current	No - Privately Owned	Available	Not Used in Prior Housing Elements	20			20	INSP
099 095000802		Urban High Residential	Planned Development 18-004		55	3.50	Civic uses and large vacant area on northeast side of parcel that is pending development as housing. Subdivision of that parcel is also pending.	Yes - Current	Yes - City-Owned	Pending project	Not Used in Prior Housing Elements	140			140	The area to the northeast of the solar field was recently rezoned for an affordable senior housing development. Newly created parcel number will be included when it is available. Realistic unit number is based on the approved project.
098 028902200		Downtown Area	Downtown Specific Plan - Downtown Core	30	55	2.08	Vacant	Yes - Current	No - Privately Owned	Pending Project	Not Used in Prior Housing Elements	130			130	Entitled for 130 low income units. No building permits issued. Realistic unit number is based on the entitled project.
098 025000204	B	Downtown Area	Downtown Specific Plan - Neighborhood North Side	15	24	0.29	Parking lot	Yes - Current	Yes - City-Owned	Available	Not Used in Prior Housing Elements	5			5	City-owned former RDA site. Designated as housing assets site and will be developed with 100% affordable housing, that is why the site is included for lower RHNA even though max density is 24 du/ac. City expects to release RFQ later this year to develop and to have an agreement for the project in place by the end of 2023. Combined with APN below.
098 025000103	B	Downtown Area	Downtown Specific Plan - Neighborhood North Side	15	24	0.34	Auto body shop and parking	Yes - Current	Yes - City-Owned	Available	Not Used in Prior Housing Elements	6			6	City-owned former RDA site. Designated as housing assets site and will be developed with 100% affordable housing, that is why the site is included for lower RHNA even though maximum density is 24 du/ac. City expects to release RFQ later this year to develop and to have an agreement for the project in place by the end of 2023. Combined with APN above
099 132508500		Low-Intensity Industrial/Urban High Residential (UH-5b)	Planned Unit Development 246-81	30	38	6.18	Vacant	Yes - Current	No - Privately Owned	Available	Used in Prior Housing Element[1]	187			187	

2. *May have in-person contact with clients, customers or employees at the residence;*
3. *May store up to 250 cubic feet of supplies/ stock/merchandise in the unit;*
4. *May employ people who do not live in the live/work unit;*
5. *May have visible signage on vehicles and at the unit, subject to the Ground floor Retail signage standards (Chapter 5, Urban Design);*
6. *May have one commercial grade vehicle associated with the business; and*
7. *May include photography studios and retail/ wholesale sales of products as permitted business types.*

P-LU-5: Encourage the continued operation of, and investment in, existing business park, light industrial, and commercial uses.

P-LU-6: Ensure that land uses are compatible with existing residential uses and minimize conflicts between adjacent land uses with respect to scale, safety, noise, privacy, and other potential nuisances and hazards.

P-LU-7: Plan the provision of high quality, cost effective child care facilities are provided throughout the Neighborhood.

- Encourage new residential, office, and mixed use developments to incorporate child day care facilities early in the site planning and design process.
- Consider applying regulatory and/or financial incentives to support child care centers close to the Valley Link station to serve commuters.
- Partner with other public agencies such as Alameda County, non-profit organizations, and private child care providers to leverage resources and assist with planning efforts.

P-LU-8: The City shall encourage property owners to collaborate and prepare Master Plans by residential subarea. (Refer to Figure 2-3 for the subarea map.) For the purposes of this Specific Plan, Master Planning shall mean the subdivision and/or site plan design review application of at least one entire subarea. If Master Planned, residential densities may be averaged or distributed across the subarea rather than calculated at the parcel level, provided that the Master Plan complies with:

1. *The target subarea unit count and the performance measures identified in Table 2-6; and*
2. *All other applicable development and design standards for the land use.*

If Master Planning more than one subarea, the densities may be averaged or distributed across those subareas. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.

P-LU-9: The location of the Ground Floor Retail/Flex Space Overlay on the BART property north of I-580 is diagrammatic on Figure 2-1. As the Plan is implemented, the Overlay shall apply to all building frontages along the Isabel Path between the north end of the Valley Link pedestrian bridge and Isabel Avenue.

P-LU-10: Allow mobile food vendors to operate in non-residential areas within the Isabel Neighborhood with a Temporary Use Permit (TUP), subject to the following regulations:

- Mobile food vendors are responsible for providing a solid waste receptacle and maintaining a clean environment around their facility.
- No loud music.
- No blocking driveways or taking up more than two spaces in private parking lots.
- Mobile food vendors must provide copies of relevant permits from the Alameda County Health Department and obtain a City of Livermore Business License, as part of the TUP application.
- The TUP shall identify the locations in which vendors would be allowed to locate and during which hours of the day (between 8:00 AM and 9:00 PM, for example).
- The TUP shall be effective for one calendar year with no limit on the number of days in which it can operate. Each TUP shall be

Commercial & Office Economic Feasibility

Introduction

The INSP envisioned a 106,000 SF commercial center with ground floor retail options and anchored by a grocery store. Similarly, the INSP envisions an estimated 382,000 sq. ft. for new office space.

This commercial feasibility analysis evaluates the retail and office market forces impacting the Isabel Neighborhood Specific Plan ("INSP") since the last market analysis was completed by Gruen Gruen + Associates (GG+A) in 2022. The report is intended to provide the City of Livermore with an understanding of how retail and office demand in the INSP area is impacted by market changes and, more specifically, if desired office and commercial density requirements in the INSP are economically feasible to achieve.

Relative to the project's commercial uses and compatibility with the INSP, this analysis also took into consideration the following goals and objectives taken from the INSP:

1. Complete Neighborhood
2. Access to Open Space, Arroyos, and Scenic Views
3. Well Connected Pedestrian and Bicycle Network
4. High Quality Design
5. Community Gathering Spaces
6. Compatibility with Existing Uses

For both retail and office markets, Kosmont prepared a summary evaluation of local area market data on inventory, absorption rates, lease rates and vacancy rates to demonstrate the supportable new commercial development within the Project. Kosmont's summary of the market primarily includes a specific assessment within the City of Livermore but provides a high-level analysis of the East Bay and Tri-Valley area to benchmark against regional trends.

Retail Demand Findings

Kosmont's analysis found similar market conditions from GG+A's findings in 2022. Demand for projected brick-and-mortar commercial space did increase slightly, likely due to stabilized retail vacancies and population increase. Given the recent shift in consumer preferences, demand is likely to be centered on retail that is geared toward essentials, experience, and e-commerce. Retail will increasingly be part of a more blended approach (housing, retail, open space, creative office, hotel, etc.) that appeals to those working from home looking for a live, work, play environment in a post-COVID economy.

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Total resident and employee expenditure potential for the area surrounding the Project demonstrates a maximum need of 75,200 SF upon full buildout of the Isabel Crossing project to support the influx of new residents from the Isabel neighborhood, as well as existing local area residents, students and workers. Kosmont analysis indicates the INSP target of 106,000 SF of retail is not supported under current conditions.

Local Demographics

The City of Livermore has seen a steady increase in population growth within the past decade of about 11% according to the Imagine Livermore 2045 General Plan equating to an additional 9,000 residents. As of 2023, the total population was roughly 87,500 and with approximately 31,500 households. The average household size is 2.75 and the household income is an average of $188,700. The East Bay single-family home real estate market has grown and Livermore is no exception seeing increasing home values with a median of $970,000 in 2023. The local area is comprised of primarily owner-occupied housing units (73%) but with home values continuing to climb, the number of available renter-occupied units is expected to grow the next decade.

Local Area Demographics

Variable	Livermore, CA	Radius from Project Site		
		1 mile	3 miles	5 miles
2023 Total Population	87,549	5,316	56,574	173,667
2023 Total Households	31,511	2,019	20,056	60,324
2023 Average Household Size	2.75	2.62	2.79	2.83
2023 Median Age	40.6	39.4	38.8	39.2
2023 Average Household Income	$188,751	$192,352	$191,051	$207,485
2023 Median Home Value	$970,253	$921,739	$977,906	$1,132,209
2023 Renter Occupied Housing Units (%)	27.13%	17.38%	31.42%	30.56%
2023 Owner Occupied Housing Units (%)	72.87%	82.62%	68.58%	69.44%

Source: ESRI Business Analyst Online

Retail Market Trends

Brick and mortar retailers across the U.S. face a dramatic decline in retail sales as the digital economy transforms the lifestyles and social patterns of every generation. Today's consumers use online websites for purchasing many hard and soft good commodities. According to Insider Intelligence, E-commerce retail sales increased by more than 30% in 2020 due to pandemic-era shopping patterns, and growth is expected to continue, particularly in clothing and general merchandise purchases.

Consumers are purchasing retail goods through multiple vehicles such as online purchasing, brick and mortar sales and buy online / pickup in store ("BOPIS"). E-Commerce sales, which have

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increased steadily over the past 10 years, grew to $1.2 trillion in 2023. Insider Intelligence says E-commerce retail sales represents over 15% of total sales and are projected to be more than 20% of total retail sales by 2027, significantly impacting new retail development feasibility.

Livermore Retail Market Overview

The retail submarket of Livermore comprises 5.2 million SF of inventory. The Livermore retail market has a current vacancy rate of 3.5%. The highest retail vacancies come from neighborhood centers (5.7%) and shopping strip centers (5.6%), while general retail buildings are holding a 1.4% vacancy rate. There has been negative absorption of 20,000 SF for neighborhood centers and strip centers. The East Bay market vacancy rate is higher at 5.5%, which has changed very little since 2018 (5.8%).

Retail Characteristics within the City of Livermore (April 2024)

Submarket	Retail Type	Vacancy Rate (2024)	Inventory Sq. Ft. by Subcategory
Livermore	Neighborhood	5.7%	2,210,092
Livermore	Strip Centers	5.6%	380,612
Livermore	General Retail	1.4%	1,925,120
Livermore	Other	0%	697,000

Source: CoStar (Q2 - 2024)

Livermore has seen relatively little development (6% overall growth over the past decade). Retail vacancies saw their peak at 5.4% in 2020 due to the impacts of COVID-19 pandemic but have decreased since. Annual rents grew an overall 23% in the submarket in the past decade. No retail inventory is under construction despite the submarket's existing low vacancy rate of 3.3%.

Retail Market History – Livermore Submarket

Period	Vacancy Rate	Inventory SF	Available SF Direct	Net Absorption SF	Market Asking Rent/SF
2024 YTD	3.5%	5,237,084	205,915	(18,489)	$32.59
2023	2.4%	5,237,084	176,417	37,714	$32.23
2022	3.1%	5,234,884	183,788	44,118	$32.72
2021	3.5%	5,211,059	197,988	98,995	$32.06
2020	5.4%	5,208,859	310,810	(46,938)	$31.34
2019	4.3%	5,196,476	266,816	23,997	$30.96
2018	2.0%	5,054,439	233,150	96,862	$29.87
2017	1.8%	4,941,287	150,165	63,224	$28.91
2016	3.0%	4,941,287	140,343	46,577	$27.76
2015	3.6%	4,922,451	198,053	39,678	$26.36
2014	4.3%	4,915,585	268,541	10,716	$25.19

Source: CoStar (Q2 - 2024)

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Competitive Retail Centers

Within a 6-mile market area there are five (5) shopping strip centers, twenty (20) neighborhood centers, and four (4) large community centers. As seen in the map below, there are approximately 23 grocery store options within a 6-mile radius from the Project, such as Costco, Walmart, Target, Safeway, Whole Foods, including ethnic-specific grocery options like 99 Ranch, 88 Seafood Market, and Del Rancho Supermercado. Although residents of Livermore have a number of options, local neighborhood-serving grocery options do not exist in the INSP area. A Costco located one mile from the site is a regional-serving option, but a smaller grocer option to serve immediate needs for residents would be a value-add as the Project is built out.

Grocery Stores within a 6-mile radius



Source: CoStar (Q2 - 2024)

City Taxable Sales

Taxable retail sales have grown less than 1% overall during the past five years, with the declines in clothing and motor vehicle related categories (-4% and -11%, respectively). The largest growth in taxable retail sales is the food services and drinking places category, which expanded by 21%, followed by general merchandise with 10% growth.

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City Taxable Retail Sales for Livermore, CA

	Category	No. of Outlets	2018	2019	2020	2021	2022	2023	5-Year %
1	Food Services and Drinking Places	334	216,597,013	223,969,533	156,476,998	218,057,198	249,130,694	262,310,696	21%
2	General Merchandise Stores	42	249,547,300	259,544,831	232,640,806	262,800,579	283,463,872	274,173,926	10%
3	Food and Beverage Stores	70	78,327,431	78,945,918	76,625,205	82,687,329	89,833,956	86,183,079	10%
4	Building Material and Garden Equipment and Supplies Dealers	44	150,893,703	141,782,754	149,646,242	169,002,605	175,477,832	156,216,482	4%
5	Gasoline Stations	31	177,629,577	162,660,637	146,932,826	188,425,565	201,765,687	181,099,524	2%
6	Home Furnishings and Appliance Stores	75	36,686,994	30,791,273	29,578,754	32,415,700	42,988,890	37,123,944	1%
7	Clothing and Clothing Accessories Stores	270	519,605,908	531,698,429	268,482,336	435,433,831	482,543,007	499,652,112	-4%
8	Motor Vehicle and Parts Dealers	80	402,295,421	425,063,855	329,345,106	377,298,207	397,525,765	358,264,698	-11%
	Subtotal	946	1,831,583,347	1,854,457,230	1,389,728,273	1,766,121,014	1,922,729,703	1,855,024,461	1%

Source: City Taxable Retail Sales (2018-2023)

Potential Retail Demand

Kosmont performed an additional analysis to estimate brick-and-mortar retail demand by expenditures from four primary target markets: 1) households in the project site area, 2) households outside of the project site area but within the INSP area, 3) students from Las Positas College, and 4) local area workers.

New Resident Spending

Recent ESRI data shows City of Livermore with an average household income of approximately $188,700 annually. Among these households, estimated yearly spending for non-automotive brick-and-mortar retail and general services is approximately $38,300 per household.

Existing households in the entire city spend $1.2 billion annually in select brick-and-mortar retail categories with the highest proportion of expenditures going toward food at home, entertainment, and food away from home.

When considering the potential spending from an additional 1,299 new households within the proposed development in the Isabel Neighborhood, Kosmont estimates the new town center could capture annual expenditures of $44.8 million at full buildout, as shown in the Table on the following page.

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Projected Expenditures for Brick-and-Mortar Retail in Livermore

Household Budget Expenditures	Livermore		Isabel Project
	Per HH	Total Exp.	Total Exp.
Population	87,549	87,549	-
Households	31,511	31,511	1,299
Avg. Household Income	$188,751	$188,751	$188,751
Food at Home	$11,600	$365,527,600	$13,561,600
Food Away from Home	$6,300	$198,519,300	$7,365,300
Alcoholic Beverages	$1,200	$37,813,200	$1,402,900
Housekeeping Supplies	$1,600	$50,417,600	$1,870,600
Household Furniture & Equipment	$5,100	$160,706,100	$5,962,400
Apparel & Services	$3,800	$119,741,800	$4,442,600
Entertainment	$6,400	$201,670,400	$7,482,200
Personal Care Products & Services	$1,700	$53,568,700	$1,987,500
Tobacco Related	$600	$18,906,600	$701,500
Brick-and-Mortar Subtotal Retail:	**$38,300**	**$1,206,871,300**	**$44,776,600**

Source: ESRI Business Analyst Online (2023)

Total Demand

Annual retail expenditures from the four target markets is estimated at $132 million per year as shown in table below. Kosmont utilized $650 psf sales (an Urban Land Institute (ULI) industry average that assumes the likely sales necessary by retailers to justify development costs for new retail space. Kosmont utilized capture rates ranging from 20-50% for target markets. Capture rates are based on the groups' likelihood of patronage to the Project's new commercial uses and taking into consideration the variety of grocery and non-grocery retail options available in the local area.

Projected Retail Demand for Project Site

Potential Livermore Retail Demand	Isabel Project Households	Households in Specific Plan Area	Student Enrollment	Local Area Workers
Population	1,299	1,181	8,500	7,342
Weekly Est. Expenditure	-	-	*$50*	*$75*
Total Retail Expenditure	$44,776,600	$45,232,300	$14,875,000	$27,532,500
Retail Area Capture Rate	*50%*	*30%*	*50%*	*20%*
Projected Retail Expenditure	$22,388,300	$13,569,690	$7,437,500	$5,506,500
Sales / Sq. Ft.	*$650*	*$650*	*$650*	*$650*
Projected Retail SF by Population	**34,400**	**20,900**	**11,400**	**8,500**
Total Projected Retail SF	**75,200**			

Sources: OnTheMap - Local Area Workers in Specific Plan area
ESRI - Household data
Las Positas College - enrollment from Educational Master Plan
ULI - Sales per sq. ft. assumption for likely minimum sales performance

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The supportable SF from expected expenditures by the local target market segments is summarized below:

1. households in the Project are estimated to support up to 34,400 SF of brick-and-mortar retail space,
2. households in the INSP area are likely to support an additional 20,900 SF.
3. Factoring both the local area worker population and Las Positas College student enrollment, an additional 19,900 SF of retail demand is estimated.

Thus, total potential demand for new brick-and-mortar retail from all populations combined is a maximum of 75,200 SF following full buildout, which is much less than the INSP target of 106,000 SF.

OFFICE UPDATE

This office analysis is to evaluate changes within the Tri-Valley office market since the last analysis was completed by GG+A in 2022. The report is intended to provide the City of Livermore with an understanding of how office demand in the INSP area is affected by market forces and, more specifically, if the expected office density in the Specific Plan is economically feasible to achieve.

Kosmont prepared a summary evaluation of office market data on inventory, absorption rates, lease rates and vacancy rates to demonstrate the feasibility of the mixed-use project. Kosmont's summary of the market primarily includes a specific assessment within the City of Livermore, but provides a high-level analysis of the East Bay or Tri-Valley market, where appropriate, to benchmark City against regional trends.

Summary of Office Findings

Kosmont's findings were similar to those in the GG+A report as the statewide office market has not improved since 2022. Kosmont does not deem the Livermore office market to be established enough to support new speculative office space development. Kosmont's analysis revealed a variety of factors that do not support building speculative office space.

In particular, the Livermore market is strained by recent negative absorption (-12,382 SF), low asking rents ($32.00 / SF) that are not high enough to support new construction, and a large supply of vacant inventory (381,500 SF). Furthermore, Kosmont's analysis revealed the market

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constraints are felt more acutely near the Project. Kosmont identified eight (8) properties closest to the project site that were experiencing an average vacancy rate of 62% and vacant inventory of over 292,000 SF.

Due to Kosmont's findings, this analysis also confirms that the INSP's buildout target of 382,000 SF of new office is not feasible. Given market fundamentals for office in the Tri-Valley and a lack of demand for speculative office space in the City of Livermore, Kosmont does not recommend any office development for the Project.

Office Market Trends

Throughout the state, the office market has struggled to adapt to the shift in fully remote or hybrid working environments since the pandemic. Vacancy rates have increased significantly in the East Bay market since its low of 8.3% in 2019 to a current vacancy rate of 14.1%. The primary reasons are moveouts of large occupiers like Bank of America and Meta/Facebook giving back 500,000 square feet in 2023, and leases that were initiated before 2020 are expiring or will expire soon.

Office Submarket History – Tri-Valley Area

Year	Inventory SF	Vacant SF	Vacancy Rate	Net Absorption	Market Rent
2023	9,884,470	1,960,534	19.8%	(458,101)	$33.70
2022	9,884,470	1,502,433	15.2%	(127,562)	$35.10
2021	9,884,470	1,374,871	13.9%	(80,733)	$34.62
2020	9,884,470	1,294,138	13.1%	(121,778)	$36.03
2019	9,884,470	1,172,360	11.9%	(24,525)	$34.93
2018	9,884,470	1,143,411	11.6%	108,480	$35.02
2017	9,884,470	1,251,891	12.7%	(275,768)	$34.44
2016	9,884,470	976,123	9.9%	63,300	$32.34
2015	9,884,470	1,040,820	10.5%	168,964	$31.77
2014	9,884,470	1,209,784	12.2%	145,928	$29.90

Source: CoStar (Q2 - 2024)

The decrease in office utilization from hybrid work can also be seen in low BART ridership levels, which are at 40% below pre-pandemic levels. The Tri-Valley office market has also seen negative net absorption of 458,101 SF and with a vacancy rate of 19.8%.

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Livermore Office Market Overview

The City of Livermore's total office vacancy rate of 16.4% is higher than the greater East Bay region, but less than the entire Tri-Valley. The office market in Livermore is not well established compared to its peer cities in the entire Tri-Valley area. Utilizing CoStar's star rating system, there are no 5-Star buildings within the City and only one 4-Star building, which is a Kaiser Permanente located on Las Positas Road. The remaining supply of office space is comprised of 1-, 2- and 3-Star buildings. Livermore's vacancy among its 3-Star buildings remains the highest (25.5%).

In general, the office inventory is outdated and City has not seen any new units come online since 2008. Net absorption for Livermore's office submarket is negative 12,382 SF across the City's full inventory of nearly 2.1 million SF. Market asking rents have decreased by 0.4% since last year (2023) to $31.92 / SF but is expected to stabilize into the second half of 2024.

Office Characteristics within the City of Livermore (April 2024)

Office Building Type	Inventory SF	Vacancy Rate (2024)	Market Asking Rent / SF	Under Construction
4 Star	70,472	0%	$37.63	0
3 Star	1,147,519	25.5%	$30.85	0
1 & 2 Star	833,834	5.2%	$32.92	0
Submarket	**2,051,825**	**16.4%**	**$31.92**	**0**

Source: CoStar (Q2 - 2024)

Historically, the vacancy rate was at its lowest point in 2020 (9.0%) just prior to the pandemic. Since then, the vacancy rates have almost doubled in four years. Increased vacancy has translated to approximately 381,000 SF of available space in the City of Livermore. Rents have also stayed flat since 2020, when compared to the year-to-date figures.

The office market in Livermore has been stagnant for years, with occupied space declining by 100,000 SF in past decade, with modified gross market rents staying flat around $30 per square foot per year.

The office inventory is unchanged since 2018. Prior to 2018 the inventory shrank as a result of approximately 33,600 SF of demolition. Given its current stock is older with primarily 2- and 3-Star buildings and with many options in the Tri-Valley area available to prospective tenants, the Livermore market vacancy rate will likely continue to climb through the end of the year with a projected vacancy rate of 17.5% by CoStar analytics.

At the time of this analysis, Kosmont identified eight (8) properties close to the Project that have an average vacancy rate of 62% and a vacant inventory of over 292,000 SF.

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Office Submarket History – City of Livermore

Year	Inventory SF	Vacant SF	Vacancy Rate	Net Absorption	Market Rent
2023	2,051,825	328,456	15.5%	(5,754)	$31.62
2022	2,051,825	338,009	15.2%	33,788	$31.91
2021	2,051,825	389,997	16.9%	(161,386)	$31.66
2020	2,051,825	264,892	9.0%	143,206	$32.09
2019	2,051,825	331,306	16.0%	(85,920)	$32.49
2018	2,077,025	213,003	12.9%	6,103	$30.64
2017	2,077,025	245,281	13.1%	(80,169)	$28.83
2016	2,085,425	247,990	9.7%	(2,017)	$27.91
2015	2,085,425	241,319	9.6%	27,298	$26.03
2014	2,085,425	272,146	10.9%	38,603	$24.56

Source: CoStar (Q2 - 2024)

Conclusion

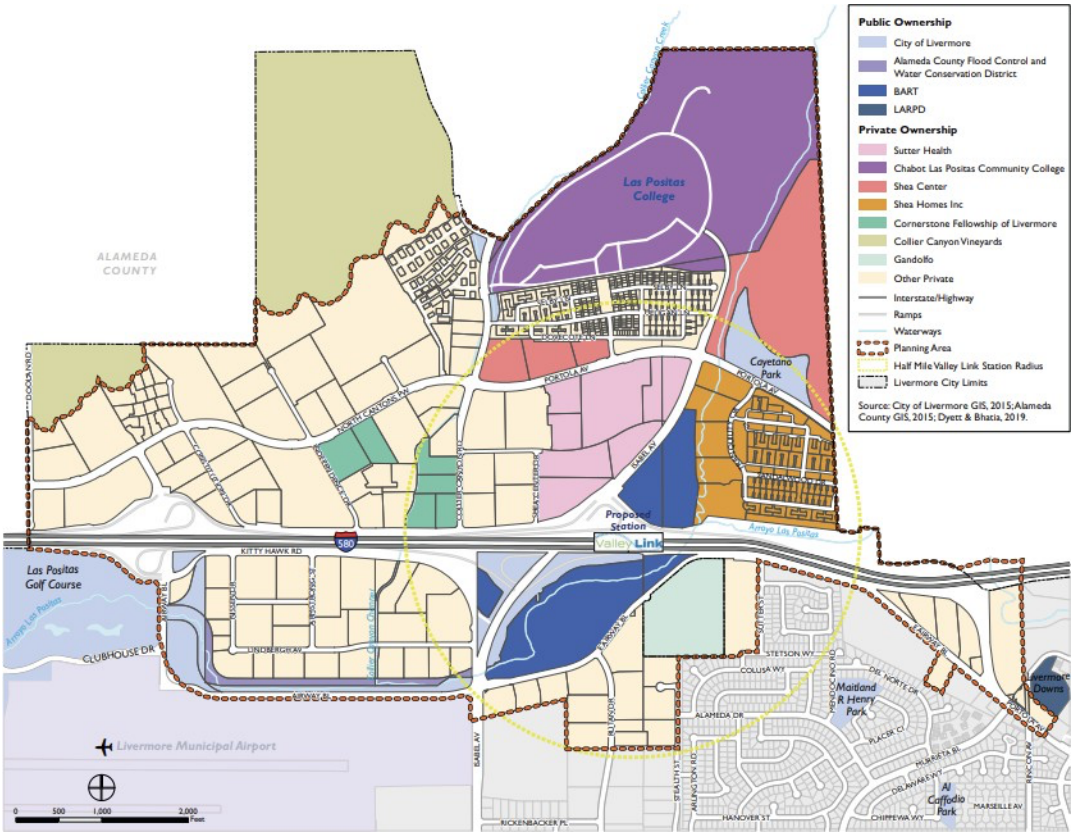
Kosmont's conclusion is that new office development is financially infeasible with modified gross market rents slightly above $30 per square foot. Operating expenses and normal vacancy factors would reduce net operating income to $20 per square foot, which indicates a stabilized value of $400 per square foot, which is dramatically lower than estimated development costs of $600 per square foot.

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ISABEL PORTOLA CROSSING PROJECT

Fiscal / Economic Analysis

Isabel Portola Owner, LLC



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Overview

Isabel Portola Owners, LLC ("Applicant") is seeking entitlements from the City of Livermore ("City") to develop Isabel Crossing, a significant mixed-use project on a 45-acre former Sutter Health site with an estimated 1,299 residential units, 65,900 SF of new retail/restaurants uses ("Project") surrounding almost 2 acres of public outdoor space, all within the Isabel Neighborhood Specific Plan ("INSP"), an 1,138-acre area concentrated along the I-580 freeway, adopted by the City of Livermore ("City") in 2020, and amended in 2022 as a regulatory framework for the next 20 years.

Kosmont & Associates, Inc. doing business as Kosmont Companies ("Consultant" or "Kosmont") has prepared this Fiscal and Economic Impact and a separate Commercial Feasibility Analysis ("Analysis") for the Applicant's proposed Project in the INSP.

The Fiscal Analysis evaluates net fiscal revenues and expenditures for the City, as well as direct, indirect, and induced economic benefits to the local economy resulting from development of the Project.

- The fiscal revenues were derived by estimating the various City taxes associated with the proposed Project including property taxes, business taxes, franchise taxes, direct and indirect sales taxes, transient occupancy taxes, and utility user taxes.
- The fiscal expenditures were derived from a per capita allocation ratio applied to estimated Project occupants based on the 2023-24 Adopted Budget for the City.

The Commercial Feasibility Analysis examined the economic and market factors affecting near term demand for retail and office uses with the Applicant property in the INSP. The INSP, developed in the past 5 years, envisioned a target level of 1,477 residential units with a mix of 20% affordable units, 106,000 SF of retail uses, and 382,000 SF of business park/office uses on the Project site.

Kosmont's analysis indicates that substantial reductions in all three land use categories (i.e., retail, residential, and office/business park) within the INSP are required for Project's feasibility given the various community benefit requirements, such as new roadway infrastructure to create a mixed-use town square, public parks, and viable neighborhoods.

Additional economic feasibility/hardship analyses related to affordable housing equivalency and Housing Density were also prepared by Kosmont under separate cover.

Isabel Neighborhood Specific Plan

The City adopted the Isabel Neighborhood Specific Plan ("INSP") in 2020 , and amended in 2022 to establish a framework for public and private development in an 1,138-acre area in the northwest sector of the City centered on the intersection of I-580 and Isabel Avenue. The major focus of the

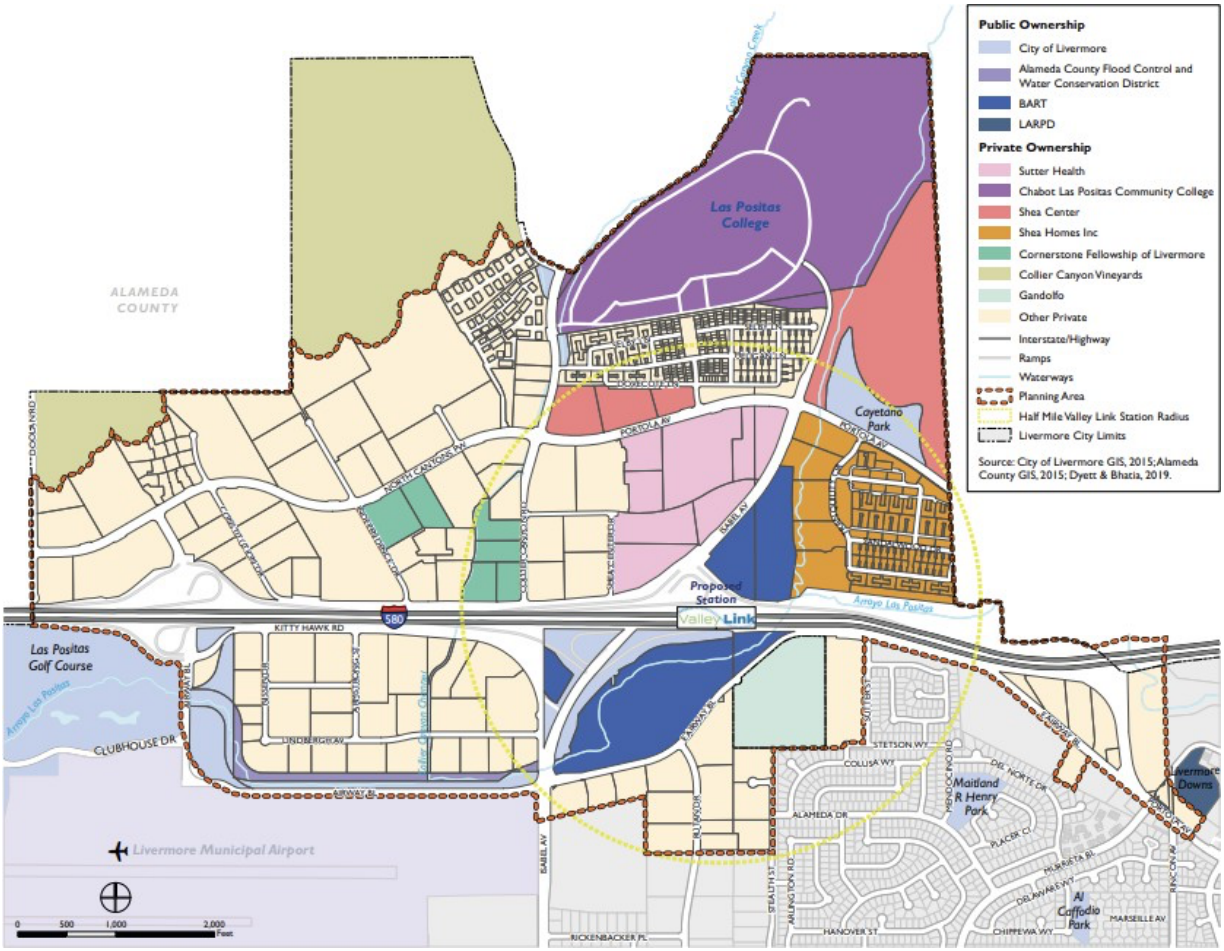
planning effort is a ½ mile radius from the proposed Valley Link station site. The primary objectives of the INSP are to:

- Create safe vibrant neighborhood with amenities for residents, workers and students compatible with community character.
- Support citywide goals for increased housing choices and economic vitality.
- Support Valley Link rail by developing a complete neighborhood.

The planning area currently has approximately 1,380 residential units, commercial, industrial and institutional uses supporting 10,500 jobs, and it contains 250 acres of undeveloped land.

The Project site is located within the INSP at the intersection of Isabel and Portola Avenues, north of I-580 freeway interchange in the City, as shown in Figure 1.

Figure 1: Map of Isabel Neighborhood Specific Plan Area



ECONOMIC & COMMUNITY BENEFITS

Development of the Project will generate thousands of construction jobs, and hundreds of retail and service jobs following completion. Developer is estimated to pay over $125 million in impact fees to City and County agencies, and City could receive $4 million per year in general fund tax revenues, yielding a significant fiscal and economic benefit for the City of Livermore, the school districts and local business, as well as provide other significant community benefits including:

- 363 affordable housing units for very low, low, median, and moderate-income households.
- 1.5-acre public park, as well as other open space amenities including a trail system, plazas and town square
- Community recreation center
- 65,000 square foot town center

Stimulus from New Resident Spending

With approximately 1,300 new households, Kosmont estimates the Project residents at buildout will infuse approximately $43 million in local retail spending, of which Livermore businesses, outside of the Project could expect to capture an estimated 75% of this new resident spending.

Development Impact Fees

Development of the Project will require payment of $125 million in fees for City and various local agencies as summarized below. The analysis *excludes* City Transferable Development Credit ("TDC") fees, for which Applicant has not received an estimate as of the date of this report.

City will receive approximately $36 million in one-time impact fees and improvements at Project buildout:

- $14 million for traffic impacts (less earned credit of $2.2 million for Developer provided facilities),
- $15.5 million or water, sewer and drainage improvements; and
- $6.5 million for other items.

Livermore Area Recreation and Park District will receive $26.7 million for park facilities (less earned credit of $1.5 million for Developer provided land),

The Zone 7 Water Agency is expected to receive approximately $48 million in developer fees.

The Tri-Valley Transportation Authority is expected to receive close to $5 million in fees

The Livermore Valley School District is estimated to receive $8.7 million in one-time fees

Annual Fiscal Impact to City

Considering the uncertainty of future economic conditions over the likely +10-year buildout, Kosmont estimated Project's annual tax revenues in 2024 dollars of **$4.1 million** at full buildout. After deducting the estimated $3.1 million increase in City service costs, the Project is anticipated to yield a net fiscal impact to the City of approximately **$1 million** annually in 2024 dollars.

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Exhibit 1: Summary of City Fiscal Impact

Project Annual Fiscal Revenues	
City General Fund Revenues	**Estimated Annual Total**
Property Tax (Secured & Unsecured)	$1,722,000
Property Tax in Lieu of MVLF	$328,000
Sales & Use Tax (Direct On-Site)	$182,000
Sales & Use Tax (Indirect Off-Site)	$357,000
Franchise Fees	$211,900
Business Licenses	$600,700
License & Permits	$196,600
Fines & Forfeitures	$12,100
Charge for Services	$276,100
Other Taxes	$203,900
Total Estimated General Fund Revenues:	**$4,090,300**
City General Fund Expenditures	
Police	$1,241,731
Fire	$716,289
Public Works	$262,025
Library	$212,651
General Government	$694,006
Total Expenditures	**$3,127,000**
Estimated Net Fiscal Impact	**$963,000**

Source: Kosmont Companies, City of Livermore

Economic Benefits

The Analysis also includes an assessment of economic impact and job benefits using the IMPLAN (IMpact analysis for PLANning) econometric input/output model developed by the IMPLAN Group. The model quantifies the economic impact to the local region during the Project construction period as well as ongoing operations. The output includes direct and indirect jobs and wage estimates during the construction period and permanent direct and indirect jobs and wage estimates for stabilized operations.

Construction Period

This Project will yield substantial economic benefits to the City, Alameda County, and the region, as buildout will require approximately $600 million in capital expenditures (excluding land acquisition and financing costs).

Per the IMPLAN analysis, the spending is estimated to provide 3,752 Full Time Equivalent ("FTE") jobs **on site**, with additional 1,073 FTE indirect service jobs spread countywide. Combined paying

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$475 million in wages and could yield an additional $230 million in indirect and induced regional economic output.

Operations

At full buildout, the Project will support approximately 200 FTE jobs onsite from commercial retail and office businesses, plus property management and maintenance for the residential development. Resident spending from the Project is estimated to support 533 FTE local jobs and ($40 million in wages).

Other Benefits

In addition to General Fund revenues and local job creation, Tri-Valley Transportation and Zone 7 Water fees, the Project will provide indirect benefits to City, County and Livermore Valley School District ("School District"):

- The School District will receive approximately $8.7 million in one-time developer school fees estimated at approximately $4.79 per square foot of residential and $0.62 per square foot of commercial building area.
- The School District will receive 21.5% of the basic 1% property tax levy, yielding at full buildout an estimated $1.8 million per year (shown in Section 4).

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Project Description

The Project is to be developed on the 45-acre subarea 3b and 3c site within the Isabel Neighborhood Specific Plan, just north of the I-580 freeway. The Site is adjacent to an office / business park to the west, single-family townhomes and Las Positas College to the north (across Portola Avenue), and more single-family townhomes to the east (across Isabel Avenue). Heading south on Isabel Avenue immediately south of I-580 exists a variety of commercial spaces to the southwest and office / business park space to the southeast.

Figure 2 Aerial Photo of Site and Immediate Neighborhood



Source: Google Earth

The Site is currently vacant. The Applicant's proposed multi-phase redevelopment Project will consist of 1,299 residential units, 1.5-acre neighborhood park, 3.9 acres of garden/green spaces spread throughout the Project, an approximate 9,825 SF community recreation center, and an estimated 65,900 SF of commercial retail space.

Figure 3 shows the conceptual master plan level of the site.

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Figure 3: Site Plan



Stabilized Annual Fiscal Impact

The fiscal impact analysis evaluates the stabilized annual fiscal revenues and municipal service costs expected for the City's General Fund for the Project. Fiscal revenue estimates were derived from estimating the various taxes including property taxes (secured and unsecured), business taxes, utility and franchise taxes, direct and indirect sales taxes. Municipal service costs were derived from City budget categories allocated on a per capita basis. The Analysis is based on information provided by the Applicant, City, County Property Tax Auditor-Controller's Office, California Department of Finance ("DOF"), California Board of Equalization ("BOE"), and ESRI.

General Assumptions

Given the uncertainty of actual development timing and future inflation rates for revenues and expenses, Kosmont has focused this Analysis on the estimated annual revenues and expenses at full Project buildout. All estimates are 2024 Dollars.

Fiscal Revenue Analysis

Property Tax
Property tax revenues are based on the anticipated assessed value of the Project upon full build-out and the applicable City property tax rates. The Project is predominantly located within Tax Rate Area 16-000. Based on the County Assessor allocation for TRA 16-000, the General Fund receives approximately 21% of the annual 1.0% secured property tax general levy, the Livermore Area Rec and Park District receives approximately 12% and Livermore Valley Joint Unified School District receives approximately 21.5% of the basic levy.

Based on estimated assessed value of $1,000,000 per for-sale residential unit, $500,000 for market rate rental unit and $350 per SF of retail at full buildout, Project is estimated to generate **$1.7 million** in annual property taxes to the City General fund, $**1 million** to Parks & Rec District, while School District could receive **$1.76 million** as shown below.

Exhibit 2: Property Taxes

		Project Buildout
Baseline: Existing Assessed Value		$ 50,000,000
Estimated New Assessed Value		$870,000,000
Net Assessed Value		$820,000,000
Total Secured Property Tax General Levy	1.00%	$8,200,000
Distributions to Taxing Entities		
City of Livermore	21.00%	$1,722,000
Livermore Parks and Rec District	12.00%	$984,000
School District	21.50%	$1,763,000

Source: County Assessor, Kosmont Companies

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Taxes in Lieu of VLF

Prior to 2004, a percentage of State of California motor vehicle license fee ("VLF") was distributed to cities. In 2005, the State instituted a revenue swap, guaranteeing that municipalities within California receive a distribution equal to the VLF collected, plus a percentage equal to the annual increase in assessed value, which for Livermore is equivalent to approximately 4% share of the basic levy, or estimated VLF revenues of **$328,000** for full buildout.

Sales Tax (On-Site / Direct)

California cities receive 1% of the **taxable** retail sales occurring within the City. The Project has a minimum of 65,000 SF of designated retail/restaurant space plus 25,000 SF of non-residential space. Kosmont assumed that onsite businesses generate an average of $500 per square foot in **taxable** sales or $32 million annually. Based on the basic 1.0% sales tax allocated to cities, direct sales tax revenues from the Project to the City General Fund at stabilization are estimated at approximately $325,000**.** Adding the State allocated Use Tax conservatively estimated at 12%, yields an estimated total of **$384,000** per year.

Exhibit 3: Onsite Sales Tax

		Project
Retail SF		65,000 SF
Estimated Taxable Sales - Retail	$500 PSF	$32,500,000
Sales Tax to City	1.00%	$325,000
Use Tax as % of Sales Tax	12.00%	$39,000
Total Direct Sales & Use Tax to City:		**$364,000**

Source: BOE, City of Livermore, Kosmont Companies

Sales Tax (Off-Site / Indirect)

Off-site / indirect sales tax revenue projections are estimated based on the taxable sales generated by the spending of Project residents, businesses and employees within the area. Employee spending is based on BLS Consumer Expenditure Survey data.

Annual Use Tax collected by the State is allocated to each City from County Pool taxes based fair share allocation of online sales taxes, averaging over 12% of the local sales taxes generated. At stabilized occupancy, the total annual resident retail spending is estimated $42.5 million at full buildout. Based on the Project's location, the Analysis assumes a 75% Citywide capture rate for annual spending, yielding indirect/offsite sales and use tax revenue to the General Fund estimated at **$357,000** per year as shown in Exhibit 4.

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Exhibit 4: Sales Tax (Off-Site/Indirect)

		Full Buildout
Ownership Households		833
Est. Annual HH Retail Spending		$38,000
Rental Households		466
Est. Annual HH Retail Spending		$20,000
Estimated # Employees		202
Estimated Annual Local Retail Spending Per Employee		$7,500
Estimated Taxable Retail Spending		$42,490,000
Estimated Capture within City	75.0%	$31,870,000
Sales Tax to City	1.00%	$318,700
Use Tax as % of Sales Tax	12.00%	$38,244
Total Indirect Sales & Use Tax to City:		**$357,000**

Source: ESRI, Livermore, and Kosmont Companies

Other Tax Revenues

The City collects a variety of taxes and fees from residents and businesses. These include franchise fees on utility charges, business taxes, business license and permits, fines and forfeitures, charges for services, misc. taxes and business license fees for commercial and industrial uses, as summarized in Exhibit 5 and Exhibit 6.

Exhibit 5 Other Per Capita Tax Factors

City Budget Category	2024/25City Budget	Allocation Basis	Relevant City Population	Discount	Per Capita Factor
General Fund Revenues					
Franchise Fees	$6,575,000	Service Population	116,000	0%	$56.68
Business Licenses	$10,735,000	Employee Population	52,000	20%	$165.15
License & Permits	$3,514,000	Employee Population	52,000	20%	$54.06
Fines & Forfeitures	$385,000	Service Population	116,000	0%	$3.32
Charge for Services	$8,805,000	Service Population	116,000	0%	$75.91
Other Taxes	$6,326,000	Service Population	116,000	0%	$54.53
Total Selected Revenues	***$36,340,000***				

Source: 2024-25 City Budget, and Kosmont Companies

They illustrate the combined new revenue from these taxes is estimated at $**1,494,000** at full buildout.

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Exhibit 6: Other Tax Revenue

		Project
Estimated # Residents		3,637
Employees		202
Total Project Service Population		3,738
Budget Category	**Allocation Basis**	
Revenues		
Franchise Fees	Service Population	$209,700
Business Licenses	Employee Population	$600,700
License & Permits	Employee Population	$196,600
Fines & Forfeitures	Service Population	$11,900
Charge for Services	Service Population	$273,300
Other Taxes	Service Population	$201,800
Total Other Revenues - Rounded:		**$1,494,000**

Source: 2024-25 City Livermore Budget, and Kosmont Companies

Fiscal Expenditure Analysis

The City's General Fund expenditures will be impacted by the new development. Expenditures such as police, fire, public works, parks; museums, library, community development and general government (city council, city manager, city clerk) and other miscellaneous categories. For this analysis Kosmont estimated the per capita cost based on the City Fiscal Year 2023-2024 Adopted Budget, and the relevant resident and employee populations within the City.

Service Population

For the purpose of expenditure budget allocation, total projected employees within the City are multiplied by a factor of 0.5 to arrive at a number of equivalent residents. The sum of these "equivalent" residents plus actual City residents equal the "service population" of 116,000 referenced in Exhibit 7 below.

Exhibit 7: City Service Population

Total City Population (2023)	90,000
Total City Employee Population (2023)	52,000
Employee Weighting for Service Population	0.50
Total Weighted # Employees	26,000
Total City Service Population	**116,000**

Source: ESRI and Kosmont

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General Fund Expenditures

Based on the budget and service population, Kosmont estimated a fixed/variable percentage appropriate for each category to derive per capita cost factors shown in Exhibit 8.

Exhibit 8: Fiscal Expenditures

City Budget Category	2024/25City Budget	Allocation Basis	Relevant City Population	Discount for Fixed Costs	Per Capita Factor
General Fund Expenditures					
Police	$48,167,000	Service Population	116,000	20%	$332.19
Fire	$27,785,000	Service Population	116,000	20%	$191.62
Public Works	$10,164,000	Service Population	116,000	20%	$70.10
Library	$7,517,000	Resident Population	90,000	30%	$58.47
General Government					
Administration	$8,193,000	Service Population	116,000	50%	$35.31
Administrative Services	$6,658,000	Service Population	116,000	50%	$28.70
General Services	$3,412,000	Service Population	116,000	50%	$14.71
Economic Development	$3,099,000	Service Population	116,000	50%	$13.36
Community Development	$21,711,000	Service Population	116,000	50%	$93.58
Subtotal General Governmen	$43,073,000				$185.66
Total: Expenditures	***$136,706,000***				$838.03

Source: City 2024-25 Budget and Kosmont

Applying the per capita factor to each service cost category, Kosmont estimates additional City General Fund expenditures in 2024 dollars to total $**3,130,000** following full build-Out as shown in Exhibit 9.

Exhibit 9: Annual Fiscal Expenditures

		Project Buildout
Estimated # Employees		3,637
Employees		202
Total Project Service Population		3,738
Budget Category	**Allocation Basis**	
Expenditures		
Police	Service Population	$1,241,731
Fire	Service Population	$716,289
Public Works	Service Population	$262,025
Library	Residents	$212,651
General Government	Service Population	$694,006
Total Expenditures - Rounded:		**$3,130,000**

Source: City of Livermore, Kosmont

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Net Fiscal Analysis

Considering the expected increase in annual General Fund revenue and municipal service costs, the Project is expected to generate a net fiscal surplus of $**963,000** per year at full build-Out (2024 dollars), as shown below.

Exhibit 10: Net Fiscal Analysis

Project Annual Fiscal Revenues	
City General Fund Revenues	**Estimated Annual Total**
Property Tax (Secured & Unsecured)	$1,722,000
Property Tax in Lieu of MVLF	$328,000
Sales & Use Tax (Direct On-Site)	$182,000
Sales & Use Tax (Indirect Off-Site)	$357,000
Franchise Fees	$211,900
Business Licenses	$600,700
License & Permits	$196,600
Fines & Forfeitures	$12,100
Charge for Services	$276,100
Other Taxes	$203,900
Total Estimated General Fund Revenues:	**$4,090,300**
City General Fund Expenditures	
Police	$1,241,731
Fire	$716,289
Public Works	$262,025
Library	$212,651
General Government	$694,006
Total Expenditures	**$3,127,000**
Estimated Net Fiscal Impact	**$963,000**

Source: City of Livermore, Kosmont Companies

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Development Impact Fees

In addition to annual General Fund tax revenues and local job creation, the Project will provide millions of dollars in one-time impact fees to the City General Fund, local school district, recreation and parks and regional traffic and water agencies.

Exhibit 11 shows the various City impact fees for each land use type, as well as for the other agencies as summarized below:

The Livermore Area Recreation and Parks District ("LARPD") charges fees for square foot of commercial and per residential unit as shown in Exhibit 11.

The Alameda County Flood Control Dept. ("Zone 7 Water") charges significant fees equal to $36 per square foot for commercial and $59,600 for each Townhome unit and $16,200 for each apartments/stacked flat unit.

Tri-Valley Transportation Agency charges fees equal to approximately $3.74 per square foot of commercial and $3,500 per residential unit.

The School District will receive one-time developer fees at approximately $4.79 per square foot of residential ($4,800 per unit) and $0.62 per square foot of commercial/industrial building area for a total of $1.5 million.

Exhibit 11: Impact Fee Schedule

Per Unit/SF Cost Factor	Commercial	Townhomes	Apts/Flats
	PSF	Per Unit	Per Unit
LARPD Park Fees	$3.178	$21,809	$19,220
City Traffic Impact	$32.250	$9,358	$8,002
Water Connection	$2.844	$8,009	$1,709
Storm Drainage	$0.540	$1,080	$513
Sewer Connection	$1.770	$6,948	$6,108
Social/Human Services	$0.005	$1,298	$1,298
GP Cost Recovery	$0.390	$780	$371
Art in Public Places	$0.000	$4,125	$2,475
Total City Fee	**$37.799**	**$31,598**	**$20,475**
Zone 7 Fees	**$36.72**	**$59,564**	**$16,193**
Tri-Valley Transportation	**$3.740**	**$3,484**	**$3,484**
School District Fee	**$0.624**	**$9,580**	**$4,551**

Source: Isabel Portola Owners, City of Livermore

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Applying the per Unit/SF fees to the proposed land uses in Exhibit 12 shows that Project development will generate approximately $26 million to LARPD and $36 million in fees to the City, primarily for traffic and utility connection fees. Overall, the developers will pay approximately $80 per square foot of commercial, $120,000 per Townhome unit and $65,000 per multi-family unit.

Zone 7 Water fees are estimated at $48 million, while Tri-Valley transportation fees are estimated at $5 million and local school fees are estimated at $8.7 million. Note that non-residential uses generate less than 5% of the combined City, Agency and school fees.

Exhibit 12: Impact Fees By Use

Total Fee	90,000 Non-Residential	545 TownHomes	754 Apts/Flats	Total Project
LARPD Park Fees	$ 286,020	$11,885,905	$14,491,880	$26,664,000
City Traffic Impact	$ 2,902,500	$ 5,100,110	$ 6,033,508	$14,036,000
Water Connection	$ 256,000	$ 4,364,905	$ 1,288,345	$ 5,909,000
Storm Drainage	$ 48,600	$ 588,600	$ 386,802	$ 1,024,000
Sewer Connection	$ 159,300	$ 3,786,660	$ 4,605,432	$ 8,551,000
Social/Human Services	$ 450	$ 707,410	$ 978,692	$ 1,687,000
GP Cost Recovery	$ 35,100	$ 425,100	$ 279,357	$ 740,000
Art in Public Places	$ -	$ 2,248,125	$ 1,866,150	$ 4,114,000
Total City Fees	**$ 3,400,000**	**$17,220,000**	**$15,440,000**	**$36,060,000**
Zone 7 Fees	**$3,305,000**	**$32,463,000**	**$12,209,000**	**$47,977,000**
Tri-Valley Transportation	**$337,000**	**$1,899,000**	**$2,627,000**	**$4,863,000**
School District Fee	**$56,000**	**$5,221,000**	**$3,431,000**	**$8,708,000**

ource: Isabel Portola Owners, City of Livermore

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Economic and Job Benefits

Construction Cost

The hard and soft construction costs for the residential mixed-use Project were estimated by Applicant at approximately $600 million for full buildout. Land acquisition and financing costs are not referenced, as they do not impact the economic benefit calculations.

IMPLAN Modeling

The Analysis uses the IMPLAN (IMpact analysis for PLANning) econometric input/output model developed by the IMPLAN Group to quantify the economic benefit to the local region from Project construction / renovation and ongoing operations. This proprietary model estimates the economic benefits on the industries in a given geographic area based on known economic inputs, such as construction costs. The model estimates direct, indirect, and induced benefits expressed in terms of increased economic activity ("output"), earnings ("labor income"), and job creation.

Direct Economic Benefits: Direct benefits refer to the short-term business activity of general contractors involved in Project construction / renovation and the ongoing business activities of Project tenants.

Indirect Economic Benefits: Indirect benefits will result when local firms directly impacted by the Project purchase materials, supplies or services from other firms. Examples would include increased sales of building materials as a result of construction activity, and increased sales of inputs related to the business operations of tenants within the Project.

Induced Economic Benefits: Induced benefits relate to the consumption spending of employees of firms that are directly or indirectly affected by the Project. These would include the goods and services associated with household consumption (e.g. housing, retail purchases, services).

Inputs for the IMPLAN economic benefit analysis include the development budget provided by the Client and permanent on-site employment information estimated by Kosmont. The permanent full-time employment estimates were derived from similar projects and industry standard per- square-foot employment densities for corresponding land use types.

The analyses, projections, assumptions and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Actual results may differ from those expressed in this analysis, as results are difficult to predict as a function of market conditions, natural disasters, pandemics, significant economic impacts, legislation and administrative actions.

Construction Related Economic Benefits

During the construction period, the Project is expected to produce approximately 3,752 onsite/direct FTE construction jobs, and combined with 1,073 indirect and induced job impacts, a total of 4,825 FTE jobs, $475 million in labor income, and approximately $834 million of total economic output are expected within the County, of which an estimated $615 million is within the City (see Exhibit 13).

Exhibit 13: Economic Benefits from Construction

Economic Benefits from Construction (One-Time / Short-Term)

	Employment	Labor Income	Economic Output
Direct (On-Site)	3,752	$393,100,000	$604,000,000
Indirect	261	$22,500,000	$61,200,000
Induced	812	$60,200,000	$169,300,000
Total Countywide	**4,825**	**$475,800,000**	**$834,500,000**
Estimated City Capture	**3,806**	**$397,235,000**	**$615,525,000**

Values in 2024 dollars.
Source: IMPLAN, Kosmont Companies

Economic Benefits from Ongoing Operation

At full buildout the multi-family and commercial operations are projected to provide 201 FTE jobs on site. In addition, business and resident spending is expected to support approximately 533 indirect and induced jobs, for a total of 734 countywide jobs, $50 million of labor income, and $131 million economic output. (see Exhibit 14). The City is estimated to capture 446 FTE jobs with $29 million in annual wages.

Exhibit 14: Economic Benefits from On-Going Operations - Full Buildout

Economic Benefits from Ongoing Operation (Annual)

	Employment	Labor Income	Economic Output
Direct (On-Site)	201	$10,200,000	$17,600,000
Indirect	24	$2,100,000	$5,300,000
Induced	509	$38,600,000	$108,900,000
Total Countywide	**734**	**$50,900,000**	**$131,800,000**
Estimated City Capture	**446**	**$28,900,000**	**$70,200,000**

Source: IMPLAN, Kosmont Companies

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MEMORANDUM

Date: June 21, 2024

To: Planning Division, Community Development Department, City of Livermore

From: Larry Kosmont, CEO - Kosmont Companies
Thomas Jirovsky, Senior Advisor – Kosmont Companies

Re: **Affordable Housing Economic Equivalency Analysis – Isabel Crossing**

Kosmont & Associates, Inc., doing business as Kosmont Companies ("Consultant" or "Kosmont"), presents this memorandum providing an economic analysis of the proposed affordable housing program in Isabel Portola Owner, LLC ("Applicant") master planned, mixed-use development located ("Project") located on an approximately 45-acre site within the Isabel Neighborhood of the City of Livermore, California ("City").

This memorandum provides Kosmont's high-level comparative economic equivalency assessment between the Project's proposed affordable housing program and the generally applicable affordable housing requirements as set out under the Isabel Neighborhood Specific Plan ("INSP") and the Livermore Development Code ("LDC") (collectively "City Affordable Housing Regulations"). As set out below, the Project proposes a robust affordable housing program that exceeds the requirements of the INSP and LDC in terms of supporting housing at all affordability levels. In addition, the added affordable housing units require an estimated $15-20 million greater investment by the Applicant to construct affordable housing units.

Comparative Economic Analysis

The LDC generally requires new housing developments to provide between 10 and 15% of all apartment and for-sale residential units as affordable for low income and moderate income households.[1] The LDC increases this requirement within the INSP area by requiring 20% of the units in a new housing project to be provided as covenanted affordable units.[2]

The maximum annual household income levels for an average sized household of three persons[3] needed to qualify for the affordable housing levels addressed in City regulations are summarized as follows:

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[1] LDC, §10.06.505-A.I.a.
[2] LDC, §10.06.505-A.I.c.
[3] The average household size in Livermore is 2.82 persons, per U.S. Census Bureau 2018-2022 data. See: https://www.census.gov/quickfacts/fact/table/livermorecitycalifornia/HSD310222, last accessed April 24, 2024.

- Very Low Income: $ 64,300;
- Low Income: $ 98,650;
- Median Income: $128,500;
- Moderate Income: $154,200.[4]

The Applicant's development plan calls for a total of 1,299 dwelling units, including 466 apartment units, 288 stacked flat condominium units, and 545 townhouse units. Of these, the Project proposes to provide a total of 363 covenanted affordable housing units, 28% percent of the total units in the Project.

Of the 363 affordable units, the Project proposes a total of 306 affordable rental units and 57 affordable for-sale units. This includes a total of 65 rental units for households at the Very Low Income Level, 113 rental units for households at the Low Income Level, 65 rental units for households at the Median Income Level, 63 rental units for households at the Moderate Income Level, 18 for-sale units for households at the Median Income Level, and 39 for-sale units for households at the Moderate Income Level. The Project would thus provide 178 housing units to benefit Very Low and Low Income households earning from $60,000 to just under $100,000 per year.

By comparison, following the City's Affordable Housing Regulations' 20% inclusionary requirement, the Applicant would provide a total of 260 affordable units, including 166 affordable for sale units for median and moderate income households and 94 affordable rental units, including 30 Very Low, 32 Low, 18 Median, and 14 Moderate Income units.[5] Stated differently, compliance with the City Affordable Housing Regulations, would only yield 62 low and very low units out of the 206 total affordable units benefiting an average-sized households earning less than $100,000 per year.

The Project thus provides 103 more total affordable units than would be required by applicable City Affordable Housing Regulations. In addition, the Project would provide 178 affordable housing units for households earning under $100,000 per year, which is nearly three times more low-income units than City Affordable Housing Regulations require.

In addition, the Project's proposed housing plan will require an increased investment of approximately $15-20 million from the Applicant for the 363 affordable units' construction costs and fees, as compared to the cost to build the 260 affordable units under strict compliance with City Affordable Housing Regulations.

Under City Regulations, the Applicant would need to build 166 for-sale units ranging from 1,600 to 2,000 SF with a construction costs of $300 to $350 per SF – or ~$600,000 per unit on average, and 94 apartment units estimated to cost $400,000 per unit based on an average 1,000 SF per

[4] City of Livermore, 2024 Affordable For-Sale Prices and Rental Rates, found at: https://www.livermoreca.gov/home/showdocument?id=11243&t=638412798907201477, last visited April 23, 2024.
[5] This analysis assumes a proportionate number of for sale and rental affordable units would be provided. See LCD, §10.06.505-A.I.c.

unit (including common areas) and will cost $400 per SF including allocated parking structure costs for total investment of $135-$140 million. The proposed Project will provide 57 for sale units (@~$550,000 to $600,000) and 306 apartment units (@$400,000) with a total investment of ~$155 million, an increase investment of $15 to $20 million.

Collateral Economic Factors

The provision of affordable housing for families and persons earning under $100,000 per year is critical in light of the region and state's current, constrained housing market. Such affordable housing is needed for a variety of working professionals. This includes governmental employees, including City staff, teachers in local schools, social workers, emergency service providers, and other public professionals who serve the community. Such workers are often forced to commute into the City from long distances, a factor that produces a variety of negative economic, environmental, and personal outcomes for the workers. Such housing is also needed for many young and other working professionals and households making under $100,000 per year, including employees of non-profits/public benefit organizations, service industry workers, and restaurant, retail and hospitality industry workers.

According to Zillow, the median monthly rent for a two-bedroom market rate rental unit in Livermore is $2,895 as of April 2024.[6] In 2024, the maximum monthly rent for a covenanted Very Low Income two-bedroom rental unit in the City is $1,665, available for households or persons earning up to $66,600 per year; a 42.5% reduction from the City's median rent for a two-bedroom unit.[7] For a two-bedroom Low Income rental unit, the maximum monthly rent is $1,998, available for households or persons earning up to $79,720 per year; a 30% reduction from the City's median rent for a two-bedroom unit.

Covenanted affordable housing rents are set at levels that constitute 30% of the monthly take-home income of qualifying low-income tenants, excluding tenant utility allowances. This rent level is set to avoid negative "housing burden," which is defined to occur where a household pays more than 30% of its total household income on housing. According to a 2023 study, 56% of renter households in the Tri-Valley area were rent burdened based on 2017-2021 data, while overcrowding of housing units in the area nearly doubled between just 2015 and 2021.[8]

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[6] See, Zillow.com, 2024, found at: https://www.zillow.com/rental-manager/market-trends/livermore-ca/#:~:text=The%20median%20rent%20price%20in,%24400%20less%20than%20April%202023, last visited April 23, 2024.

[7] City of Livermore, 2024 Affordable For-Sale Prices and Rental Rates, found at: https://www.livermoreca.gov/home/showdocument?id=11243&t=638412798907201477, last visited April 23, 2024.

[8] Tri-Valley Nonprofit Alliance, *Data Profile: Just Getting by in the Tri-Valley*, 2023 Updates, at p. 11, found at: https://tvnpa.org/wp-content/uploads/2023/10/TVAPC-Data-Profile-Final-2023.pdf, last visited April 23, 2024. Overcrowding is defined by the US Census as having more than 1.01 person per bedroom in a housing unit. *Ibid*. Notably, the City's most recent Sixth Cycle 2023-2031 Housing Element reports lower numbers of both housing burden and overcrowding, the data still demonstrates overall increases in both important housing market health metrics over time.

With the Project providing 103 units in excess of affordability requirements, Kosmont believes the Project's affordable housing program is economically superior to strict compliance with the City Affordable Housing Regulations. The Project, as proposed, provides more affordable housing units overall, and more units for persons that qualify for the lower income categories covered by City code and state law, which have the greatest economic need for financial assistance.

Regional Housing Needs Assessment (RHNA) Comparative Analysis

In the past nine years, the City has been successful in meeting its Regional Housing Needs Assessment ("RHNA") goals for Moderate and Above Moderate Income units, but has fallen short for Low and Very Low Income units. Thus, the Project's provision of greater Low and Very Low Income units provides a notable boost toward the City meeting lower income housing goals for which it has the greatest need as shown below:

2015-2022 Fifth Cycle RHNA Targets and Housing Production[9]			
Affordability Level	**RHNA Goal 2015-2022**	**Actual City Housing Production 2015-2022**	**Percentage of RHNA Target Achieved**
Very Low Income	839	196	23.3%
Low Income	474	56	8.4%
Moderate Income[10]	496	649	131%
Above Moderate Income	920	1,411	153%

The most recent Annual Housing Element Progress Report issued in March 2024 concluded that, in 2023, a total of 80 Moderate Income and 42 Above Moderate Income units were approved, while zero Very Low and Low Income Units were approved.[11]

Accordingly, the City has an acute need for an increased production of Very Low and Low Income units to meet its housing goals. The following table presents a comparative analysis that reviews the City's state-approved 2022-2030 RHNA targets for the City's current Sixth Cycle 2023-2031 Housing Element. It also compares the Project's affordable housing program with that which would occur with strict compliance with City Affordable Housing Regulations.

[9] City of Livermore, 2022 Annual Housing Element Progress Report, found at: https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1848928/Livermore_2022.pdf
[10] The Moderate Income category here includes both Moderate and Median Income units.
[11] City of Livermore, 2023 Annual Housing Element Progress Report, found at: https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/2464483/3._2023-2031_RHNA_Progress.pdf

2023-2031 Sixth Cycle RHNA Targets and Comparison Between Proposed Project and City Affordable Housing Regulations			
Affordability Level	**City RHNA Goal 2022-2030**[12]	**Project, As Proposed**	**Project with City Affordable Housing Regulations**
Very Low Income	1,317	65	30
Low Income	758	113	32
Moderate Income	696	185	166

As indicated, the Project performs better in the provision of much needed Very Low and Low Income Unit categories, as well as for the Moderate Income category.

Conclusion

The City has the most need for housing production in the lower income categories, which consequently serve the households and individuals facing the most acute housing burden and need for economic assistance with housing costs.

Based on the foregoing analysis, Kosmont believes that the proposed Project will provide significantly greater economic benefits for affordable housing in the City, by providing a larger and more diverse offering of affordable units than the applicable 20% inclusionary policy under the City Affordable Housing Regulations.

The Project provides particular benefits for the lower income affordable housing categories where both the City and residents in need of affordable housing have the greatest need. At the same time, the Project does a better job helping the City meet all applicable RHNA affordable housing production goals for 2030.

In summary, the Project provides more of the economic equivalent of existing City Affordable Housing Regulations, including requiring an estimated $15-20 million greater investment in affordable housing by the Applicant. It is an economically superior alternative in terms of greater investment supporting affordable housing, and for the economic health of the City's housing market, and will boost the housing supply for lower income City residents.

[12] See Housing Element, at p. 2-36.

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MEMORANDUM

Date: June 21, 2024

To: Bill Myers, Isabel Portola Owner, LLC

From: Larry Kosmont, CEO **-** Kosmont Companies
Thomas Jirovsky, Senior Advisor – Kosmont Companies

Re: **Housing Density Economic Hardship**

Kosmont & Associates, Inc. doing business as Kosmont Companies ("Consultant" or "Kosmont") is pleased to present this **report** for the City's requested economic hardship analysis. This economic report presents Kosmont's high-level assessment of the economic challenges of meeting the Target housing density.

Developer Request
Isabel Portola Owner LLC ("Applicant") is requesting a reduction in residential density to 1,299 units from the "target" residential density of 1,477 units for the 45-acre site within Isabel Neighborhood Specific Plan (subareas 3b and 3c) in the City of Livermore ("City").

The Isabel Neighborhood Specific Plan ("INSP") identifies a range of density standards from 15 to 100 units per acre based on location within INSP to achieve a target of 3,000 to 4,000 new housing units as follows:

- Transition – 15-25 units per acre
- Village – 25-40 units per acre
- Center – 40-60 units per acre
- Core – 60-100 units per acre

Table 2-6 in the INSP identifies the residential unit development identified for Applicant's subareas as shown below:

	Minimum No. Units	Target Units
Subarea 3b	1,054	1,267
Subarea 3c	182	210
Subtotal	1,236	1,477

Background
P- LU-8 of the INSP provides that "[t]he City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director."

In order to meet the Specific Plan's target of 1,477 residential units, a developer would need to add 178 more multi-family units, since the development plan calls for 1,299 units, as follows:

- 833 for-sale duplex, triplex, townhomes and condos and
- 466 multi-family apartments.

The alternative plan would require eliminating approximately 4 acres of for-sale housing at 20 units/acre and replacing them with multifamily apartments at 60-80 units per acre.

Apartment Market Conditions

The INSP target density was developed with expectations of a new Valley Link (previously BART) station and high-density transit-oriented development similar to BART served communities in the East Bay approaching 100 units per acre.

Multi-Family Market Trends

Within a 3-mile radius of the site, there are around 2,541 units with no units under construction. The Livermore market has a current vacancy rate of 7.3% with 186 vacant units. With over 195 units in positive absorption since 2019 and a decrease in vacancy rates, there is some sign of a rebound of the residential rental market. Within the 3-mile radius, 246 units have been delivered since 2023 and the average rent per unit has increased slightly by 2.6% to $2,444. These rent level trends are averages for all quality types. A focused review of recent Class A product found market rents of $2,700 for 1-bedroom units, $3,200 for 2-bedroom units and $4,200 for 3-bedroom units.

Multi-Family Market History – 3-Mile Radius

Period	Inventory Units	Vacancy Units	Vacancy Percent	Absorption Units	Avg Rent Per Unit	Avg Rent Per SF
2024 YTD	2,541	186	7.3%	107	$2,444	$3.16
2023	2,517	270	10.7%	69	$2,382	$3.08
2022	2,295	117	5.1%	(35)	$2,564	$3.33
2021	2,295	81	3.5%	59	$2,389	$3.10
2020	2,253	98	4.4%	16	$2,225	$2.88
2019	2,253	114	5.1%	(21)	$2,185	$2.83
2018	2,253	94	4.2%	13	$2,149	$2.78
2017	2,253	107	4.7%	(5)	$2,064	$2.67
2016	2,253	102	4.5%	(25)	$2,009	$2.60

Source: CoStar (Q2 - 2024)

The Dublin/Pleasanton/Livermore multifamily submarket contains approximately 14,000 units of inventory. The last delivery of units in the region occurred in 2022/23 with 697 units. Historically, investors have shown a high level of interest in the submarket, although sales have slowed due to higher interest rates and tighter lending standards.

However, Livermore apartment rent levels will need to be substantially higher than current Class A market rents of approximately $2,700 to $3,400 per month in order to be financially feasible given the substantial development impact fees, high cost of parking structures, and the requirement to provide 20% of units affordable to very low, low, median and moderate-income households. This averages out to approximately $2,400 per month.

Financial Hardship

Kosmont has prepared an illustrative pro forma comparison of multi-family development under a range of densities from 25 to 80 units per acre on a hypothetical 2-acre site in INSP to show the residual value available to cover land and infrastructure costs.

Key pro forma assumptions:

- Gross building area of 1,000 SF per unit with 15% allocated to common area for a net rentable area of 850 SF
- Direct construction costs of $225 per SF rentable area and $150 per SF for common area
- Parking cost of $5,000 per space for low-density carports vs $30,000 per space for enclosed parking structures required for higher density
- City, County, School District, Tri-Valley and Zone 7 impact fees of $62,000 per unit
- Soft costs of 10-12% of hard costs
- Financing cost at 6% for an 18 month to 30-month construction period
- Average market rent of $3,100 for 1-bedroom units, 2-bedroom units and 3-bedroom units
- Vacancy rate of 5%
- Operating costs of 33% of gross revenue
- Investment Value required ROI of 5.5% per year needed to achieve a builder profit margin

As shown on the following page, the resulting residual land value for 25 units per acre is $77,000 per unit or $1.9 million per acre. With density of 80 units per acre, the per unit supportable value is reduced under current conditions to a value of only $200,000 per acre.

		MF DENSITY FEASIBILITY ILLUSTRATION					
		RESIDUAL LAND VALUE					
		2-acre site @ Various Densities					
					Apts	**Apts**	**Apts**
		Cost Assumption			**25 DU /Acre**	**40 DU /Acre**	**80 DU /Acre**
Units					50	80	160
Low Income Inclusionary					20%	20%	20%
Direct Hard Costs							
Parking Structure	2.00	$ 30,000	space		NA	4,800,000	9,600,000
Surface Carport	2.00	$ 5,000	space		500,000		
Apt Units @ 850 SF (net)		$ 225	psf		9,562,500	15,300,000	30,600,000
Common Area, etc.		$ 150	psf		1,200,000	1,920,000	4,800,000
Total Direct Costs					$ 11,262,500	$ 22,020,000	$ 45,000,000
Indirect/ Soft Costs							
Architecture & Engineering		6.00%	hard		$ 675,750	$ 1,321,200	$ 2,700,000
City Fees		$ 62,000	per unit		3,100,000	4,960,000	9,920,000
EIR & Traffic Engineering Consultants		2.00%	hard		225,250	440,400	900,000
Loan Fees + Interest		5-7%	total		718,125	1,618,800	3,844,400
Acctg/taxes/insurance		2.00%	hard		225,250	440,400	1,125,000
Total Soft Costs					$ 4,944,375	$ 8,780,800	$ 18,489,400
Developer Overhead		3.00%	Total		$ 486,206	$ 924,024	$ 1,904,682
A. Total Development Cost					**$ 16,693,000**	**$ 31,725,000**	**$ 65,394,000**
Development Valuation							
Market Units @		$3,100	per mth		$ 1,488,000	$ 2,380,800	$ 4,761,600
Low-Mod Units @		$2,400	per mth		288,000	460,800	921,600
Gross Income					$ 1,776,000	$ 2,841,600	$ 5,683,200
Less: Vacancy/Bad Debt		5%			$ (88,800)	$ (142,080)	$ (284,160)
Effective Gross Income					$ 1,687,200	$ 2,699,520	$ 5,399,040
Less: Operating Costs		33%			$ (556,776)	$ (890,842)	$ (1,781,683)
Net Operating Income					**$ 1,130,000**	**$ 1,809,000**	**$ 3,617,000**
B. Sales / Investment Value		**5.5%**			**$ 20,545,455**	**$ 32,890,909**	**$ 65,763,636**
Residual Land Value (B-A)					$ 3,852,000	$ 1,166,000	$ 370,000
Land value per Acre					**$ 1,926,000**	**$ 583,000**	**$ 185,000**
Land Value per Unit					$ 77,000	$ 15,000	$ 2,000

Source: Kosmont, Isabel Portola Owners, LLC

With land acquisition and infrastructure costs exceeding $2 million per acre, a high-density multi-family community is not feasible without a substantial for-sale townhome component.

Townhome Residual Land Value
Kosmont prepared illustrative pro forma to estimate for the per acre contribution margin for land and infrastructure. For a typical for-sale townhome product at 20 units per acre, Kosmont's preliminary research indicates the average Townhome/condo unit sells for $900,000 to $1 million while 20% median and moderate affordable 3-bedroom units would be limited to $450,000 to $550,000 and yield an average residual land value of $4 million per acre.

The table below illustrates the estimated per acre contribution margin available from For-sale Townhome products to cover land cost and community benefit costs.

Illustration of
Townhome Contribution Margin

		Towmhomes
Density Per Acre		20
Average Unit Value		$ 900,000
Direct Construction	$200/sf	400,000
Soft Costs	20%	80,000
Builder Overhead		80,000
Marketing/Sales Costs		90,000
Total Costs		650,000
Contribution Margin Per Unit		$ 250,000
Less: Infrastructure Cost per Acre		$ 1,000,000
Contribution Margin per Acre		$ 4,000,000

Source: Kosmont , Isabel Portola Owners LLC

However, by replacing 4 acres of land from for-sale townhomes with high-density apartment units it creates a potential incremental **financial loss of $15 million** to the master developer making overall development infeasible. This is based on a loss of $4 million per townhome acre x 4 acres and a gain of $200,000 per high-density multi-family acre times 4 acres.

Community Benefits Financial Impact

Unlike typical subdivisions, Applicant designed a community village with a wide range of housing types, affordability levels, open space, town square and other community benefits that require a multi-million dollar investment:

• 74,362 Retail/ Commercial space @ $350psf.	$ 26m
• 115 additional parking spaces for retail @ $40,000 per space	$ 5m
• Excess open space of 292k-155k sf @ $4m per acre	$ 12m
• Additional Affordable Subsidy (28% vs 20%)	$ 15m
TOTAL	**$ 58m**

Conclusion

Based on the analysis, Kosmont's opinion is that the INSP target density for the subject parcels is financially infeasible given the estimated +$50 million in community benefits to be contributed by the Applicant.

There is uncertain demand for creating a community with 50% of the units as rentals. Increasing the unit count through higher density will result in a net loss of an estimated $15 million in contribution margin, dramatically increasing the financial risk.

Isabel Portola Owner, LLC

July 3, 2024
Via Electronic Submittal

City of Livermore
c/o Jake Potter, Senior Planner
Planning Division, Community Development Department
1052 South Livermore Drive
Livermore, CA 94550

Re: Isabel Neighborhood Specific Plan, Isabel Crossing (Harridge) Development Project (SUB22-008, DA22-001, CUP 24-002, SPDR 24-003, SPPA 24-001)
Third Revised **Density Bonus Request Letter**

Dear Jake:

Isabel Portola Owner, LLC (Isabel Portola) has applied to the City of Livermore ("City") for entitlement approvals for the Isabel Crossing project (Project), a master planned mixed-use development consisting of 1,299 dwelling units, approximately 75,000 square feet of commercial uses along a new commercial main street, and public open space uses and amenities including a new neighborhood park, community center, plazas, and a public trail and bike paths on a vacant and underutilized parcel within Subareas 3b and 3c of the Isabel Neighborhood Specific Plan (INSP) area.

Under the Density Bonus Law, "[w]hen a developer agrees to construct a certain percentage of the units in a housing development for low- or very-low-income households… the city or county must grant the developer one or more itemized concessions and a 'density bonus,' which allows the developer to increase the density of the development by a certain percentage above the maximum allowable limit under local zoning law." (*Latinos Unidos Del Valle De Napa Y Solano v. County of Napa* (2013) 217 Cal.App.4th 1160, 1164.) The Legislature has stated that the Density Bonus Law "shall be interpreted liberally in favor of producing the maximum number of total housing units." (Gov't Code, § 65915(r); *Schreiber v. City of Los Angeles* (2021) 69 Cal.App.5th 549, 554-555.) Moreover, the purpose of the incentive and waiver provisions of the Density Bonus statute is to eliminate local zoning requirements that would inhibit the development of affordable housing units and "contribute significantly to the economic feasibility of lower income housing in proposed housing developments." (*Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329,1339.)

The Project provides a total of 363 new covenanted affordable housing units, comprising 28 percent of the total number units in the. Of the Project's affordable

units, a total of 178 units are provided as rental units at the Very Low and Low Income Levels, which is 13 percent of the total units in Project.[1] This figure exceeds the 10 percent minimum base density of Low Income units to qualify the Project for density bonus "incentives and concessions" and "waivers or reductions" of "development standards" under Government Code, Section 65915(b)(1), (d) and (e)(1) and Livermore Development Code (LDC), Section 6.02.030. The Project seeks one incentive and various waivers, as follows.

I. Incentive or Concession Request.

First, "specific incentives or concessions" under Section 65915(d) are broadly defined to include: (1) "a reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards approved by the California Building Standards Commission"; (2) approval of mixed- use zoning; or (3) other proposed regulatory incentives or concessions. (Gov't Code, § 65915(k).)

A city "shall grant the concession or incentive requested by the applicant unless the city … makes a written finding, based upon substantial evidence," of any of the following: (1) the incentive does not result in identifiable and actual cost reductions; (2) the incentive would have a specific, adverse impact on public health and safety, the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the … impact; or (3) the incentive would be contrary to state or federal law. (Gov't Code, § 65915(d)(1).)

With respect to showing cost reductions under Government Code, Section 65915(d)(1)(A), the "applicant is not required to prove the requested incentives will lead to cost reductions; the incentive is presumed to result in cost reductions and the city bears the burden to demonstrate otherwise if it intends to deny the incentive." (*Bankers Hill 150 v. City of San Diego* (2022) 74 Cal.App.5th 755, 770.) Because the Project proposes to provide over 13 percent of its total density of 1,299 units, a total of 178 units, at the low and very low income level, the Project qualifies for at least one incentive, and seeks one incentive.

Isabel Portola requests the following incentive or concession:

1. Eliminate any applicable Floor Area Ratio (FAR) requirements that apply to office uses within INSP Subarea 3c set forth INSP Table 2-3.

[1] The Project proposes a total of 306 affordable rental units between the Very Low Income and Moderate Income levels and 57 for-sale affordable units at the Median and Moderate Income levels, totaling 28 percent of the total number of units in the Project.

II. Waiver or Reduction Requests.

The Project also seeks "waivers or reductions" of development standards under Government Code, Section 65915(e)(1) and LDC, Section 6.02.030-H, specified below, which are not limited in number by the State Density Bonus Law. The waiver or reduction provision of the Density Bonus Law, Government Code, Section 65915(e)(1), provides, in part, that "in no case may a city . . . apply any development standard that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) [a density bonus project] at the densities or with the concessions or incentives permitted by this section."

The right to waivers has also been broadly interpreted by California courts. (See *Wollmer, supra*, 193 Cal.App.4th at 1346–1347.) A city violates the Density Bonus Law where it fails to waive development standards that would physically preclude the construction of a qualifying Density Bonus project. (*Wollmer, supra*, 193 Cal.App.4th at 1347.) "If the project were not built, it goes without saying that housing units for lower income households would not be built and the purpose of the Density Bonus Law to encourage such development would not be achieved." (*Id.*) Thus, under the Density Bonus Law, "[u]nless one of the statutory exceptions applies, so long as a proposed housing development project meets the criteria of the Density Bonus Law by including the necessary affordable units, a city may not apply any development standard that would physically preclude construction of that project as designed." (*Bankers Hill 150, supra,* 74 Cal.App.5th at 775.)

"Development standard" is defined by the statute to include "a site or construction condition including, but not limited to, a height limitation, a setback requirement, a floor area ratio, an onsite open-space requirement, or a parking ratio that applies to a residential development pursuant to any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation." (Gov't Code, § 65915(o)(2).) "For example, if a city ordinance imposes a building height limitation, a city must waive that limitation for a development that is eligible for a density bonus if imposing the height limit would physically preclude construction of the proposed building with the requested incentives and at the density allowed by the Density Bonus Law. There are no financial criteria for granting a waiver." (*Bankers Hill 150, supra,* 74 Cal.App.5th at 770.)

In accordance with these provisions, Isabel Portola requests the following waivers of applicable development standards, listed by the proposed Project master plan "Planning Area" requiring a waiver or reduction:

1. In Planning Area N-1:

    a. A waiver or reduction from the applicable INSP porch separation requirement for porches facing each other of 15 feet along paseos, where two particular porches in the Planning Area are separated by 7.5 feet and 9.9 feet, respectively.

2. In Planning Areas N-2 and N3-A:

    a. A waiver or reduction from the applicable INSP dimension requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the Project provides certain units that include private open space that is 17 feet, 3 inches by 5 feet, 0 inches, for a total area of approximately 86.25 square feet.

3. In Planning Area C1-B:

    a. A waiver or reduction from the applicable INSP front setback requirement of a 10-foot setback at the fourth floor of the proposed four-story apartment building; no setback is proposed (though decks are provided to break up the facades).

    b. A waiver or reduction from the applicable INSP minimum 16-foot floor to ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.

4. In Planning Area C2-A:

    a. A waiver or reduction from the applicable INSP front setback requirement of a 10-foot setback at the fourth floor of the proposed five-story apartment building; no setback is proposed (though decks are provided to break up the facades).

    b. A waiver or reduction of the applicable INSP height limit of 490 feet MSL, where a maximum height of approximately 499 feet MSL is provided for a portion of a building on the north end of the Planning Area.

    c. A waiver or reduction from the applicable INSP minimum 16-foot floor-to-ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.

5. In Planning Area S1:

    a. A waiver or reduction from the applicable INSP minimum commercial FAR of 0.4:1, where an FAR of approximately 0.3:1 is provided.

    b. A waiver or reduction of the applicable INSP height limit of 485 feet above MSL, where a maximum height of approximately 497 feet above MSL is provided.

6. In Planning Area S2 and S4:

    a. A waiver or reduction from the applicable INSP dimension requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the Project provides certain units that include private open space that is 14 feet, 2 inches by 5 feet, 4 inches, for a total area of approximately 73.3 square feet.

7. In Planning Area S3-A:

    a. A waiver or reduction of the applicable INSP height limit of 485 feet MSL, where a maximum height of approximately 491 feet MSL is provided.

8. In Planning Area S3-B:

    a. A waiver or reduction of the applicable INSP height limit of 475 feet MSL, where a maximum height of approximately 496 feet MSL is provided.

9. In All Planning Areas:

    a. A waiver or reduction of the applicable INSP requirement for a minimum of 16 trees per acre of site area, where the Project proposes approximately 10 trees per acre (465 total).

Isabel Portola expressly reserves the right to modify or add to this list any additional incentives or concessions and waivers or reductions that may arise prior to the approval of the Project's entitlements or building permits.

We thank for you for time and attention.

Sincerely,

ISABEL PORTOLA OWNER, LLC

By: _____

Name: David Schwartzman

Its: Authorized Signatory

LIVERMORE
SCHOOL DISTRICT

Livermore Valley Joint Unified School District

685 East Jack London Boulevard, Livermore, CA 94551

Tel (925) 606-3200 Fax (925) 606-3329

March 21, 2024

Stephen Riley, Acting Planning Manager
Community Development Department
City of Livermore

Mr. Riley:

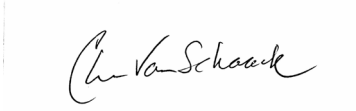
Thank you for allowing me to review the plans for the Isabel Crossings Project and comment on its potential impact on Livermore School District schools. As you know, the City and District have been working very closely for many years to ensure that we are well positioned for the expected growth from the Isabel Neighborhood Specific Plan. It is my understanding that the Isabel Crossings Project will have approximately 1300 new units.

As a regular practice, we engage with local demographers every other year to update our projections to ensure that our enrollment capacity meets or exceeds the anticipated student growth in both the short and long term. Currently, the schools in our District as they sit today can accommodate over 15,000 students. Our current enrollment is just over 13,000. Including the completion of the Isabel Neighborhood Plan, we do not project student growth to approach our current capacity. This is based upon a student generation rate of .5 students/unit, which is a bit higher than the actual rate over the past ten years, but provides us with a small buffer. Generation rates for townhomes and apartments are even lower, at approximately .25 students/unit.

Based upon that number, we anticipate the Isabel Crossings project to produce less than 650 students, ranging from Transitional Kindergarten through 12th grade, which would not exceed our current school capacity. Schools closest to the project – Rancho Las Positas Elementary, Lawrence Elementary, Junction TK-8, and Granada High School – have the room to house these additional students. In addition, our District recently purchased land in the northwestern Livermore area (just east of Constitution Drive) that could be a future school site. Though we do not believe the students generated by Isabel Crossings would necessitate a new school, we will closely monitor the build out of the Isabel area to determine if a school in the area is warranted. Though neighborhood schools have long been desired in Livermore, we are finding that more and more students are being driven to school each day, such that having a school within walking distance is no longer as important to parents as it once was.

Again, I thank you sincerely for keeping us an active partner in these development projects. By working together as we have, we can ensure that we are providing high quality educational services to all our residents.

Sincerely,



Chris Van Schaack
Superintendent

[redacted]

You don't often get email from [redacted] Learn why this is important

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Mr. Potter,

As the Planning Commission will be discussing the Isabel Crossing project at its July 2 meeting, Interfaith Housing, Inc. would like to submit the following letter of support:

Interfaith Housing heartily endorses the proposed Isabel Crossing development as it will provide a variety of housing options for low-income to medium-income households. We are glad to see that 28% of the units--a total of 363--will be affordable instead of the required minimum of 20%, and we imagine that, as part of a commercial development, those units can be built more quickly and cost-effectively than IFH itself can provide affordable housing.

IFH serves low-income seniors, and we feel that Isabel Crossing will be well-suited to our population as it offers transportation options such as bus stops and, we hope, the future Valley Link train system, as well as a neighborhood grocery store, a park, a recreation center and several plazas with benches.

Laning Thompson
Vice-president
Interfaith Housing, Inc.

[redacted]

Subject: Isabel Crossing Project

You don't often get email from [redacted] Learn why this is important

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Dear Mr. Potter,

Several years ago, Livermore approved the Isabel specific plan, which will help Livermore meet its contribution to the substantial housing shortage in our region. It contributes a substantial portion of the RHNA allocations described in the City's Housing Element. Isabel Crossing as part of that specific plan is well designed, incorporating both walkability and bikeability into an attractive community. It provides a mix of housing types, including a large (28%) portion as workforce housing, which is important to support existing businesses in Livermore and the Tri-Valley. If and when mass transit comes down the I-580 corridor, Isabel Crossing will have easy access to the proposed station nearby. Of course, the jobs being created in this community do not address Livermore's broader general planning goal to provide high-paying research and manufacturing jobs for the broader community as well as preserving open space and our agricultural heritage. Although it definitely deserves approval, this project is just one small part of creating a vibrant and diverse Livermore of the future.

Alan Burnham

[redacted]

Subject: Isabel Crossings Project

You don't often get email from [redacted]. Learn why this is important

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Hi Jake,

Thanks for the work you do for the city. I am a lifetime Livermore resident and have started multiple companies in this community. I would like to voice my support for the Isabel Crossings project as currently designed. The project is an excellent example of the types of projects we should regularly be approving.

Sincerely,
Drew Felker
[redacted]

[redacted]
[redacted]
[redacted]
Subject: Isabel Crossing Project

You don't often get email from [redacted] Learn why this is important

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello Jake,

Regarding the Isabel Crossing Project, part of the Isabel Neighborhood Specific Plan, please share my comments with the Planning Commission in advanced of the July 2nd meeting.

Representing six generations of Livermore residents, The Wente Family fully supports and endorses the Isabel Crossing Neighborhood. Workforce housing is very much needed in Livermore, as the majority of our viticulture and winemaking/cellar workforce does not live in Livermore. While this project will not solve the problems we are facing as a community, it is very much a step in the right direction with ~1300 units and a higher than required percentage of affordable units. We fully support public transportation and believe in a future that sees fewer cars on the road and walkable, sustainable communities.

Thanks,
KDW

Karl D. Wente
COO
[redacted]

Proud to be a Certified Sustainable Vineyard and Winery and recipient of the 2022 Green Medal Leader Award

WENTE FAMILY ESTATES

Share Copy link Download ••• Chip Woerner, Las Pos....msg Info

[redacted]

Subject: Fwd: Isabel Crossing Quote

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Jennifer/Jake, below is Dr. Foster's statement supporting the Isabel Crossing project.
Sblend A. Sblendorio
Hoge, Fenton, Jones & Appel
[redacted]

Begin forwarded message:

[redacted]

Subject: Isabel Crossing Quote

Hi Sblend,

Chip Woerner here, Director of Marketing and Communications for Las Positas College. Below is a quote from LPC president, Dr. Dyrell Foster in support of the Isabel Crossing project that you requested.

"Las Positas College is excited about the Isabel Crossing project because it will make a significant impact in our local community by addressing critical housing, transportation, cultural, and economic development needs. Due to its proximity to the college, the project offers important housing affordability options that would benefit our students, faculty and staff. Isabel Crossing would also create a dynamic, transit-friendly, and walkable neighborhood that will enrich our community with new job opportunities, commercial spaces, and public open spaces all within walking distance of the college."

-Chip

Livermore Valley
CHAMBER of COMMERCE

June 12, 2024
City of Livermore Planning Commission
1052 S. Livermore Ave.
Livermore, CA 94550

RE: Isabel Neighborhood Project

On behalf of the Livermore Valley Chamber of Commerce, I am writing to express support for the proposed plans for the development of the Isabel Neighborhood Plan. We appreciate having an opportunity to weigh in on this proposal supporting the business community and our members.
After reviewing the architectural drafts for the neighborhood and having many conversations with business owners in Livermore, we think that this plan fits appropriately into our community. The types of housing offered in the plan will help alleviate a need for affordable housing in Livermore. High density housing is the only option for affordable housing in our area.

This plan will also provide the housing community north of 580 freeway with retail solutions and conveniences that are current needs for those living in the established housing developments currently located in the area. This will give Livermore additional opportunities for small and medium businesses to operate outside of the downtown district at perhaps more affordable commercial lease options.

The vision for Livermore includes expanded transportation services, such as Valley Link Rail Service, Wheels Bus Services and better connections to the BART system that currently has no buy-in in our community. The Isabel Neighborhood Plan can help provide our community with options for cleaner and greener living and convenient use of public transportation systems and local retail and services that do not currently make themselves available to our community.

The Isabel Neighborhood Plan would resolve many needs of residents and business owners in Livermore and would offer options that are not currently available and also provide community for future residents and businesses. We are offering our support in favor of the Isabel Neighborhood Plan and hope the Planning Commission will move forward with this project.

Thank you for your attention on this matter and please contact us if we can be of further assistance in this important decision.

Sincerely,

Sherri Souza
CEO/President

Livermore Valley Chamber of Commerce
2157 First St. Livermore, CA 94550
925-447-1606
www.LivermoreCHamber.org

INNOVATION TRI VALLEY
leadership group
• DANVILLE • DUBLIN • LIVERMORE • PLEASANTON • SAN RAMON

June 5, 2024

City of Livermore
Mayor Marchand
Vice Mayor Carling
CM Barrientos
CM Branning
CM Kiick

Subject: Support for Isabel Crossing

Dear Honorable Mayor and Council Members:

On behalf of Innovation Tri-Valley Leadership Group (ITV), I am pleased to write a letter of support for the Isabel Crossing project, a model of vibrant placemaking in action.

ITV is an interconnected cross-sector network of business and community leaders working to advance the business climate and quality of life in the Tri-Valley. Our collaboration is attracting new businesses, helping existing businesses expand, attracting workforce, and branding the Tri-Valley as a region of innovation to help to create a better world. To that end, ITV spearheaded the creation of the Tri-Valley 2040 Vision Plan to provide touchstones for our region's current and future planning efforts.

We were pleased to see the alignment of the Isabel Crossings project with the recommendations outlined in the Tri-Valley 2040 Vision. Vibrant placemaking is a key pillar of the regional vision and recommendations within that theme focus on inclusive housing opportunities for all and pioneering walkable, smart and green communities.

With a strong focus on sustainability, job creation, and community well-being, Isabel Crossing sets a high standard for development in the Tri-Valley region by providing 1,299 new multi-family units with a full range of affordability levels. This includes 535 market-rate for-sale townhomes, 10 affordable for-sale townhomes, 241 market-rate for-sale condos, 47 affordable for-sale condos, 160 market-rate for-rent apartments, and 306 affordable for-rent apartments. While Isabel Crossing is only required to provide a total of 260 affordable units (20%) under the

INSP, it provides a notable 363 affordable units; 28% of the total units provided and 103 more affordable units than would otherwise be required. The affordable units will be deed restricted for sale and rent to median-, moderate-, low-income and very low-income households, with 65 very low-income rental units, 113 low-income rental units, 65 median-income rental units, 63 moderate-income rental units, 18 median-income for-sale units, and 39 moderate income for-sale units.

Emphasizing connectivity and economic development, Isabel Crossing creates a transit-friendly, walkable neighborhood with 75,000 square feet of job-creating new commercial uses oriented around a tree-lined main street. There will be a wide array of restaurants, retail options, and a community-serving grocery store and ample public open spaces including a neighborhood park, recreation center, multiple plazas, trails, bike lanes, and a public art program. Isabel Crossing also includes substantial new infrastructure and transportation features including a network of internal roads with new signalized intersections, wide sidewalks, new bus stops, hiking trails and dedicated new bike lanes within walking distance of the proposed location of a future station for the hydrogen-powered Valley Link train system. Together, these uses will make a significant contribution to the region's housing, transportation, cultural, and economic development goals.

Isabel Crossing also integrates the 2040 Vision Plan's emphasis on sustainability and building a regional Green Economy. All buildings will meet the stringent requirements of the California Green Building Code and the California Energy Code, requiring nation-leading efficiency in water conservation and energy consumption through careful design, state-of-the-art appliances and high efficiency building systems. All residential units will have EV charging capability. All new buildings will also be outfitted with solar panels.

In summary, the Isabel Crossing development provides a sustainable, transit-friendly new neighborhood with a range of housing options, commercial spaces, public open spaces, recreational amenities, public art, and new job opportunities on a vacant and underutilized site in the heart of the Tri-Valley. Given the project's compatibility with and fulfillment of what was imagined in the Tri-Valley 2040 Vision, Isabel Crossing has the full support of ITV. On behalf of our organization, we urge you to vote to approve this long-awaited project.

Sincerely,

Katie Marcel
CEO, Innovation Tri-Valley

Tim Sbranti
Director of Strategic Initiatives
Innovation Tri-Valley

LIVERMORE
CALIFORNIA

PLANNING COMMISSION
JULY 2, 2024

REGULAR MEETING

1. CALL TO ORDER – The meeting of the Planning Commission was called to order by Vice-Chairperson Yolanda Fintschenko at 7:00 pm, held in person at 1016 S. Livermore Avenue.

ROLL CALL – Present: Vice-Chairperson Yolanda Fintschenko, Commissioner Steven Dunbar, Commissioner Daniel Leary, Commissioner Tracy Kronzak.

Absent: Chairperson Jacob Anderson

PLEDGE OF ALLEGIANCE

2. OPEN FORUM

Vice-Chairperson Fintschenko opened and closed the public comment period.

3. CONSENT CALENDAR

3.1 Approval of the May 7, 2024 Planning Commission Draft Meeting Minutes.
Recommendation:
Staff recommends the Planning Commission approve the draft minutes.

3.2 Approval of the May 21, 2024 Planning Commission Draft Meeting Minutes.
Recommendation:
Staff recommends the Planning Commission approve the draft minutes.

ON THE MOTION OF COMMISSIONER LEARY, SECONDED BY COMMISSIONER KRONZAK AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION APPROVED THE CONSENT CALENDAR, WITH AS AMENDED.

4. PROJECT REVIEW – NONE.

5. PUBLIC HEARINGS

5.1 Hearing to consider a request for Vesting Tentative Tract Map, Site Plan Design Review, Development Agreement, Consistency Determination, Conditional Use Permit, Master Sign Program Amendment, and

Development Code amendment to develop vacant land located southwest of the Portola Avenue and Isabel Avenue intersection with for-sale residential townhome and condominium units and for-rent apartments with mixed commercial and office uses and a public park and public plazas, known as Isabel Crossing.

Recommendation:

Staff recommends the Planning Commission adopt a resolution approving Consistency Determination (CD) 24-004; and recommending the City Council adopt the attached resolutions to:

1. Certify/adopt an Addendum to the Isabel Neighborhood Specific Plan Environmental Impact Report, in accordance with the California Environmental Quality Act.
2. Approve Subdivision (SUB) 22-008, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Master Sign Plan Amendment (MSP) 24-001; the proposed Master Plan; the Alternative Affordable Plan;
3. Approve Development Agreement (DA) 22-001;
4. Approve Specific Plan Amendment (SPPA) 24-001;
5. Approve Development Code Amendment (DCA) 24-001;
6. Approve the requested Density Bonus Waiver and incentive/concessions
7. Approve the No Net Loss findings
8. Direct the Planning Manager to file a Notice of Determination, in accordance with the provisions of the California Environmental Quality Act, subject to project approval.

Senior Planner Jake Potter presented the staff report.

Vice-Chairperson Fintschenko opened the public comment period.

Splend Splendorio, legal counsel and project lead, thanked staff and the project team; introduced the project team; and presented a video depicting the proposed project.

Bill Meyers, Heritage Development, discussed the collaborative effort and thanked City staff.

In response to Commission questions, **Senior Planner Potter** explained the RHNA requirements in the Housing Element, the State's lower income requirements, and no net loss of units by rezoning the parcel across the street from office to residential; State laws related to Development Agreements and proposed amenities; risk of non-compliant Housing Element; recycled water fire hydrants; and surplus of 120 lower income units due to rezoning.

Mr. Splendorio stated a local ordinance would be required for smoke free rental properties.

Ron Nestor, Project Applicant, explained the average heights due to the sloping

street.

Vice-Chairperson Fintschenko opened the public hearing.

Brian Werner, East Bay Residents for Responsible Development, indicated support for the project since it would be built sustainability and create equity in the community.

Silray Garcia, Local 713, representing 37,000 members, discussed the core values of the union including apprenticeship, local hire, medical benefits and a fair living wage and requested making the project a union project.

Sherri Souza, Livermore Valley Chamber of Commerce, expressed support for the proposed project due to the plan providing high density housing, affordable lease options for small businesses, expanded transportation services, and cleaner and greener living.

Jean King discussed inclusionary housing and indicated support for the proposed 28% affordable and 49% low income; suggested some of the low-income units be for sale; and expressed disappointment that the affordable units were not being distributed over the entire plan.

Brandon Evans, Alameda County Electricians Union, indicated support for the Isabel Crossing Project.

Jeremy O'Donnell indicated support for the project due to the park and open spaces and commitment to use local construction workers and apprenticeship programs.

There were no more speakers, and the public comment period was closed.

The Commission discussed the required findings to approve Consistency Determination (CD) 24-004.

Commissioner Dunbar indicated he could make the findings.

In response to **Commissioner Leary**, **Senior Civil Engineer Salgado** agreed with concerns regarding the space between the Caltrans right-of-way and the buildings and indicated Staff would ensure the Water Resources Division approved and State mandated separations were maintained.

Commissioner Kronzak indicated the findings could be made and concurred with concerns regarding easements.

Vice-Chairperson Fintschenko indicated the findings could be made.

The Commission discussed the resolution to certify/adopt an Addendum to the Isabel Neighborhood Specific Plan Environmental Impact Report, in accordance with the California Environmental Quality Act.

In response to **Commissioner Dunbar**, **Senior Planner Potter** explained the condition to form the transportation demand management program and coordinate with the other HOAs within the Isabel Neighborhood.

Commissioner Kronzak indicated the addendum EIR was adequate. **Commissioner Leary** concurred.

In response to **Vice-Chairperson Fintschenko, Senior Planner Potter** explained the discrepancy between level of service and vehicle miles traveled (VMT); that there was no significant impact greater than the EIR initially established; City Council statements of overriding consideration; other locations in the City with transportation management plans; and addition of the Comcast Property in the addendum. **Vice-Chairperson Fintschenko** indicated she could find with the staff recommendations.

ON THE MOTION OF COMMISSIONER DUNBAR, SECONDED BY COMMISSIONER KRONZAK AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION RECOMMENDED THE CITY COUNCIL ADOPT THE FOLLOWING RESOLUTIONS:

Resolution 20-24 Approving Consistency Determination (CD) 24-004, for the Isabel Crossing Development

Resolution 21-24 Recommending that the City Council adopt an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report

In response to **Commissioner Kronzak**, **Senior Civil Engineer Salgado** stated there was not currently an associated traffic mitigation and calming plan but there were projects included in the current five-year CIP. **Commissioner Kronzak** pointed out impact to three or four intersections and expressed concern regarding traffic impacts.

The Commission discussed Vesting Tentative Tract Map (VTTM) 8659 - Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, and Master Sign Program Amendment (MSP) 24-001; accept the Density Bonus Request; Find No Net Loss; approve a Master Plan; and approve an Alternative Affordable Plan for the Isabel Crossing Development.

Commissioner Dunbar discussed limitations on developing low-income units, the tradeoff between the number of units and dispersal, and in indicated the findings could be made.

Commissioner Leary discussed the site plan in comparison to the specific plan including crossings, inclusion of a grocery store, integration, and prime location of affordable housing; streetlights; phasing; and erosion control.

In response to **Commissioner Kronzak, Senior Planner Potter** explained that the existing conditions were considered when evaluating mitigation of exterior noise and the project would conform to Building Code standards for interior noise. **Senior Planner Potter** stated there were standards to mitigate noise in the Building Code. **Commissioner Kronzak** stated their decision was based on State law, RHNA requirements, cost of construction and green field opportunity. They discussed their personal experience with housing issues and indicated the findings could be made.

Vice-Chairperson Fintschenko concurred with the other commissioners and questioned the phasing. **Senior Civil Engineer Salgado** explained that the engineering considerations acknowledged the phasing set out in the development agreement.

Commissioner Dunbar noted the requirement to ensure infrastructure was completed or repaired, improved audio blocking of new buildings; concern with lighting; and need to mix bike racks fronting onto the commercial space. He suggested a bus stop on Gateway; improvement of the trail behind the low-income housing; reviewing whether bike lanes on Campus Hills Drive were necessary versus an access path connecting the southwest corner up to Isabel and Gateway; and reviewing design guidelines for facility selections; and directional curb ramps.

In response to **Commissioner Dunbar**, **Senior Planner Potter** explained that a lighting plan would be required prior to issuance of the building permit; off street ADA spaces were for the private recreation center.

Commissioner Leary suggested the crosswalk alignment closer to the recreation center. **Ashley Alvernaz**, civil engineer with Carlson, Barbee and Gibson, explained that the turning radius was based on City standards, which precluded directional ramps.

Commissioner Kronzak reiterated the prior concerns raised regarding safety and maintenance of the bike path underneath the highway and thanked the developer for including the native plants pallet.

Commissioner Dunbar referenced the City of Fremont protected intersections which shortened the pedestrian crossing and disentangled peds and bikes and increased level of service for vehicles. **Ms. Alvernaz** stated it was an option on the Portola side of the project but was not possible on Isabel. **Commissioner Dunbar** encouraged staff to design protected intersections on Isabel as well and that Gateway and A Street should be as safe as possible for bikes and pedestrians.

ON THE MOTION OF COMMISSIONER KRONZAK, SECONDED BY COMMISSIONER DUNBAR, AMENDED BY COMMISSIONER DUNBAR AND

ACCEPTED BY COMMISSIONER KRONZAK AND CARRIED 4-0 TO RECOMMENDED THE CITY COUNCIL ADOPT THE FOLLOWING RESOLUTION:

Resolution 16-24 Recommending that the City Council approve Vesting Tentative Tract Map (VTTM) 8659 - Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, and Master Sign Program Amendment (MSP) 24-001; accept the Density Bonus Request; Find No Net Loss; approve a Master Plan; and approve an Alternative Affordable Plan for the Isabel Crossing Development, amended as follows:

1. add evaluation of the trail connection south of Building S1 up to Gateway Avenue if it can be designed;
2. consider improvements to crosswalks to be directional curb ramps, consideration of improvements to crosswalks at signalized intersections to extend the pedestrian refuge out if space allowed;
3. bike rack distribution down Main Street following the Downtown Livermore Design Standards;
4. recommending staff look at the proposal for bus stops on Gateway where warranted; and
5. consider Safe Streets on Gateway and A Street relative to Bikeway Selection Design Guidelines.

The Commission discussed the Development Agreement and indicated the findings could be made.

Vice-Chairperson Fintschenko suggested using the $2 million in park funds for other community wide facilities such as colling centers and a library.

ON THE MOTION OF COMMISSIONER DUNBAR, SECONDED BY COMMISSIONER LEARY AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION RECOMMENDED THE CITY COUNCIL ADOPT THE FOLLOWING RESOLUTION:

Resolution 19-24 Recommending that the City Council Approve Development Agreement (DA) 22-001, for the Isabel Crossing Project, that would vest Development Rights for 20 years, provide financial certainty for the applicant, and secure a range of Community Benefits for the City

The Commission discussed Specific Plan Amendment 24-001 and Development Code Amendment 24-001 and indicated the findings could be made.

ON THE MOTION OF COMMISSIONER KRONZAK, SECONDED BY COMMISSIONER DUNBAR AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION RECOMMENDED THE CITY COUNCIL ADOPT THE FOLLOWING RESOLUTIONS:

Resolution 17-24 Recommending that the City Council approve Specific Plan Amendment 24-001, for the Isabel Crossing Project, that would amend the Isabel

Neighborhood Specific Plan's Master Planning and Inclusionary Policies and amend the Land Use Map

Resolution 18-24 Recommending that the City Council approve Development Code Amendment 24-001, for the Isabel Crossing Project, that would amend the alternative means of compliance and affordability requirements in Livermore Development Code Section 10.06.050 ("Inclusionary Ordinance")

The Commission discussed the requested Density Bonus Waiver and incentive/concessions and indicated the findings could be made. The Commission also discussed how Waiver number nine was not needed, based on the applicant's earlier testimony that the project exceeded the required landscaped area standard.

ON THE MOTION OF COMMISSIONER DUNBAR, SECONDED BY COMMISSIONER KRONZAK AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION RECOMMEND THE CITY COUNCIL APPROVE THE DENSITY BONUS WAIVER AND INCENTIVE/CONCESSIONS, REMOVING WAIVER NO. 9.

The Commission discussed the No Net Loss findings.

In response to **Commissioner Dunbar**, **Senior Planner Potter** explained the Housing Element designation and the no net loss.

Commissioner Kronzak indicated BART had no objections and, therefore, could make the findings.

ON THE MOTION OF COMMISSIONER LEARY, SECONDED BY COMMISSIONER DUNBAR AND CARRIED ON A 4-0 VOTE, THE PLANNING COMMISSION RECOMMEND THE CITY COUNCIL APPROVE THE NO NET LOSS FINDINGS.

6. MATTERS FOR CONSIDERATION - NONE

7. MATTERS INITIATED BY PLANNING COMMISSION AND STAFF

Commissioner Dunbar suggested consideration of design standards related to sidewalks and rolled curbs.

Commissioner Kronzak discussed the powers of HOA's and encouraged a local policy or ordinance to protect residents from HOA's taking away homes.

Interim Planning Manager Riley reminded the Commissioners about the Planning conference in Riverside in late September.

8. ADJOURNMENT – at 9:49 pm to a Regular Planning Commission Meeting on Tuesday, July 16, 2024, at 7:00 pm, Civic Center Meeting Hall, City Council Chambers, 1016 S. Livermore Avenue.

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION ADOPTING AN ADDENDUM TO THE 2020 ISABEL NEIGHBORHOOD SPECIFIC PLAN SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE ISABEL CROSSING PROJECT

On May 14, 2018, the Livermore City Council adopted Resolution No. 2018-063, adopting California Environmental Quality Act Findings, a Statement of Overriding Considerations, a Mitigation Monitoring and Reporting Program, and certifying the Final Environmental Impact Report for the Isabel Neighborhood Specific Plan Final Environmental Impact Report ("2018 EIR") (State Clearinghouse No. 2016042039).

On November 9, 2020, the Livermore City Council adopted Resolution No. 2020-201 adopting California Environmental Quality Act Findings, a Statement of Overriding Considerations, a Mitigation Monitoring and Reporting Program, and certifying the Final Supplemental Environmental Impact Report ("2020 SEIR") for the Isabel Neighborhood Specific Plan (State Clearinghouse No. 2016042039). The 2018 EIR and 2020 SEIR are referred to collectively herein as the Previous EIR.

On September 22, 2022, the City of Livermore ("City") received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new communities facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

In June 2024, the City prepared an Addendum to the Previous EIR ("Addendum", Exhibits B, C, and D, attached hereto) pursuant to the California Environmental Quality Act ("CEQA").

On July 2, 2024, at a duly noticed public hearing, the Planning Commission considered the Project, heard public testimony, made the necessary findings, and adopted Planning Commission resolution No. 21-24, attached hereto as Exhibit A, recommending the City Council approve the Project.

On July 22, 2024, the City Council held a duly noticed public hearing to consider the Project, Planning Commission and staff recommendations, all public comments and testimony, and findings.

Together with this resolution, the City Council concurrently considered resolutions for: 1) Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Master Sign Program Amendment (MSP) 24-001, the Density Bonus request, No Net Loss, the Master Plan, and the Alternative Affordable Plan; and 2) Specific Plan Amendment (SPPA) 24-001; and ordinances for: 1) the Project's Development Agreement (DA) 22-001 application; and 2) the Project's Development Code Amendment (DCA) 24-001 application.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the City Council reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED, that the City Council of the City of Livermore has considered the findings made in Planning Commission Resolution No. 21-24, attached hereto as Exhibit A, and the City Council hereby adopts the same findings by this reference and incorporates them as their own findings as part of this resolution, and as described below:

The Addendum indicates that no subsequent or supplemental Environmental Impact Report is required, under the provisions of the California Environmental Quality Act per CEQA Guidelines section 15164, given that none of the following conditions exist:

1. Substantial changes are proposed in the project which will require major revisions of the Previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

   Response: The Addendum analyzes potential project impacts on each of the environmental factors evaluated in the Previous EIR. As discussed in the staff analysis under the subheading "Specific Plan EIR and Addendum", the Addendum includes a Water Supply Assessment, a Focused Transportation Analysis, and a VMT Analysis, in addition to all the required CEQA analyses, as summarized below. The Addendum analyzes potential Project impacts, including impacts from amending the land use designation from office to residential in Specific Plan Subareas 3a and 1d. Land use changes to Subarea 3a are to be considered concurrently with the Project, while changes to Subarea 1d are not part of this Project.

Substantial changes are not proposed to the Specific Plan nor have substantial changes occurred that would require major revisions to the Previous EIR prepared for the Specific Plan. Substantially more severe impacts beyond those identified and analyzed in the Previous EIR would not occur as a result of the proposed Project. For example, the Project will still provide a mixed-use commercial development on an approximately 45-acre site. All contemplated land uses in the Specific Plan are still provided, like residential, commercial, office, and open space. The quantities of residential and open space uses are within the ranges contemplated by the Specific Plan and the site is still served by transit near the freeway interchange. No new land uses or operations have been introduced into the Specific Plan or the Project site that would cause new significant impacts or incompatibilities.

Overall, the proposed Project would result in no new impact or mitigation information of substantial importance that would generate new, more severe impacts or require new mitigation measures compared to those identified for the original project in the Previous EIR. As such, the proposed project would not result in conditions identified in *CEQA Guidelines* Section 15162 requiring supplemental environmental review or a Subsequent EIR, and these are therefore not required for the proposed Project.

For these reasons, the City concludes that the analyses conducted, the conclusions reached, and the mitigation measures adopted in the Previous EIR would not be substantially changed for the proposed Project. The proposed Project would remain subject to all previously adopted mitigation measures and uniformly applicable development policies included in the Previous EIR for Specific Plan. Based on the above analysis, no subsequent action under *CEQA Guidelines* Sections 15162 or 15164 is required.

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

   Response: No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the Previous EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects.

   The Project site is still located on approximately 45 acres in the same location identified in the Specific Plan. No new natural hazards have been identified onsite, and the Project provides the uses and densities contemplated in the Specific Plan.

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Response: There is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the Previous EIR is adequate, and this evaluation serves as an Addendum to the City of Livermore Isabel Neighborhood Plan Environmental Impact Report (2018 EIR) and Supplemental Environmental Impact Report (2020 SEIR), SCH # 2016042039, collectively referred to as the Previous EIR.

No new operational, use, or natural hazard impacts have been identified. The Project's Biological, Geological, and Noise studies have not identified any impacts beyond those discussed in the EIR. Fire Protection would be provided by the Livermore-Pleasanton Fire Department. The Specific Plan EIR notes that the Project site would be served by Fire Station #10 on Airway Boulevard. The Station can deploy front line apparatuses within 10 minutes, and the Fire Department can dispatch a ladder truck to serve the proposed five to seven story buildings. Given the proximity of Fire Station #10, current response times, and the ability to dispatch a ladder truck, existing facilities are sufficient to serve the Project.

Although existing service capacity is adequate for the Project, the Fire Department is currently conducting a Community Risk Assessment to ensure that the incremental population increases across the City and within the Specific Plan do not further degrade fire service levels. The Risk Assessment will analyze whether a new fire station is needed within the Specific Plan area, among other analysis. The results of the Assessment will be completed by the end of summer 2024. Pursuant to Specific Plan policy, the Project will be required to implement the Risk Assessment recommendations. The Project's net increase in the City's tax base and contributions to the Community Benefit Fund will help fund the Project's fair share of any Risk Assessment recommendations. For these reasons, there is no new information of substantial importance that would cause any additional or worsened significant impacts.

BE IT FURTHER RESOLVED that, based upon the City Council's own independent review of the Record Evidence and considerations, the City Council hereby adopts the *Isabel Crossing and No Net Loss Specific Plan Amendment Project Isabel Neighborhood Specific Plan Environmental Impact Report Addendum* ("Addendum"), and finds that no subsequent or supplemental Environmental Impact Report is required, under the provisions of the California Environmental Quality Act per CEQA Guidelines section 15164, for the Isabel Crossing Project.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore directs the Planning Manager to file a Notice of Determination with the Alameda County Clerk if the Project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the City Clerk's Office, 1052 S. Livermore Avenue, in Livermore, California. This resolution shall be effective upon adoption by the City Council.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Planning Commission Resolution No. 21-24
Exhibit B – Specific Plan EIR Addendum
Exhibit C – Addendum Appendix Volume A
Exhibit D – Addendum Appendix Volume B

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL ADOPT AN ADDENDUM TO THE 2020 ISABEL NEIGHBORHOOD SPECIFIC PLAN SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE ISABEL CROSSING PROJECT

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On September 22, 2022, the City received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

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In June 2024, the City prepared an Addendum to the Previous EIR ("Addendum") pursuant to the California Environmental Quality Act ("CEQA").

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Project and staff recommendations, all public comments and testimony, and findings.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public meeting, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project, took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED, by the Planning Commission that the Addendum indicates that no subsequent or supplemental Environmental Impact Report is required, under the provisions of the California Environmental Quality Act per CEQA Guidelines section 15164, given that none of the following conditions exist:

1. Substantial changes are proposed in the project which will require major revisions of the Previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

   Response: The Addendum analyzes potential project impacts on each of the environmental factors evaluated in the Previous EIR. As discussed in the staff analysis under the subheading "Specific Plan EIR and Addendum", the Addendum includes a Water Supply Assessment, a Focused Transportation Analysis, and a VMT Analysis, in addition to all the required CEQA analyses, as summarized below. The Addendum analyzes potential Project impacts, including impacts from amending the land use designation from office to residential in Specific Plan Subareas 3a and 1d. Land use changes to Subarea 3a are to be considered concurrently with the Project, while changes to Subarea 1d are not part of this Project.

   Substantial changes are not proposed to the Specific Plan nor have substantial changes occurred that would require major revisions to the Previous EIR prepared for the Specific Plan. Substantially more severe impacts beyond those identified and analyzed in the Previous EIR would not occur as a result of the proposed Project. For example, the Project will still provide a mixed-use commercial development on an approximately 45-acre site. All contemplated land uses in the Specific Plan are still provided, like residential, commercial, office, and open space. The quantities of residential and open space uses are within the ranges contemplated by the Specific Plan and the site is still served by transit near the freeway interchange. No new land uses or operations have been introduced into the Specific Plan or the Project site that would cause new significant impacts or incompatibilities.

   Overall, the proposed Project would result in no new impact or mitigation information of substantial importance that would generate new, more severe impacts or require new mitigation measures compared to those identified for the original project in the Previous EIR. As such, the proposed project would not result in conditions identified in *CEQA Guidelines* Section 15162 requiring supplemental environmental review or a Subsequent EIR, and these are therefore not required for the proposed Project.

   For these reasons, the City concludes that the analyses conducted, the conclusions reached and the mitigation measures adopted in the Previous EIR would not be

substantially changed for the proposed Project. The proposed Project would remain subject to all previously adopted mitigation measures and uniformly applicable development policies included in the Previous EIR for Specific Plan. Based on the above analysis, no subsequent action under *CEQA Guidelines* Sections 15162 or 15164 is required.

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

   Response: No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the Previous EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects.

   The Project site is still located on approximately 45 acres in the same location identified in the Specific Plan. No new natural hazards have been identified onsite, and the Project provides the uses and densities contemplated in the Specific Plan.

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

   a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

   b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

   c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

   d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

   Response: There is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the Previous EIR is adequate, and this evaluation serves as an Addendum to the City of Livermore Isabel Neighborhood Plan Environmental Impact Report (2018 EIR) and Supplemental Environmental Impact Report (2020 SEIR), SCH # 2016042039, collectively referred to as the Previous EIR.

No new operational, use, or natural hazard impacts have been identified. The Project's Biological, Geological, and Noise studies have not identified any impacts beyond those discussed in the EIR. Fire Protection would be provided by the Livermore-Pleasanton Fire Department. The Specific Plan EIR notes that the Project site would be served by Fire Station #10 on Airway Boulevard. The Station can deploy front line apparatuses within 10 minutes, and the Fire Department can dispatch a ladder truck to serve the proposed five to seven story buildings. Given the proximity of Fire Station #10, current response times, and the ability to dispatch a ladder truck, existing facilities are sufficient to serve the Project.

Although existing service capacity is adequate for the Project, the Fire Department is currently conducting a Community Risk Assessment to ensure that the incremental population increases across the City and within the Specific Plan do not further degrade fire service levels. The Risk Assessment will analyze whether a new fire station is needed within the Specific Plan area, among other analysis. The results of the Assessment will be completed by the end of summer 2024. Pursuant to Specific Plan policy, the Project will be required to implement the Risk Assessment recommendations. The Project's net increase in the City's tax base and contributions to the Community Benefit Fund will help fund the Project's fair share of any Risk Assessment recommendations. For these reasons, there is no new information of substantial importance that would cause any additional or worsened significant impacts.

BE IT FURTHER RESOLVED, that the Planning Commission of the City of Livermore, based upon its own independent review of the Record Evidence and considerations, has considered the Previous EIR, and recommends the City Council: 1) determine that no subsequent or supplemental Environmental Impact Report is required given that substantial project and circumstantial changes have not occurred and no new information of substantial importance as set forth in CEQA Guidelines 15162 exists, and 2) adopt the June 2024 Addendum to the Previous EIR, in accordance with CEQA.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends that the City Council direct the Planning Manager to file a Notice of Determination with the Alameda County Clerk if the Project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department, 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Leary, seconded by Commissioner Kronzak, the foregoing Resolution was passed and adopted at the Planning Commission meeting of July 2, 2024, by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

Jacob Anderson, Chairperson

Stephen Riley

By Stephen Riley, Planning Manager
Secretary to the Planning Commission



Isabel Crossing and No Net Loss Specific Plan Amendment Project

Environmental Impact Report Addendum
State Clearinghouse # 2016042039

prepared by
City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550
Contact: Jennifer Ackerman, Assistant Planner

prepared with the assistance of
Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

June 2024

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1 Introduction and Project Summary

1.1 Project Title

Isabel Crossing and No Net Loss Specific Plan Amendment Project

1.2 Lead Agency/Project Sponsor Contact Information

City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550

Contact: Jake Potter, Senior Planner
Email: japotter@livermoreca.gov

1.3 Introduction and Background

The City of Livermore was the lead agency for the certified 2018 Environmental Impact Report (EIR) (State Clearinghouse [SCH] #2016042039) and the certified 2020 Supplemental Environmental Impact Report (SEIR) (SCH #2016042039) for the Isabel Neighborhood Specific Plan (INSP) and is the lead agency for this document. This document presents the results of environmental review for the Isabel Crossing and No Net Loss Specific Plan Amendment Project, which consists of changes to the development program for a portion of the Specific Plan area; these changes are henceforth referred to as the "proposed project" or "modified project." The City has prepared this EIR Addendum pursuant to *CEQA Guidelines* Sections 15162 and 15164 because it has determined that "major revisions" to the prior 2018 EIR and 2020 SEIR are not required for the project. In accordance with CEQA, the analysis herein considers the changes in the proposed project compared to the original development program and buildout originally planned for the project site, henceforth known as the "original project," that was analyzed in the 2018 EIR and 2020 SEIR; substantial changes with respect to the surrounding circumstances under which the proposed project is undertaken; and "new information of substantial importance" that shows that the project may cause a new, previously unanalyzed significant environmental effect, a substantial increase in the severity of previously analyzed significant impact, or that mitigation previously found to be infeasible is now feasible to reduce one or more significant effects of the project but the project proponent refuses to implement it.

1.4 Project Location and Setting

The project site includes three distinct areas. The Isabel Crossing Parcels (Assessor's Parcel Numbers [APN] 903-0010-046 through -054) encompass approximately 45 acres located at the southwest corner of Isabel Avenue and Portola Avenue in the INSP area of Livermore in Alameda County. The Isabel Crossing Parcels are bounded by Isabel Avenue to the east, Portola Avenue to the north, Interstate 580 (I-580) to the south and existing office and commercial development to the west. The Isabel Crossing Parcels are located within the 3b and 3c Subareas of the INSP. Subareas 3b and 3c

are core areas of the INSP with a general objective of creating a vibrant residential neighborhood with retail uses that generate transit ridership.

The No Net Loss Parcels make up the remaining two areas of the project site. The Bay Area Rapid Transit (BART) "BART Parcel" (6.53 acres, APN 903-10-36-3) is located to the east of the intersection of I-580 and Isabel Avenue, and two contiguous "Comcast Parcels" (26.83 total acres, APNs 905-10-23 and 905-10-24) are located northwest of North Canyons Parkway at 3055 Triad Place, Livermore, California, 94551. The BART Parcel is bounded by undeveloped land planned for residential land uses to the east, Isabel Avenue to the north, and the I-580 offramp to the south and west. The BART Parcel is located within Subarea 3a of the INSP. Subarea 3a land uses include Office Core and Core Residential (60 to 100 dwelling units per acre [du/ac]). The Comcast Parcels are bounded by existing residences to the east, agricultural land and hills to the north, undeveloped parcels and North Canyons Parkway beyond to the south, and offices to the west. The Comcast Parcels are located within Subarea 1d of the INSP. Subarea 1d is designated for Business Park land uses.

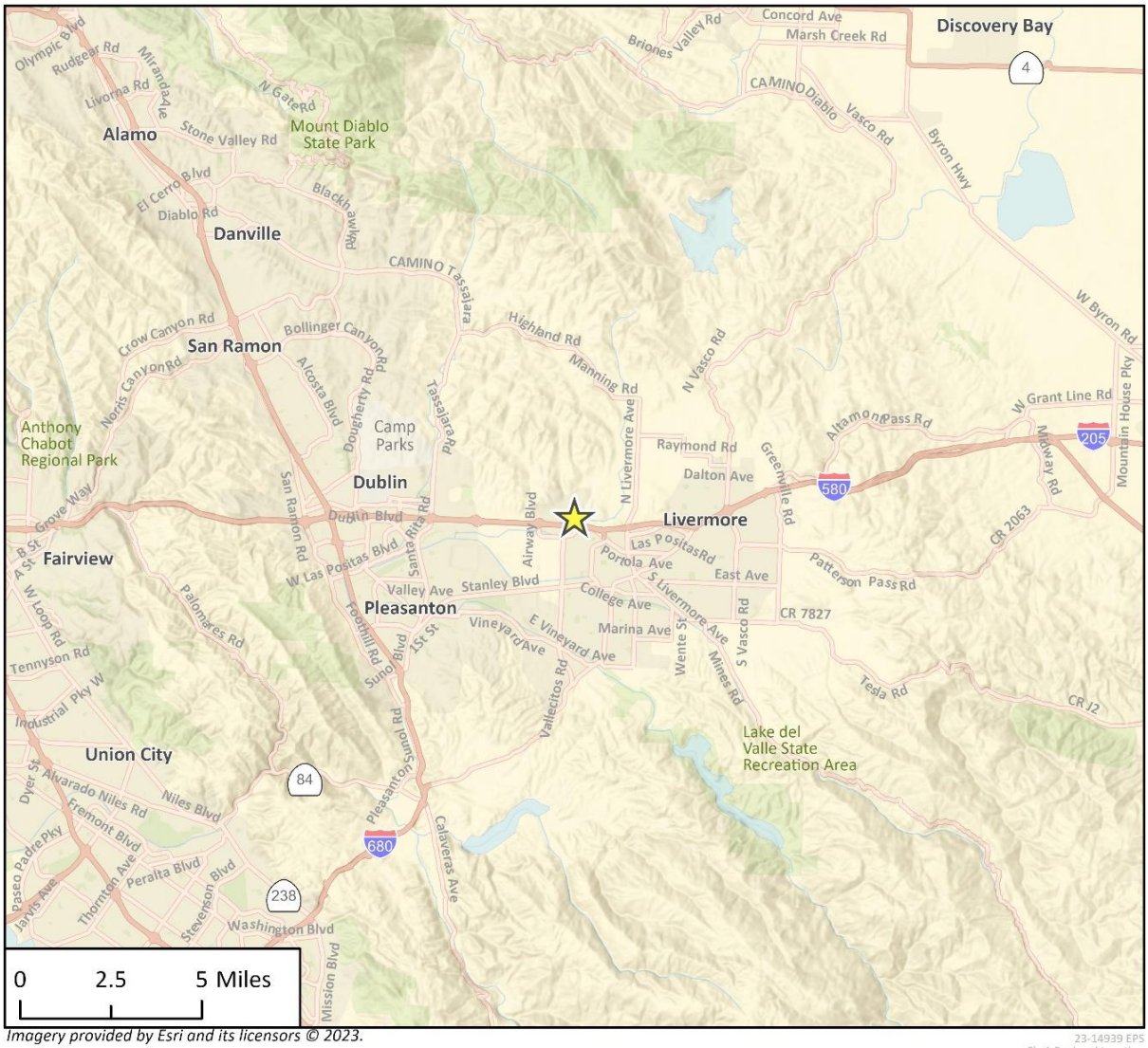
The INSP Planning Area is accessible through interstate highway (I-580), State Route 84, and Vasco Road. The Isabel Crossing Parcels are accessible from Portola Avenue, Isabel Avenue, and Shae Center Drive. The BART Parcel is accessible from Isabel Avenue. The Comcast Parcels are accessible via a driveway entrance that extends from North Canyons Parkway. The future Isabel Station for the Valley Link railway is located less than 0.25 mile to the southeast of the Isabel Crossing and BART Parcel portions of the project site. The Valley Link railway is a proposed 42-mile passenger rail project that will connect the Lathrop Altamont Commuter Express (ACE) rail station with the Dublin/Pleasanton BART station. The Isabel Crossing and BART Parcel portions of the project site is located within 0.5 mile of the proposed Isabel Station platform. Figure 1 shows the regional location of the project area and Figure 2 shows the location of the site in its vicinity context.

The Isabel Crossing Parcels have gently rolling topography that slopes slightly down toward its center, and currently undeveloped with sparse vegetation. Surrounding land uses include undeveloped land, open space, and residential townhouses to the north; office and commercial buildings to the west; undeveloped land designated for residential and office land uses to the east; and undeveloped land designated for institutional and education uses to the south beyond I-580.

The Bart Parcel is relatively flat, sloping slightly downward towards the east, and currently undeveloped with sparse vegetation. Surrounding land uses include undeveloped land designated for residential and office uses to the north, east, and west; and undeveloped land planned for educational/institutional uses to the south beyond I-580.

The Comcast Parcels are currently developed with existing office buildings and parking lots. The parcels are relatively flat in the southern portion and in the northern portion slope gradually upwards to the hills to the north of the parcels. Surrounding land uses include agriculture to the north; residential to the west; offices to the east; and undeveloped land planned for residential uses to the south.

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2023.

23-14939 EPS
Fig 1 Regional Location

Project Location

N

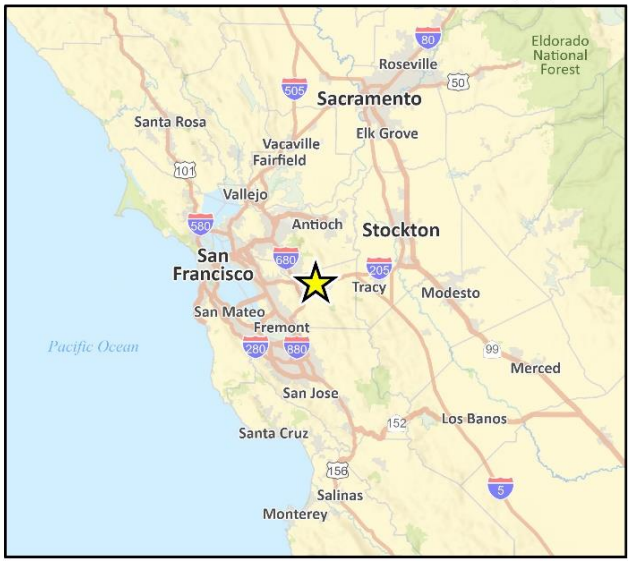


Figure 2 Project Location



Imagery provided by Microsoft Bing and its licensors © 2024.

24-16209 EPS
Fig 2 Project Location

1.5 Project Description

The proposed project consists of a currently proposed mixed-used development located on 45 acres (referred to as the "Isabel Crossing Project"), and a proposed land use designation change for three additional parcels totaling approximately 33 acres from commercial and office use to residential use for three parcels (referred to as "No Net Loss Specific Plan Amendment Project"). The individual project components are described in more detail below.

Isabel Crossing Project

The Isabel Crossing Project would consist of a mixed-used development located on 45 acres. The project applicant proposes to construct 1,299 dwelling units (townhomes and mid-rise multi-family apartments) and 74,362 square feet of neighborhood serving commercial space on the 45-acre site. Commercial spaces, including retail and grocery uses, would be located on the ground floor of multi-story mixed-use buildings, and would front streets internal to the project site. Residential units would range from 453 square feet to 2,402 square feet in size, and would include flat condos, apartments, and three-story townhomes. Commercial space would be on the street level of multi-story buildings with residential condos and apartments located above. Proposed amenities include a neighborhood park, a recreation center that includes a pool, and open space at the corners of the retail-lined street including a pocket plaza and a town square.

Vehicular site access would be provided by two intersections along Portola Avenue, two intersections along Isabel Avenue, one intersection at the east end of Gateway Avenue where it meets Shea Center Drive, and one intersection along Shea Center Drive. The project would include internal roadways, pedestrian walkways, and a multi-use trail along the southern border of the site connecting the east end of the proposed Gateway Road to Shea Center Drive. Table 1 outlines characteristics of the proposed project compared to the development program and buildout for these subareas in the original project and Figure 3 illustrates the proposed plans and gross acreage of each parcel included in the proposed project.

Among its approvals, the Isabel Crossing Project requests one "incentive or concession" and a total of 12 "waivers or reductions" of "development standards" under the State and local Density Bonus law, which provides for relief from certain local zoning standards for development projects that provide affordable housing. Under these provisions, the Isabel Crossing Project seeks relief from certain standards adopted in the original INSP for the Isabel Crossing Project. This includes waiver requests for the parcels within the proposed project would exceed the height limits required in the INSP. Parcel S1 would exceed the height envelope by approximately 11.5 feet, Parcel C-2A would exceed the height envelope by approximately 8.5 feet at the north end of the building only, Parcel S3-A would exceed the height envelope by approximately 5.9 feet, and Parcel S3-B would exceed height requirements by approximately 20.5 feet. To accommodate the project, the applicant has requested the following waivers on specific parcels (parcel locations are shown in Figure 3):

- Parcel N1:
  - A waiver or reduction from the applicable INSP porch separation requirement for porches facing each other of 15 feet along paseos, where two particular porches in Parcel N1 are separated by 7.5 feet and 9.9 feet, respectively.

- Parcels N2 and N3-A:
  - A waiver or reduction from the applicable INSP dimension requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the project provides certain units that include private open space that is 17 feet and 3 inches by 5 feet and 0 inches, for a total area of approximately 86.25 square feet.
- Parcel C1-B:
  - A waiver or reduction from the applicable INSP front setback requirement of a 10-foot setback at the fourth floor of the proposed four-story apartment building; no setback is proposed (though decks are provided to break up the façades).
  - A waiver or reduction from the applicable INSP minimum 16-foot floor to ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.
- Parcel C2-A:
  - A waiver or reduction from the applicable INSP front setback requirement of a 10-foot setback at the fourth floor of the proposed five-story apartment building; no setback is proposed (though decks are provided to break up the façades).
  - A waiver or reduction of the applicable INSP height limit of 490 feet above mean sea level (MSL), where a maximum height of approximately 499 feet above MSL is provided for a portion of a building on the north end of Parcel C2-A.
  - A waiver or reduction from the applicable INSP minimum 16-foot floor to ceiling ground floor height standard for ground floors of commercial uses within the retail/flex space overlay area; the proposed ceiling height is an average of approximately 14 feet.
- Parcel S1:
  - A waiver or reduction from the applicable INSP minimum commercial FAR of 0.4:1, where an FAR of approximately 0.3:1 is provided.
  - A waiver or reduction of the applicable INSP height limit of 485 feet above MSL, where a maximum height of approximately 497 feet above MSL is provided.
- Parcel S2 and S4:
  - A waiver or reduction from the applicable INSP dimension requirement for private open space, which requires a minimum of 75 square feet of open space per dwelling unit with minimum dimensions of 6 feet by 8 feet, and the project provides certain units that include private open space that is 14 feet and 2 inches by 5 feet and 4 inches for a total area of approximately 73.3 square feet.
- Parcel S3-A:
  - A waiver or reduction of the applicable INSP height limit of 485 feet above MSL, where a maximum height of approximately 491 feet above MSL is provided.
- Parcel S3-B:
  - A waiver or reduction of the applicable INSP height limit of 475 feet above MSL, where a maximum height of approximately 496 feet above MSL is provided.

Table 1 Isabel Crossing Project Characteristics

Project Characteristic	Proposed Project	Original Project	Change (Proposed Project Compared to Original Project)
Non-residential Area			
Office	0 square feet	39,640 square feet[1]	-39,640 square feet
Commercial	74,362 square feet	167,185 square feet	-92,823 square feet
Common Area	2.56 acres	2.17 acres	+0.39 acres
Residential Units			
Market Rate	936 units	1,086 units	-150 units
Affordable	363 units	252 units	+111 units
Total	**1,299 units**	**1,338 units[2]**	**-39 units**
Maximum Building Height (feet above mean sea level)	498.5 feet	505 feet[3]	-6.5 feet
Parking (stalls)	2,436	At least 2,142	+294

[1] The office buildout for the project site was estimated using the acreage for proposed products within the Office Core area of the project site and a minimum floor area ratio of 1.0 as planned for the Office Core designation in the Land Use chapter of the INSP.

[2] The calculated target buildout of the project site considered in the INSP.

[3] The maximum height allowed in the project site.

Source: Appendix A; City of Livermore 2020a

Figure 3 Proposed Site Plan



Source: William Hezmal Halch Architects, Inch. DBA WHA., 2023.

No Net Loss Specific Plan Amendment Project

Since certification of the INSP EIR, proposed and constructed developments in the INSP area have not met the anticipated unit counts identified in the INSP and/or City of Livermore Housing Element; therefore, the City desires to re-designate certain parcels within the INSP to ensure that there is adequate opportunity for the development of housing within the INSP area. The current shortfall of residential units is 344 units (including the Isabel Crossing Project, described above), with the trend of housing unit shortfalls anticipated to continue as the INSP area is built-out.

The project would amend the INSP to change the land use designation of the BART Parcel to Residential Core (60-100 du/ac). The existing Commercial Overlay/Flex Space designation would remain on a portion of the BART Parcel. The project would also include a future amendment to the INSP to change the land use designation of the Comcast Parcels to Village (25-40 du/ac; eastern half) and Transition (15-25 du/ac; western half). The proposed future land use designations of the Comcast Parcels would match the existing designations of parcels located immediately south of the Comcast Parcels. The intent of the proposed and future land use designation changes is to ensure no net loss of housing opportunity sites within the INSP area, in accordance with the City's adopted Housing Element. This Addendum addresses the anticipated buildout of the No Net Loss Parcels that could result from the proposed and future land use designation changes.

Re-designation of the BART and Comcast Parcels would result in the potential to develop up to 1,775 additional residential units compared with existing land use designations on these parcels. Comcast Parcel West (APN 905-10-23) would be able to develop 350 residential units; Comcast Parcel East (APN 905-10-24) would be able to develop 512 residential units; and the BART Parcel (APN 903-10-36-3) would be able to develop 913 units. This change would also result in a net loss of 1,531,486 square feet of existing and proposed office space on the No Net Loss Parcels.

Overall Growth Projections

Because constructed and currently proposed development, including the Isabel Crossing Project, would not meet the anticipated quantity of residential units identified in the INSP and/or Housing Element, the proposed land use designation change of the No Net Loss Parcels is required so that there is no net loss of residential unit capacity. The overall project would result in a net increase of 1,431 residential units and a net decrease of 1,531,486 square feet of office space), compared to what was analyzed in the 2018 EIR and 2020 SEIR for the INSP.

Consistency of the Project with Adopted Plans and Ordinances

Isabel Neighborhood Specific Plan Background

The INSP was adopted to guide future development of the area around the planned Valley Link rail station, which is planned for the median of I-580, just east of Isabel Avenue. The INSP covers approximately 1,138 acres and allows for development of 4,095 new multi-family housing units and approximately 2.1 million square feet of net new office, business park, and commercial development (including a neighborhood commercial center) (City of Livermore 2023). It also envisions three new neighborhood parks, pedestrian and bike facilities, and infrastructure improvements. The INSP Planning Area is currently developed with a range of residential, industrial, commercial, institutional, and open space uses; the project site remains undeveloped.

The INSP underwent CEQA review in the form of an EIR (2018 EIR), which was certified in 2018. An update to the INSP was subsequently made to account for the Valley Link Rail Project, and an SEIR (2020 SEIR) was prepared to evaluate updates to the INSP. The SEIR was certified in 2020 and the INSP was adopted in November of 2020.

Isabel Crossing Project

The Isabel Crossing Project would be constructed within and would modify the approved development program for Subareas 3b and 3c of the INSP. Approved land uses in Subarea 3b include:

- Residential
  - Village: 25-40 du/ac
  - Center: 40-60 du/ac
  - Core: 60-100 du/ac
- Neighborhood commercial

Approved land uses in Subarea 3c include:

- Residential Core: 60-100 du/ac
- Office Core

Under the adopted INSP, Subareas 3b and 3c have a combined target buildout of 1,477 residential units. The Isabel Crossing project site is approximately 2.32 acres smaller than the full 3b and 3c Subareas; therefore, the buildout of the project site considered in the INSP is 1,338 residential units, which is greater than the 1,299 units proposed by the project. The Isabel Crossing project site includes the Neighborhood Commercial area of the INSP, which envisions a maximum buildout of 167,185 square feet of commercial space. The approximately 75,000 square feet of commercial space proposed by the project would not exceed the commercial space considered in the 2020 SEIR. The Isabel Crossing Project seeks a Specific Plan Amendment in a manner that enables the approval of the Isabel Crossing Project via an approved master site plan, which includes reductions of commercial and office space, a reconfiguration of the site plan and applicable zoning designations, and alternative compliance with affordable housing requirements. As mentioned above, the Isabel Crossing Project also seeks a Density Bonus law incentive to reduce any required office space and provide for waivers from certain applicable INSP development standards. Therefore, the proposed number of residential units and commercial space are less than, and are thus within, the intensity of development envisioned in the INSP for these subareas as analyzed in the 2018 EIR and 2020 SEIR.

No Net Loss Specific Plan Amendment Project

The No Net Loss Specific Plan Amendment Project would allow for the future development of higher density residential uses within Subareas 3a and 1d of the INSP and would modify the approved development program for those subareas. Approved land uses on the BART Parcel in Subarea 3a include:

- Residential Core: 60-100 du/ac
- Office Core

Approved land uses on the Comcast Parcels in Subarea 1d include:

- Business Park

The proposed land use designation change of the BART parcel would allow 913 units which is greater than is currently allowed in Subarea 3a. Subarea 1d is designated as Business Park which allows commercial and light industrial uses. Residential uses are not currently permitted on the Comcast Parcels. The City is proposing an amendment to the INSP to change the land use designation of the BART Parcel to Residential Core and the Comcast Parcels to Village and Transition (future change) to ensure that there is adequate opportunity for the development of housing within the INSP area.

State Density Bonus Law

Residential projects may in some cases use provisions of the State Density Bonus law (California Government Code Sections 65915 – 65918) to develop affordable and senior housing. The State Density Bonus law also includes incentives to make the development of affordable and senior housing economically feasible. These include waivers and concessions, such as exceptions to a zoning ordinance or other land use regulations. Projects providing sufficient affordable housing can avail themselves of any applicable combination of additional density and/or other waivers and incentives.

The Isabel Crossing Project would include 363 affordable housing units which is approximately 28 percent of the project's proposed residential buildout. Based on the percentage of affordable units, the project proponent is proposing to use the State Density Bonus law to request additional waivers and concessions, which were described above.

No Net Loss Law (Government Code Section 65863)

The purpose of Government Code Section 65863 (No Net Loss Law) is to ensure development opportunities remain available throughout the planning period to accommodate a jurisdiction's regional housing need allocation (RHNA), especially for lower- and moderate- income households. A jurisdiction may not take any action to reduce a parcel's residential density unless it makes findings that the remaining sites identified in its Housing Element sites inventory can accommodate the jurisdiction's remaining unmet RHNA by each income category, or if it identifies additional sites so that there is no net loss of residential unit capacity. If a jurisdiction approves a development of a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, it must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level, or identify and make available sufficient sites to accommodate the remaining unmet RHNA for each income category.

While existing and planned developments in the INSP area, including the Isabel Crossing Project, would result in a reduction of 344 units compared to what was originally planned under the INSP and accounted for in the City's Housing Element, the proposed No Net Loss Specific Plan Amendment Project would result in a net increase of 1,431 residential units compared to what was planned under the INSP and analyzed in the INSP 2018 EIR and 2020 SEIR.

1.6 Project Approvals

The City Council would need to take the following actions regarding the proposed Isabel Crossing Project:

- Adoption of this Addendum to the INSP EIR
- Approval of a Development Agreement
- Approval of a Density Bonus "Incentive and Concession" and "Waiver and Reduction" Requests
- Approval of a Conditional Use Permit (to allow residential uses in the INSP Neighborhood Commercial Zone)
- Approval of an Amendment to the INSP
- Site and Design Review
- Approval of a Vesting Tentative Tract Map
- Approval of a Master Sign Program Amendment
- General Plan Consistency Determination

The City Council would need to take the following actions regarding the proposed land use designation change of the BART Parcel:

- Adoption of this Addendum to the INSP EIR
- Approval of an Amendment to the INSP

The City Council would need to take the following actions regarding the future land use designation change of the Comcast Parcels:

- Adoption of this Addendum to the INSP EIR
- Approval of an Amendment to the INSP

1.7 Prior Environmental Document(s)

The INSP underwent environmental review in the form of an EIR certified by the City of Livermore in 2018. An update to the INSP was subsequently made to account for the Valley Link Rail Project, and an SEIR was prepared to evaluate updates to the INSP. The SEIR was certified by the City of Livermore in 2020.

- Isabel Neighborhood Plan Environmental Impact Report (2018 EIR), SCH #2016042039, certified April 2018.
- Isabel Neighborhood Plan Supplemental Environmental Impact Report (2020 SEIR), SCH #2016042039, certified June 2020.

1.8 Location of Prior Environmental Document(s)

City of Livermore, Planning Department Website:

https://www.livermoreca.gov/departments/community-development/planning/specific-plans/isabel-neighborhood-specific-plan/insp-draft-and-final-environmental-impact-report-eir

2 Overview of CEQA Guidelines Sections 15162 and 15164

CEQA Guidelines Sections 15162 and 15164 set forth the criteria for determining the appropriate additional environmental documentation, if any, to be completed when a project has a previously certified EIR.

CEQA Guidelines Section 15164 states that a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. *CEQA Guidelines* Section 15162(a) states that no Subsequent or Supplemental EIR shall be prepared for a project with a certified EIR unless the lead agency determines, based on substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
    A. The project will have one or more significant effects not discussed in the previous EIR.
    B. Significant effects previously examined will be substantially more severe than shown in the previous EIR.
    C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.
    D. Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The analysis pursuant to *CEQA Guidelines* Section 15162 demonstrates whether the lead agency can approve the activity as being within the scope of the existing certified EIR, that an addendum to the existing EIR would be appropriate, and no new environmental document, such as a new EIR, would be required. The addendum need not be circulated for public review but can be included in or attached to the Final EIR, and the decision-making body shall consider the addendum with the Final EIR prior to deciding on the project.

According to *CEQA Guidelines* Section 15164, an addendum to a previously certified EIR is the appropriate environmental document in instances when “only minor technical changes or additions are necessary” and when the new information does not involve new significant environmental

effects or a substantial increase in the severity of a significant effect beyond those identified in the previous EIR. *CEQA Guidelines* Section 15164 states that:

a. The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
b. An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
c. An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
d. The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
e. A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record.

15162 Standard: Substantial Changes in the Project

Pursuant to *CEQA Guidelines* Section 15162(a)(1), Section 4, *Impact Analysis*, presents a discussion of whether the proposed project constitutes a substantial change in the project analyzed in the certified EIR that would require major revisions to the certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Please refer to Section 4, *Impact Analysis*, for a discussion of each impact and changes to such impacts resulting from project changes.

15162 Standard: Substantial Changes in the Circumstances

Pursuant to *CEQA Guidelines* Section 15162(a)(2), Section 4, *Impact Analysis*, presents a discussion of whether changes to the project site or the vicinity (environmental setting) have occurred subsequent to the certification of the EIR that would result in new significant impacts or a substantial increase in the severity of a previously identified significant impact that were not evaluated and mitigated by the previous EIR. Please refer to Section 4, *Impact Analysis*, for a discussion of each impact and change in circumstances related to such impacts.

15162 Standard: New Information of Substantial Importance

Pursuant to *CEQA Guidelines* Section 15162(a)(3), Section 4, *Impact Analysis*, includes a discussion of whether the proposed project would result in new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the INSP 2018 EIR and 2020 SEIR were certified. New information of substantial importance includes: (1) one or more significant effects not discussed in the previous EIR; (2) significant effects previously examined that are substantially more severe than shown in the previous EIR; (3) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (4) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. Please refer to Section 4, *Impact Analysis*, for a discussion of each impact and new information related to such impacts.

3 Environmental Effects and Determination

Environmental Areas Determined to Have New or Substantially More Severe Significant Effects Compared to Those Identified in the Previous EIR

The subject areas checked below were determined to be new significant environmental effects or to be previously identified effects that have a substantial increase in severity either due to a change in project, change in circumstances, or new information of substantial importance, as indicated by the checklist and discussion on the following pages.

■ NONE

□ Aesthetics	□ Agriculture and Forestry Resources	□ Air Quality
□ Biological Resources	□ Cultural Resources	□ Energy
□ Geology and Soils	□ Greenhouse Gas Emissions	□ Hazards and Hazardous Materials
□ Hydrology and Water Quality	□ Land Use and Planning	□ Mineral Resources
□ Noise	□ Population and Housing	□ Public Services
□ Recreation	□ Transportation	□ Tribal Cultural Resources
□ Utilities and Service Systems	□ Wildfire	□ Mandatory Findings of Significance

Determination

Based on this analysis:

☐ Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in *CEQA Guidelines* Section 15162(a)(3). Therefore, a SUBSEQUENT or SUPPLEMENTAL EIR is required.

■ No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in *CEQA Guidelines* Section 15162(a)(3). Therefore, the previously certified EIR is adequate and this evaluation serves as an ADDENDUM to the City of Livermore Isabel Neighborhood Plan Environmental Impact Report (2018 EIR) and Supplemental Environmental Impact Report (2020 SEIR), SCH # 2016042039.

Stephen Riley
Signature

6/28/24
Date

Stephen Riley
Printed Name

Planning Manager
Title

4 Impact Analysis

The analysis in this section of the potential impacts associated with the Isabel Crossing and No Net Loss Specific Plan Amendment Project compared with those of the approved INSP analyzed in the certified 2018 EIR and 2020 SEIR has been prepared using the CEQA checklist as a guide. This checklist is consistent with the format and environmental topics and questions of the checklist used in the Final EIR, but also includes recent updates to reflect the most recently adopted checklist provided in Appendix G of the 2023 *CEQA Guidelines*. The checklist considers the full range of environmental issues subject to analysis under CEQA (in rows), and then poses a series of questions (in columns) aimed at identifying the degree to which the issue was analyzed in the certified 2018 EIR and 2020 SEIR. The checklist also includes a column identifying whether there is new information of substantial importance, as defined by CEQA, relative to each environmental issue. The questions posed and addressed in the checklist are described below.

Where was Impact Analyzed in the EIR?

This column provides a cross-reference to the portions of the certified 2018 EIR and/or 2020 SEIR where information and analyses may be found relative to the environmental issue listed under each topic. The cross-references identified in this column correspond with page numbers and section numbers of the 2018 EIR and/or 2020 SEIR.

Are Major Revisions to the EIR Required?

In accordance with *CEQA Guidelines* Section 15162(a), this column indicates whether the proposed project would involve new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts, new information of substantial importance, or substantial changes in the circumstances that, in turn, would require major revisions of the 2018 EIR and/or 2020 SEIR.

Are There New or Substantially More Severe Significant Impacts?

In accordance with *CEQA Guidelines* Section 15162(a)(1), this column indicates whether the proposed project would involve new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts that were not discussed in the 2018 EIR and/or 2020 SEIR.

Do EIR Mitigation Measures Address and/or Resolve Impacts?

This column indicates whether mitigation measures from the 2018 EIR and/or 2020 SEIR would address and/or resolve impacts related to the modified project.

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4.1 Aesthetics

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	Pages 3.5-8 through 3.5-10 of the 2018 EIR	No	No	N/A
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Pages 3.5-14 of the 2018 EIR	No	No	N/A
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Pages 3.5-14 through 3.5-15 of the 2018 EIR	No	No	N/A
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	Pages 3.5-15 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to aesthetics were analyzed on pages 3.5-8 through 3.5-15 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to aesthetics from the 2018 EIR. Aesthetic impacts related to scenic resources, visual character, and light and glare were determined to be less than significant, while impacts related to scenic vistas were determined to be significant and unavoidable despite implementation of Goal G-LU-2 of the INSP which requires the protection of existing scenic views to the extent possible and create new view corridors from within the INSP Planning Area.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental

documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project have a substantial adverse effect on a scenic vista?

The 2018 EIR determined that impacts to scenic vistas would be significant and unavoidable due to the proposed height and intensity of development within the INSP planning area. The proposed project would be entirely within the INSP Planning Area analyzed in the 2018 EIR. As discussed in Section 1.5, *Project Description*, four of the Isabel Crossing Parcels in the proposed project would exceed the height limits required in the INSP pursuant to requested Density Bonus law "waiver and reduction" requests. Parcel S1 would exceed the height envelope by approximately 11.5 feet, Parcel C-2A would exceed the height envelope by approximately 8.5 feet at the north end of the building only, Parcel S3-A would exceed the height envelope by approximately 6.0 feet, and Parcel S3-B would exceed height requirements by approximately 20.5 feet. However, several of the proposed building heights would be reduced compared to the original project, and the overall impact on scenic vistas would be similar to and not substantially more severe than the original project. The height requirements would be consistent with INSP land uses after concessions and waivers approved under the proposed State Density Bonus. Figure 4 and Figure 5 show views of the project site from Isabel Avenue and Shea Center Drive. Development on the site would generally obscure views of the distant ridgelines regardless of the height increases proposed for the project.

Under the original project, building height was restricted to 490 to 495 feet above MSL for the BART Parcel (pursuant to Figure 2-4 of the INSP) and 30 feet in height for the Comcast Parcels (pursuant to the City's General Plan Scenic Corridor Policy). The proposed land use designation change of the No Net Loss Parcels would not modify the height limitations, and as no specific development is proposed on the No Net Loss Parcels at this time, it is reasonably assumed that future development proposals on the No Net Loss Parcels would comply with the height limitations set forth in the City's General Plan and INSP.

Therefore, the proposed project would not result in new or more severe impacts to scenic vistas beyond those identified in the 2018 EIR.

Figure 4 View of the Project Site Looking West from Isabel Avenue



Figure 5 View of the Project Site Looking North from Shea Center Drive



b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The 2018 EIR indicated that the portion of I-580 that passes through the INSP planning area is an Eligible State Scenic Highway, and the Gandolfo Farm is a historic resource within the INSP Planning Area. The hills north and south of I-580 comprise the scenic resources visible from I-580, and areas with existing trees along creeks in the INSP Planning Area would be maintained as open space. There are no significant rock outcroppings within the INSP Planning Area or project site.

The project site falls within a scenic corridor zone as identified in the 2018 EIR, and the project site is visible from I-580. However, development proposed under the Isabel Crossing Project would remain in areas designated for development under the INSP and would not be located on areas designated as open space, or on the Gandolfo Farm property. Similarly, future development of the No Net Loss Parcels facilitated by the proposed and future land use changes would occur in an area designated for development under the INSP and would not be located on the Gandolfo Farm property. The proposed project would not damage historic buildings, rock outcroppings, or trees within a State Scenic Highway beyond what was considered in the 2018 EIR for the original project. Therefore, the proposed project's impacts to scenic resources would be similar to those studied in the prior EIRs and would be less than significant. The proposed project would have no new or substantially more severe significant impacts related to scenic vistas beyond those described in the certified EIR.

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The 2018 EIR determined that new development would be subject to development standards in Chapter 2: *Land Use* of the INSP that would regulate building height and setbacks to minimize the visual impacts of new construction and redevelopment and design standards and guidelines in

Chapter 5: *Urban Design* of the INSP*,* which address the street interface, building massing, architecture, colors, materials, landscaping, and signage.

The proposed project would be entirely within the project area for the original project. The modified project site has retained the same general appearance as was analyzed in the 2018 EIR for the original project. The Isabel Crossing Project would not substantially change the appearance of new development on the site compared to the original project analyzed in the 2018 EIR because the original project planned for new residential and commercial development on the Isabel Crossing Parcels, similar to the proposed project. The Isabel Crossing Project would be less dense than that studied in the prior EIRs, and there would be slightly more landscaping and open space, which would be an improvement to the visual character of the site compared with the original project.

The No Net Loss Specific Plan Amendment Project would allow future development of the BART and Comcast Parcels to be strictly residential use, as compared to the original project, which allowed for Business Park development on the Comcast Parcels and some Office Core development on the BART Parcel. While the allowed type of use and density of development would be modified under the No Net Loss Specific Plan Amendment Project, the proposed uses would be visually consistent with existing and planned surrounding development, which includes residential uses near the No Net Loss Parcels. In particular, the BART Parcel was designated for Residential Core (60-100 dwelling units per acre) and Office Core development and would be re-designated for exclusively Residential Core. While the Comcast Parcels would be re-designated to Village and Transition, parcels to the south and east of the Comcast Parcels are also designated for Village and Transition, and the land use change would be consistent with those adjacent designations.

Furthermore, INSP goals and policies would apply to the proposed project, like the original project. Therefore, the proposed project would result in no new or more severe impacts to visual character and quality beyond those identified in the 2018 EIR.

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The 2018 EIR found that while new development under the original project would increase sources of light and glare (through street lights, buildings, and vehicles), compliance with Livermore General Plan policies for controlling outdoor artificial light and Chapter 15.18 of the Livermore Municipal Code would reduce potentially significant long-term light and glare impacts and design standards would further help to ensure that lighting for new development is held to high design standards for light pollution and glare reduction. The proposed project would not add new sources or light or glare to the project site beyond what was considered in the 2018 EIR for the original project, as all portions of the project site were anticipated for development and not designated for open space. Therefore, the proposed project would result in no new or more severe impacts to light and glare beyond those identified in the 2018 EIR.

4.2 Agriculture and Forestry Resources

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Page 3.14-7 of the 2018 EIR	No	No	N/A
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	Page 3.14-8 of the 2018 EIR	No	No	N/A
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	Page 3.15-1 of the 2018 EIR	No	No	N/A
d. Result in the loss of forest land or conversion of forest land to non-forest use?	Page 3.15-1 of the 2018 EIR	No	No	N/A
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Page 3.14-8 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to agriculture and forestry resources were analyzed on pages 3.14-7 through 3.15-1 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to agriculture and forestry resources from the 2018 EIR. Impacts related to the conversion of Prime Farmland and agricultural zoning were determined to be significant and unavoidable even with implementation of INSP policies. Impacts to existing farmland were determined to be less than significant with compliance with Chapter 8.16 of the Livermore Municipal Code. The 2018 EIR determined that there would be no impact on forest resources or land zoned for forest use.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located, 2) were not previously analyzed in a previous environmental documents as significant effects, 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents, and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The 2018 EIR identified one property, the Gandolfo property, as impacted by the conversion of Prime Farmland and Unique Farmland to non-agricultural use. The Isabel Crossing and No Net Loss Parcels do not include this property.

The 2018 EIR stated that there is one zoning district, PDR-01-001, in the INSP Planning Area that allows for agriculture uses. The Isabel Crossing and No Net Loss Parcels are not located within this agricultural zoning district.

The proposed project would be located on the same site as studied in the prior EIRs, on land designated as grazing land by the California Department of Conservation Farmland Mapping and Monitoring Program Important Farmlands Inventory. The Isabel Crossing and No Net Loss Parcels do not include Important Farmland and is not designated for agricultural uses. Therefore, the proposed project would result in no new or more severe impacts to Prime Farmland or Unique Farmland beyond those identified in the 2018 EIR.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The 2018 EIR stated that the INSP Planning Area does not contain forest resources or land zoned for forest use. Because the proposed project is entirely within the INSP Planning Area considered under the 2018 EIR, and no forest land is located on the Isabel Crossing or No Net Loss Parcels, the proposed project would result in no new or more severe impacts beyond those identified in the 2018 EIR for the original project.

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4.3 Air Quality

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	Page 3.3-20 of the 2018 EIR Page 3.1-22 of the 2020 SEIR	No	No	No
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Pages 3.3-33 and 3.3-35 of the 2018 EIR Pages 3.1-36 and 3.1-43 of the 2020 SEIR	No	No	Yes
c.	Expose sensitive receptors to substantial pollutant concentrations?	Pages 3.3-38, 3.3-40, and 3.3-44 of the 2018 EIR Pages 3.1-43, 3.1-45, and 3.1-49 of the 2020 SEIR	No	No	Yes
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Page 3.3-46 of the 2018 EIR Page 3.1-51 of the 2020 SEIR	No	No	No

Analysis in Previous Environmental Documents

Impacts to air quality were analyzed on pages 3.3-1 through 3.3-47 of the 2018 EIR and pages 3.1-1 through 3.1-52 of the 2020 SEIR. The certified 2018 EIR and 2020 SEIR determined that implementation of the INSP would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

The 2018 EIR and 2020 SEIR determined that development facilitated by the INSP, with the implementation of mitigation measures AQ-1 through AQ-3 (included below), in addition to the proposed 2018 EIR policies, would reduce construction-related emissions to a less-than-significant level. The INSP emissions in the 2018 EIR and 2020 SEIR would be generated from mobile sources (i.e., passenger vehicles) that are not regulated at the city level; therefore, no feasible mitigation measures are available to reduce these operational emissions. Operational impacts were

determined to be significant and unavoidable. The 2018 EIR and 2020 SEIR found construction and operation may expose sensitive receptors to substantial toxic air contaminant concentrations. With the Implementation of mitigation measures AQ-1 and AQ-4 (shown below), construction emissions would be reduced and a project-level evaluation within 1,000 feet of sensitive receptors would be required; however, project-specific conditions could preclude the reduction of health risk below Bay Area Air Quality Management District (BAAQMD) thresholds. Therefore, toxic air contaminant (TAC) exposure was determined to be significant and unavoidable.

MM AQ-1: Require Construction Fleet to Use Renewable Diesel. All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to reduce construction-related exhaust emissions by ensuring that all off-road equipment operating for more than 20 total hours over the entire duration of construction activities shall operate on renewable diesel (such as Diesel high performance renewable). Renewable diesel is currently commercially available in San Francisco Bay Area.

MM AQ-2: Require Use of Diesel Trucks with 2010-Compliant Model Year Engines. All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to use diesel trucks that have 2010 model year or newer engines. In the event that 2010 model year or newer diesel trucks cannot be obtained, the contractor must provide documentation to the City showing that a good faith effort to locate such engines was conducted.

MM AQ-3: Require payment of mitigation fees to offset emissions exceeding BAAQMD's daily pollutant thresholds.

MM AQ-4: Require future projects located within 1,000 feet of receptors perform a construction health risk assessment (HRA). All applicants proposing development of projects within 1,000 feet of existing sensitive receptors, as defined by BAAQMD, shall prepare a site-specific construction HRA taking into account both project-level and cumulative health risks (including existing TAC sources). If the HRA demonstrates, to the satisfaction of the City, that the health risk exposures for adjacent receptors will be less than BAAQMD project-level and cumulative thresholds (as appropriate), then additional mitigation would be unnecessary. However, if the HRA demonstrates that health risks would exceed BAAQMD project-level and/or cumulative thresholds (as appropriate), additional feasible on- and offsite mitigation shall be analyzed by the applicant to help reduce risks to the greatest extent practicable.

The following describes the analysis included in the 2018 EIR and 2020 SEIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located, 2) were not previously analyzed in a previous environmental documents as significant effects, 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents, and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The California Clean Air Act requires that air districts create a 2017 Climate Action Plan (CAP) that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the 2017 CAP. The 2017 CAP does not include control measures that apply directly to individual development projects. Instead, the control strategy includes control measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-greenhouse gas (GHG) pollutants. A project that would not support the 2017 CAP's goals would not be consistent with the 2017 CAP. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the CAP's goals.

As noted on page 3.1-24 of the 2020 SEIR, the original project would not conflict with or obstruct implementation of the BAAQMD's 2017 CAP with the development of numerous polices that promote mixed-use and transit-oriented development. The proposed project would exceed development for the original project planned under the INSP. In addition, by adhering to INSP policies and design guidelines the proposed project would incorporate many of the 2017 Clean Air Plan control measures related to transportation, building energy, waste, and water sections discussed in Table 3.1-6 of the 2020 SEIR for the original project, such as trip reduction programs, transit efficiency, bicycle and pedestrian facilities, urban tree planting, and waste diversion. Therefore, the proposed project would not result in new or more severe impacts related to conflicts with applicable air quality plans beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Isabel Crossing Project

Construction

The Isabel Crossing Project would involve the construction of 39 fewer residential units and 92,823 square feet less commercial space than the project as considered in the 2020 SEIR. In addition, the proposed project would not include office space. Similar to the 2018 EIR and 2020 SEIR, with the implementation of mitigation measures AQ-1, AQ-2, and AQ-3 from the 2018 EIR and 2020 SEIR (included above), the proposed project's construction criteria pollutant impacts would be less than significant with mitigation incorporated. No new or substantially more severe significant effects would occur to air quality with the implementation of the proposed project.

Operation

Long-term operational emissions associated with the Isabel Crossing Project were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1. During operations, the proposed uses would result in emissions of criteria pollutants from area sources (i.e., consumer products, architectural coatings, and landscaping equipment), energy sources (natural gas usage), and mobile sources (vehicle use). Table 2 below compares the proposed Isabel Crossing Project to the original project planned for the Isabel Crossing Parcels under the INSP. Operational emissions of

the proposed project would be less than the original project for nitrogen oxide, carbon monoxide (CO), particulate matter with a diameter no more than 10 microns, and particulate matter with a diameter no more than 2.5 microns because there would be less commercial retail space and no office land uses the proposed project, resulting in a corresponding decrease in emissions sources, such as vehicle trips. Reactive organic gas (ROG) emissions would increase three pounds per day compared to the original project since the proposed project would increase the total usable residential square footage, which would increase consumer product consumption. As shown in Table 3.1-7 in the 2020 SEIR, the original project's increase in ROG emissions compared to existing (2013) conditions would be 7 pounds per day below the BAAQMD threshold. Therefore, with the proposed Isabel Crossing Project increasing emissions by three pounds per day, emissions from the Isabel Crossing Project would be four pounds per day below the BAAQMD threshold. Therefore, the proposed Isabel Crossing Project would result in no new or more severe impacts related to air quality impacts and criteria pollutant emissions beyond those identified in the 2018 EIR and 2020 SEIR for the original project.

Isabel Crossing and No Net Loss Specific Plan Amendment Project

Table 2 provides the net air quality emissions associated with the potential future development that could occur as a result of the proposed land use designation change of the BART Parcel and the future land use designation change of the Comcast Parcels, when combined with the Isabel Crossing Project and existing and planned development. The overall project would result in an increase of residential units and a decrease of commercial office space compared to the original INSP. Operational emissions would be lower for ROG, nitrogen oxide, CO, particulate matter with a diameter no more than 10 microns, and particulate matter with a diameter no more than 2.5 microns as compared to the original INSP. This is due to the reduced commercial office space, leading to a corresponding decrease in emissions sources, such as vehicle trips. Additionally, operational emissions would decrease due to reduced consumption of consumer products and natural gas energy consumption. As a result, the potential development of the No Net Loss Parcels when combined with the proposed development of the Isabel Crossing Parcels would not lead to a new or more severe impact related to air quality and criteria pollutant emissions beyond those already identified in the 2018 EIR and 2020 SEIR for the original project.

Table 2 Isabel Crossing Project Operational Emissions

Sources	Average Daily Emissions (lbs./day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Isabel Crossing Project					
2040 With Adopted INSP					
Mobile	12	30	337	164	42
Area	45	1	49	<1	<1
Energy	<1	7	3	1	1
Original Project Emissions	**57**	**38**	**390**	**165**	**43**
2040 With Isabel Crossing Project					
Mobile	10	26	287	139	36
Area	50	1	38	<1	<1
Energy	<1	3	1	<1	<1
Isabel Crossing Emissions	**60**	**29**	**327**	**139**	**36**
Net Difference From Adopted INSP on the Isabel Crossing Parcels	**3**	**(9)**	**(63)**	**(26)**	**(7)**
No Net Loss Specific Plan Amendment Project					
Decrease of 1,531,486 sf of Office Space					
Mobile	(27)	(27)	(261)	(100)	(26)
Area	(39)	(<1)	(33)	(<1)	(<1)
Energy	(1)	(10)	(8)	(1)	(1)
Total Emissions	**(67)**	**(37)**	**(302)**	**(101)**	**(26)**
Increase of 1,431 Residential Units[1]					
Mobile	16	16	153	58	15
Area	37	1	40	<1	<1
Energy	<1	7	3	1	1
Total Emissions	**54**	**24**	**197**	**59**	**16**
Net Difference From Adopted INSP on the No Net Loss Parcels	(13)	(13)	(105)	(42)	(10)
Isabel Crossing and No Net Loss Specific Plan Amendment Project					
Total Net Emissions from the Isabel Crossing and No Net Loss Specific Plan Amendment Project Compared with the Adopted INSP	**(10)**	**(22)**	**(168)**	**(68)**	**(17)**

[1] The increase of 1,431 residential units from the No Net Loss Parcels accounts for the overall reduction in housing units in the INSP area from the proposal Isabel Crossing Project and other planned and constructed projects in the INSP area.

Lbs./day = pounds per day; ROG = reactive organic gases; NO_X = nitrogen oxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns; SO_X = sulfur oxide BAAQMD = Bay Area Air Quality Management District.

Notes: Parenthetical values are negative numbers and are subtracted from the total emissions rather than added.

Source: Average daily and annual emissions. See Table 2.5 "Operations Emissions by Sector, Unmitigated". See CalEEMod worksheets in Appendix B. Numbers may not add up due to rounding.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

The proposed project would involve the development of land uses and associated sensitive receptors near roadways that could emit substantial pollutant concentrations, similar to the original project analyzed in the 2018 EIR and 2020 SEIR. Implementation of the Isabel Crossing and No Net Loss Specific Plan Amendment Project would reduce the vehicle miles traveled (VMT) and average daily vehicle trips compared to the original project. As shown in Table 2, the proposed project would emit less CO emissions from mobile sources compared to the original project. Therefore, no new or significant increase in CO exposure would be anticipated under the proposed project.

Construction and operational activity from the proposed project would generate TAC emissions that could expose new and existing sensitive receptors to substantial pollutant emissions. Without project specific details, such as construction equipment, building footprints, and construction schedule, it would be speculative to determine construction impacts on sensitive receptors. With the implementation of mitigation measures AQ-1, AQ-2, and AQ-4, provided above, the proposed project would reduce construction TAC emissions and exposure to sensitive receptors. However, project-specific conditions may prevent the reduction of health risk below adopted thresholds; therefore, construction impacts would be significant and unavoidable, similar to the findings of the 2018 EIR and 2020 SEIR. Development under the proposed project may involve new stationary sources of TACs and could expose sensitive receptors to TAC emissions. Stationary sources would be subject to the permit authority of BAAQMD. Consistent with the 2020 SEIR, project-specific details could preclude the reduction of health risk below BAAQMD thresholds. However, no more stationary sources of TACs are proposed than under the original project. Therefore, there would be no new or more severe impacts related to exposure of sensitive receptors to air pollution beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The proposed project would not involve the use of construction equipment or materials that were not accounted for in the original project and analyzed in the SEIR. The proposed project would occur within the same proximity to existing residences as the construction activities anticipated for the original project and the proposed project would involve similar operational uses to those evaluated for the original project in the 2018 EIR and 2020 SEIR. Therefore, no new odors beyond those analyzed in the 2018 EIR and 2020 SEIR for the original project would result from the proposed project.

4.4 Biological Resources

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Pages 3.7-26 through 3.7-35 of the 2018 EIR	No	No	Yes
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Pages 3.7-35 through 3.7-37 of the 2018 EIR	No	No	Yes
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Pages 3.7-37 through 3.7-39 of the 2018 EIR	No	No	Yes
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Page 3.7-39 of the 2018 EIR	No	No	N/A

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Page 3.7-40 of the 2018 EIR	No	No	Yes
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Page 3.7-39 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to biological resources were analyzed on pages 3.7-26 through 3.7-40 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to biological resources from the 2018 EIR. The 2018 EIR determined that impacts related to adverse effects on special-status species, riparian habitat, sensitive natural communities, federally-protected wetlands and other waters regulated under Section 404 of the Clean Water Act, and the potential to conflict with local policies or ordinances protecting biological resources would be less than significant with mitigation. The 2018 EIR determined that impacts related to the movement of wildlife species would be less than significant and there would be no impact regarding the potential to conflict with the provisions of an adopted conservation plan.

The 2018 EIR determined that operational impacts to special-status wildlife would be less than significant with implementation of INSP policies. The 2018 EIR determined that construction associated with future development in the INSP Planning Area could affect special-status plant and wildlife species; however, impacts would be less than significant with the implementation of INSP policies and the following mitigation measures:

MM-BIO-1: Prepare and implement a salvage, relocation, or propagation and monitoring plan for special-status plant species.

If impacts to special-status plant species are unavoidable, prepare and implement a salvage, relocation, or propagation and monitoring plan for special-status plant species. If a protocol-level botanical survey reveals the presence of special-status plant species in the Planning Area, all directly affected areas of special-status plants will be documented by a qualified botanist or ecologist retained by project proponents prior to issuance of grading permits, consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities State of California (CDFW, 2009). Documentation will include density and percent cover; key habitat characteristics, including soil type, associated species, hydrology, and topography; and photographs of preconstruction conditions. Impacts to rare (California Rare Plant Rank 1 and 2) native plant species will be avoided where feasible. If impacts to such species are unavoidable, the

project proponent will notify USFWS and/or CDFW and a qualified botanist or restoration ecologist will prepare a salvage, relocation, or propagation and monitoring plan in coordination with USFWS and/or CDFW prior to construction to address affected special-status plant species. At least two surveys by a qualified botanist or ecologist per monitoring year.

- At least 80 percent of the planted area must support vegetation composition and density consistent with reference population conditions.
- At least 80 percent of the planted area must support target species amounts similar to reference feature conditions.
- A minimum of five consecutive years of monitoring to ensure success criteria are met
- Remedial actions to restore intended ecological function of planted areas that fail to meet the success criteria for three consecutive years.

MM-BIO-2: Avoid nesting birds where feasible.

Proponents (or their contractors) of specific projects under the proposed Plan shall conduct construction activities outside the bird nesting season (February 1 to August 31) to the extent feasible. If construction initiation is unavoidable during this time, the project proponent or its contractor will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds (including raptors, but excluding burrowing owl) within 300 feet and including the near-term or longer-term improvements environmental footprints. Adjacent lands outside the development footprints will be scanned with binoculars from the limit of ground-disturbance and publicly accessible areas. Preconstruction surveys will occur no more than three days prior to the onset of ground-disturbing activities (including clearing, grubbing, and staging) at each development area. If active nests are found in the development footprints, the biologist will establish a no-disturbance buffer around the nest and mark the buffer perimeter with high visibility fencing, flagging, or pin flags. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in place until the nest is no longer active, as determined by the biologist. Buffers for any nests found outside but within 300 feet of the development sites will be established based on the biologist's best professional judgment whether the work would result in nest abandonment. If a lapse in construction activities of 15 days or longer at a previously surveyed environmental footprint occurs, another preconstruction survey will be conducted. If structure demolition activities cannot occur outside of the nesting season, the project proponent or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (e.g., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than three days prior to structure demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structures to be demolished/modified and the surrounding areas for the presence of active

nests. If active nests are found on the structures or in the affected area, then demolition/modification activities will not proceed until the biologist verifies that all nests on the structures are inactive. After all surveys and/or nest deterrence activities are completed at each development footprint, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the project proponent within seven days of survey completion.

MM-BIO-3: Avoid burrowing owl nesting where feasible.

Prior to any construction activity planned during the fall and winter non-nesting season (September 1 through January 31) or at any time during the construction process, proponents of projects proposed within the Planning Area will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. Surveys will be conducted at each area of suitable habitat that will be disturbed no more than seven days prior to ground-disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance pursuant to CDFW's Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game, 2012). If any burrowing owls are found within the disturbance area, the project proponent will notify CDFW and will proceed under CDFW direction. If construction is planned to occur during the nesting season (February 1 through August 31), the project proponent will retain a qualified wildlife biologist to conduct a breeding season burrowing owl survey in the year prior to construction. The survey will be conducted to determine if there is a breeding pair within approximately 500 feet of each development footprint, unless the biologist determines that a smaller survey buffer around the construction footprint is warranted based on preexisting background disturbance and conditions. Survey visits will be timed in accordance with CDFW guidelines (California Department of Fish and Game, 2012). This will provide the project team advance notice of nesting owls in the development area and allow ample time to discuss appropriate avoidance measures with CDFW. In addition, preconstruction surveys will be conducted no more than seven days prior to ground disturbance in all areas of the development footprint supporting burrowing owl habitat. If the biologist identifies the presence of a burrowing owl nest in an area scheduled to be disturbed by construction, a 660-foot no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, and buffers will be coordinated with CDFW by contacting the appropriate CDFW personnel, and will be subject to CDFW review and oversight.

MM-BIO-4: Avoid tricolored blackbird breeding habitat where feasible.

If construction activities in or within 300 feet of freshwater emergent wetland habitat occur during the breeding season (February 1 through August 31), the project proponent will retain a qualified biologist to conduct surveys for the presence of a tricolored blackbird nesting colony or nests. If an active nest colony or nest is observed by the qualified biologist, then a no-disturbance buffer of 250 feet will be established until the end of the breeding season or until the nesting colony or nest is determined inactive by the biologist. Nest buffers may be reduced if site-specific conditions reduce the possibility of near-term or longer-term improvements disturbance, as determined by the qualified biologist in coordination with CDFW.

MM-BIO-5: Avoid western pond turtle where feasible.

Prior to the start of construction within western pond turtle habitat (i.e., any undeveloped areas within 400 feet of riverine aquatic habitat, freshwater emergent wetlands, vernal pools, or seasonal wetlands), proponents of proposed projects within the Planning Area shall retain a biologist approved by the CDFW to survey for western pond turtles. Surveys will be conducted at each habitat area no more than seven days prior to the initiation of ground disturbance at that location. If preconstruction surveys identify active nests, the biologist will establish 50-foot no-disturbance buffer zones around each nest using temporary orange construction fencing with a four-inch-tall gap below the fence. The fencing will be permeable to young turtles and allow them to move away from the nest following hatching. The buffer zones and fencing will remain in place until the biologist has confirmed that the young have left the nest. If non-nesting pond turtles are found in the footprint, the biologist will remove and relocate them to suitable habitat outside the environmental footprint. Relocation sites will be subject to CDFW approval.

MM-BIO-6: Avoid San Joaquin kit fox and American badger where feasible.

Within one year but no less than three months prior initiating construction, proponents of specific projects within the Planning Area will retain qualified biologists to identify potential kit fox and badger dens in the development footprint and surrounding 200 feet. The biologist will prepare a report summarizing the survey observations and results, including maps depicting the locations of potential badger dens and, if possible, occupancy. The report will be submitted to the project proponent and CDFW. Prior to construction, the project proponent will retain qualified biologists to implement preconstruction surveys of previously identified potential kit fox and badger dens to determine if they are natal kit fox or American badger dens no less than 14 days and no more than 30 days before the initiation of construction at each development footprint (e.g., one week ahead of the construction crew for linear components). Construction activities will not occur within 100 feet of a potential den during the natal period (February 1 to September 30). If a known den or natal den is present within the permanent construction footprint or within 200 feet of the construction footprint during the natal period (100-foot buffer during the non-natal period), the kit fox or badger will be excluded outside of the natal period (from November 1 to January 31). A summary report will be prepared by the biologists and submit to the project proponent and CDFW following completion of all kit fox or badger avoidance and exclusion activities.

MM-BIO-7: Avoid California tiger salamander, western spadefoot and California red-legged frog where feasible.

Proponents of specific projects within the Planning Area shall retain a USFWS and/or CDFW approved biologist (as appropriate) to identify and flag (pin flags or 4-foot lath) all suitable aquatic habitat for California tiger salamander, western spadefoot and California red-legged frog outside of but adjacent to development footprints and ground-disturbance areas prior to staging, vegetation clearing, grading, or other construction activities. The project proponent or its contractor will protect habitat areas by installing orange exclusion and erosion control fencing at the maximum practicable distance from the work site or, if feasible, at least 500 feet

from the aquatic habitat edge, wet or dry, to make it easily visible by construction crews. A qualified biologist will conduct a preconstruction survey each morning before construction activities begin and continue to monitor ground-disturbing construction activities where suitable habitat occurs during all phases of construction to remove any California tiger salamander, western spadefoot and California red-legged frogs found in the development footprint. Individual salamanders and frogs will be moved immediately to a relocation site that is a minimum of 330 feet from the construction boundary. The relocation site will be determined in coordination with USFWS and/or CDFW prior to the commencement of construction activities. Construction activities near drainages and wetland complexes identified as potential movement corridors shall take place between July 1 and October 1, when the California tiger salamander, western spadefoot and California red-legged frog are least likely to be present in the development area. To discourage California tiger salamander, western spadefoot and California red-legged frogs from entering the improvements areas via ditches, the ditches will be equipped with lightweight, one-way flow gates.

MM-BIO-8: Avoid Callippe silverspot butterfly where feasible.

Prior to construction, proponents of specific projects within the Planning Area will retain a qualified botanist or biologist with experience in identifying Viola pedunculata, the host plant for Callippe silverspot butterfly, to identify and flag (with pin flags or 4-foot lath) any Viola pedunculata individuals during its blooming season (February to April) when the species is readily identifiable in and within 50 feet of the near-term and longer-term improvements that will affect California annual grassland. The locations of Viola pedunculata outside of the ground disturbance area of the near-term or longer-term improvements will be included on grading plans and avoided by construction personnel. The biologist will document the number and density of host plants that are unavoidable in development footprints. This information shall be compiled in a report and submit to USFWS prior to initiation of ground disturbance. The project proponent or its contractor will adhere to the following host plant avoidance measures:

- No herbicide application will occur within 100 feet of host plant populations. Spot application to cut stumps, frilled stems, or injection into stems is acceptable. No broadcast herbicide applications will be used.
- Cut trees that are removed in the vicinity of host plants will be hand carried rather than dragged to disposal areas.
- Avoid or minimize the removal of host plant, Viola pedunculata.
- Avoid work in suitable habitat during the flight and mating season (mid-May to mid-July) to the extent feasible.

MM-BIO-9: Avoid roosting bats where feasible.

If tree removal and trimming cannot be conducted between September 15 and October 30, proponents of projects implemented under the proposed Plan will retain a qualified biologist to examine trees to be removed or trimmed for suitable bat roosting habitat no more than 2 weeks before removal and trimming. High-quality habitat features (large tree cavities, basal hollows, loose or peeling bark,

larger snags, palm trees with intact thatch, etc.) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, urine staining, etc.). Mixed willow riparian scrub and stands of mature broadleaf trees should be considered potential habitat for solitary foliage-roosting bat species. Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required. Survey methods will be discussed with CDFW prior to the start of surveys. Measures to avoid and minimize impacts on sensitive bats species will be determined in coordination with CDFW and may include the following:

- Tree removal will be avoided between April 1 and September 15 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for nonvolant (non-flying) young.
- Each tree will be removed in pieces rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or a qualified biologist has determined the roost is no longer active.
- If avoidance of nonmaternity roost trees is not possible, and tree removal or trimming must occur between October 30 and September 15, qualified biologists will monitor tree trimming and removal. If possible, tree trimming and removal should occur in the late afternoon or evening when it is closer to the time that bats would normally arouse. Prior to removal and trimming, each tree will be shaken gently and several minutes should pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologists will search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare biological monitoring report, which will be provided to the project proponent and CDFW.

The 2018 EIR determined that changes resulting from future development under the INSP would result in a potentially significant impact on riparian vegetation. However, with implementation of the proposed Plan policies, and mitigation measures listed below, this impact would be reduced to a less than significant level:

MM-BIO-10: Avoid and protect riparian habitat during construction.

Proponents of specific projects under the proposed Plan will ensure that a qualified resource specialist (i.e., biologist, botanist, or ecologist) will clearly identify riparian habitat to be preserved abutting the development area and outside of the direct construction area with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site preparation. Construction will not encroach upon sensitive natural communities identified by the resource specialist. The resource specialist will use the project's verified wetland delineation, soils data, and land cover data to confirm the location of riparian habitat boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained

throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced sensitive natural community areas. Exclusion fencing and markers will be removed following completion of construction activities. All conditions imposed by State and federal permits for individual improvements will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

MM-BIO-11: Compensate for loss of riparian habitat.

For direct effects on woody riparian trees that cannot be avoided, proponents of specific projects under the proposed Plan will compensate for the loss of riparian habitat to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with the appropriate State and federal agencies during the permitting process. At a minimum, the compensation ratio will be 2:1 (e.g., two acres restored/created/enhanced or credits purchased for every 1 acre removed) for permanent impacts and 1:1 for temporary impacts (where riparian habitat will regenerate to pre-activity character within one year). Compensation may be a combination of offsite restoration or mitigation credits. The project proponent or its contractor will develop a restoration and monitoring plan that describes how riparian habitat will be enhanced or recreated and monitored over at least 5 years, or as determined by the appropriate State and federal agencies. If the project proponent identifies suitable onsite areas (adjacent to the permanent construction footprint) that are outside the development footprint and chooses to compensate onsite or in the project's vicinity, a revegetation plan will be prepared. The revegetation plan will be developed prior to the removal of existing riparian vegetation and will be conducted onsite or in the near-term or longer-term improvements vicinity to the extent feasible; however, mitigation site selection will avoid areas where future development or maintenance are likely. The revegetation plan will be prepared by a qualified botanist or restoration specialist with experience in riparian restoration and reviewed by the appropriate agencies. The revegetation plan will specify the planting stock appropriate for each riparian land cover type and each mitigation site, ensuring the use of genetic stock from the corresponding development area by project. The plan will employ the most successful techniques available at the time of planting. Success criteria will be established as part of the plan and will include a minimum of 70 percent revegetation success after three years, 80 percent revegetation success at the end of five years, and 75 percent vegetative coverage after five years. The project proponent or its contractor will retain a qualified botanist, restoration ecologist, or biologist with experience in riparian restoration to monitor the plantings as necessary for five years. The project proponent or its contractor will be responsible for maintaining the plantings, including managing invasive plants (as defined by the California Invasive Plant Council) and other weeds, and implementing irrigation and plant protection if necessary. The project proponent or its contractor will submit annual monitoring reports to the regulatory agencies issuing permits related to habitat effects, including CDFW, USACE, and USFWS. Replanting will be necessary if success criteria are not met, and replacement plants subsequently will be monitored and maintained to meet the success criteria. The riparian habitat

mitigation will be considered successful when the sapling trees established meet the success criteria, the habitat no longer requires substantial active management, and vegetation is arranged in groups that, when mature, replicate the area, natural structure, stratification, and species composition of similar riparian habitats in the region.

The 2018 EIR determined that changes resulting from future development under the INSP would result in a potentially significant impact on wetlands and other waters; however, impacts would be less than significant with implementation of INSP policies and the following mitigation measures:

MM-BIO-12: Avoid and protect wetlands during construction.

Proponents of specific projects under the proposed Plan will ensure that a qualified resource specialist (i.e., wetland biologist, ecologist, or soil scientist) will clearly identify wetland areas to be preserved abutting the development area and wetland areas outside of the direct construction area with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site preparation. Construction will not encroach upon jurisdictional wetlands identified by the resource specialist. The resource specialist will use the development footprint and verified wetland delineation to confirm the location of wetland boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas. Exclusion fencing and markers will be removed following the completion of construction activities. All conditions imposed by the projects' State and federal permits will be implemented as part of the construction, with ultimate enforcement oversight by applicable State and federal agencies. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

MM-BIO-13: Compensate for impacts on jurisdictional wetlands and non-wetland waters of the United States (aquatic resources) prior to near-term and longer-term improvements impacts during construction.

If projects impact jurisdictional wetlands and non-wetland waters, proponents of these specific projects under the proposed Plan will develop an aquatic resource (wetlands and non-wetland waters of the United States) mitigation plan, subject to approval by the USACE, which will ensure no net loss of wetlands from development impacts. The plan will detail the amount and type of wetlands (based on the projects' verified wetland delineation) that will be compensated for (through preservation, creation, or restoration) for impacts on existing wetlands and non-wetland waters of the United States (aquatic resources), and outline the monitoring and success criteria for the compensation wetlands and non-wetland waters of the United States. Additional enhancement options include fish barrier removal, riparian restoration, floodplain restoration, and streambank layback to improve overall ecologic function and connectivity of wetland and non-wetland waters. Enhancement sites will be located as near the impact location as possible but, in the event that local enhancement opportunities are not available, such activities will occur within the same stream system or watershed to provide improved ecologic

function and connectivity of wetlands and non-wetland waters affected by development activities.

Monitoring and success criteria applicable to created or restored wetlands will require the following:

- At least two surveys by a qualified wetland biologist, botanist, or ecologist per monitoring year.
- At least 80 percent of the created or restored features support vegetation consistent with reference feature conditions.
- At least 80 percent of the created or restored features support hydrologic regimes similar to reference feature conditions.
- A minimum of five consecutive years of monitoring to ensure success criteria are met.
- Remedial actions to restore intended ecological function of created or restored features that fail to meet the success criteria for three consecutive years.
- Once the plan is approved, the project proponent will implement the aquatic resource compensation measures prior to the initiation of development construction. The project proponent will be responsible for funding compensatory mitigation, monitoring of the created or restored features per the mitigation plan, and any remedial actions necessary. All conditions that are attached to the State and federal permits will be implemented as part of the development project, with ultimate enforcement oversight by applicable State and federal agencies. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The 2018 EIR determined that operational impacts to special-status wildlife would be less than significant with implementation of INSP policies and construction associated with future development in the INSP Planning Area could affect special-status plant and wildlife species; however, impacts would be less than significant with the implementation of INSP policies and mitigation measures MM-BIO-1 through MM-BIO-9.

The biological resource assessment (BRA) (WRA 2023; included as Appendix C) prepared to assess current conditions on the Isabel Crossing Parcels determined that 12 protected species that were with potential to occur according to the 2018 EIR no longer have potential to occur, or are now unlikely to occur, on the Isabel Crossing Parcels. Unless otherwise specified below, the Isabel Crossing Parcels do not provide suitable habitat for these species:

- Big-scale balsamroot (*Balsamorhiza macrolepis*; California Rare Plant Rank 1B.2)
- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*; California Rare Plant Rank 1B.1): not observed in protocol-level surveys (October 2022), assumed absent
- Prostrate vernal pool navarretia (Navarretia prostrata; California Rare Plant Rank 1B.2)
- Callippe silverspot butterfly (*Speyeria callippe*; Federal Endangered): outside of known range, no serpentine soils are present that could support host plants
- Tricolored blackbird (*Agelaius tricolor*; State Threatened, CDFW Species of Special Concern)
- California tiger salamander (*Ambystoma californiense*; Federal Threatened, State Threatened)
- California red-legged frog (*Rana draytonii*; Federal Threatened, CDFW Species of Special Concern)
- Western pond turtle (*Actinemys marmorata*; CDFW Species of Special Concern)
- Townsend's big-eared bat (*Corynorhinus townsendii*; CDFW Species of Special Concern, WBWG High Priority): no suitable habitat
- Hoary bat (Lasiurus cinereus; WBWG Medium Priority): no suitable habitat
- American badger (*Taxidea taxus*; CDFW Species of Special Concern)
- San Joaquin kit fox (*Vulpes macrotis mutica*; Federal Endangered, State Threatened)

The BART Parcel is currently undeveloped, and may also provide suitable habitat for special-status species, similar to the Isabel Crossing Parcels, as noted above. The BART Parcel remains vacant grassland, with no substantial changes to the property having occurred since the 2018 EIR.

The Comcast Parcels are currently developed with commercial/office buildings and associated surface parking lots. The Comcast Parcels remain substantially unchanged since the 2018 EIR, with site changes limited to the growth of landscaped vegetation.

The proposed project would be entirely within the INSP Planning Area analyzed in the 2018 EIR for the original project. The project site is not located in a critical habitat for threatened or endangered species (USFWS 2022). The nearest critical habitat area for the California red-legged frog is approximately 0.2 miles northeast of the Comcast Parcels (USFWS 2022). The proposed Isabel Crossing Project would involve excavation for building foundations, associated utilities, and amenities such as a pool, which are not substantially different from expected projects discussed in the 2018 EIR. Future development of the BART and Comcast Parcels would result in a similar level of ground disturbance. The proposed level of disturbance and project footprint would not exceed what was analyzed in the 2018 EIR.

Mitigation measures MM-BIO-2 and MM-BIO-3 and INSP policies described in the 2018 EIR for the original project would continue to apply to the proposed Isabel Crossing Project. Due to the findings of the 2023 BRA, mitigation measures MM-BIO-1, -4, -5, -6, -7, -8, and -9 are not required for the proposed Isabel Crossing Project. Therefore, because under current conditions there are fewer biological resources on the site and because the level of disturbance would not be increased, the proposed project would not result in new or more severe impacts related to special-status wildlife beyond those identified in the 2018 EIR for the original project.

No specific development projects are proposed on the No Net Loss Parcels at this time. Future development would be required to adhere to applicable mitigation measures from the 2018 EIR as well as applicable INSP policies, including P-ENV-21, which requires that new development inventory sensitive resources and develop adequate measures to avoid or mitigate impacts for any parcel that may include special-status species. Therefore, the proposed project would not result in

new or more severe impacts related to protected wetlands beyond those identified in the 2018 EIR for the original project.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The 2018 EIR determined that changes resulting from future development under the INSP would result in a potentially significant impact on riparian vegetation. However, with implementation of the INSP policies and mitigation measures MM-BIO-10 and MM-BIO-11, impacts would be less than significant.

As described in the 2023 BRA (WRA 2023; included as Appendix C), the Isabel Crossing project site does not contain any riparian habitat or other sensitive natural communities. Mitigation measures MM-BIO-10 and MM-BIO-11 are not required for the Isabel Crossing Project.

No specific development projects are proposed on the No Net Loss Parcels at this time. Future development would be required to adhere to INSP Policies P-ENV-21, which requires that new development inventory sensitive resources and develop adequate measures to avoid or mitigate impacts for any parcel that may include special-status species; and P-ENV-23, which requires that development activities either obtain compensatory habitat mitigation through the East Alameda County Conservation Strategy (EACCS), or use the mitigation prescribed in EACCS as a basis for near-term and longer-term mitigation and obtain coverage under separate applicable State and federal permits from CDFW and USFWS. Therefore, with implementation of relevant mitigation measures and INSP policies, there would be no new or more severe impacts to these biological resources beyond those identified in the 2018 EIR.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The 2018 EIR determined that changes resulting from future development under the INSP would result in a potentially significant impact on wetlands and other waters; however, impacts would be less than significant with implementation of INSP policies and mitigation measures MM-BIO-12 and MM-BIO-13.

An aquatic resources delineation was prepared for the Isabel Crossing Parcels to assess current conditions and is included as Appendix D. During site visits in January and October 2022, qualified biologists observed and delineated a small stand of cattails (*Typha domingensis*) an obligate wetland plant species. Hydric soil indicator, surface water, and saturation indicators were met in October, meeting USACE's technical criteria for a wetland. On revisiting historic imagery, WRA determined that cattails were absent between 2008-2021, suggesting the wetland was created from a broken irrigation line; this human-made isolated wetland is unlikely to be federally jurisdictional. This feature is not adjacent to a stream or other water body and would therefore not be regulated by the CDFW. The Isabel Crossing Project would not require grading or ground disturbance that would substantially exceed that planned for the original project, and development intensity and building footprints would not exceed development discussed in the 2018 EIR for the original project.

If it is determined that the wetland is jurisdictional, INSP policies and mitigation measures described in the 2018 EIR would still apply to the proposed Isabel Crossing Project.

No specific development projects are proposed on the No Net Loss Parcels at this time; however, future development would be required to adhere to applicable mitigation measures from the 2018 EIR, and applicable INSP policies, including Policy P-ENV-21, which requires that new development inventory sensitive resources and develop adequate measures to avoid or mitigate impacts for any parcel that may include special-status species habitat; Policy P-ENV-25, which requires that project proponents or their contractors install exclusion fencing and erosion control measures prior to any ground disturbance within 50 feet of wetlands; and Policy P-ENV-26, which requires that construction within 300 feet of freshwater marsh or streambank habitat take place during the non-breeding season for tricolored blackbirds. Therefore, with implementation of relevant mitigation measures and INSP policies, there would be no new or more severe impacts to protected wetlands beyond those identified in the 2018 EIR.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The 2018 EIR determined that due to existing human activity and visitation, and existing human and vehicle noise, the INSP Planning Area does not likely serve as a habitat corridor and development in the INSP Planning Area is unlikely to interfere with wildlife species movement, therefore, impacts would be less than significant.

The Isabel Crossing and No Net Loss Parcels are located entirely within the INSP Planning Area analyzed in the 2018 EIR for the original project. The proposed Isabel Crossing Project would involve excavation for building foundations, associated utilities, and amenities such as a pool, which are not substantially different from the level of development analyzed in the 2018 EIR. No specific development projects are proposed on the No Net Loss Parcels at this time, however, development from the proposed Isabel Crossing Project and future development that would be allowed by the No Net Loss Specific Plan Amendment Project would not exceed the development footprint identified in the INSP and analyzed in the 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts related to special-status wildlife beyond those identified in the 2018 EIR for the original project.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The 2018 EIR determined that the removal of regulated trees without a permit or appropriate compensation would result in a significant impact, however, impacts would be less than significant with implementation of INSP Policy P-ENV-28, which requires project proponents to compensate for tree removal during construction, including obtaining a tree removal permit; and developing a tree avoidance, minimization, and replacement plan.

The proposed project is entirely within the INSP Planning Area analyzed in the 2018 EIR for the original project. The City of Livermore Tree Preservation Ordinance in Section 12.20 of the Livermore Municipal Code protects native tree species with a trunk circumference of 24 inches or more and non-native trees with a trunk circumference of 60 inches or more. The Isabel Crossing Parcels include trees that have not been identified as native or non-native, but have a trunk circumference greater than 24 inches; these trees are located along the west side of the project site along Shea Center Drive. If these trees are removed, the City's tree preserveration ordinance would be applicable to the proposed project, and INSP Policy P-ENV-28 would continue to apply. No specific development projects are proposed on the No Net Loss Parcels at this time; however, future

development would be required to adhere to applicable mitigation measures from the 2018 EIR, and applicable INSP policies, including Policies P-ENV-21, which requires that new development inventory sensitive resources and develop adequate measures to avoid or mitigate impacts for any parcel that may include special-status species habitat; and P-ENV-28, which requires consistency with the City of Livermore's Street Tree and Tree Preservation Ordinance Chapter 12.20. Therefore, the proposed project would not result in new or more severe impacts related to conflicts with local policies and ordinances beyond those identified in the 2018 EIR for the original project.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The 2018 EIR determined that the INSP Planning Area is not located within an adopted conservation plan area; therefore, there would be no impact regarding the potential to conflict with adopted conservation plans.

The proposed project is entirely within the INSP Planning Area analyzed in the 2018 EIR for the original project, and the Isabel Crossing and No Net Loss Parcels are not located on any new Natural Wildlife Conservation Plan or California Natural Community Conservation Plan areas (CDFW 2023a, 2023b).

The proposed project is also covered by the East Alameda County Conservation Strategy (2011) which includes the City of Livermore. As described in the 2018 EIR, projects within the INSP Planning Area are requried to be consistent with this Conservation Strategy through INSP Policy P-ENV-23. Therefore, the proposed project would not conflict with this plan. The proposed project would not result in new or more severe impacts related to adopted conservation plans beyond those identified in the 2018 EIR for the original project.

4.5 Cultural Resources

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Pages 3.13-14 through 3.13-15 of the 2018 EIR	No	No	Yes
b.	Cause a substantial adverse change in the significance of an archaeological pursuant to §15064.5?	Pages 3.13-16 of the 2018 EIR	No	No	Yes
c.	Disturb any human remains, including those interred outside of formal cemeteries?	Page 3.13-18 through 3.13-19 of the 2018 EIR	No	No	Yes

Analysis in Previous Environmental Documents

Impacts to cultural resources were analyzed on pages 3.13-14 through 3.13-19 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to cultural resources from the 2018 EIR. The 2018 EIR determined that the implementation of the Isabel Neighborhood Plan would cause a substantial change to the significance of a historical resource and impacts would be significant and unavoidable even with implementation of INSP policies. Impacts to archeological and paleontological resources were determined to be less than significant. Impacts to human remains were determined to be less than significant with implementation of P-ENV-37, which specifies the protocol in the event of the discovery of human remains, including ceasing excavation, contacting the county coroner, and contacting the Native American Heritage Commission if necessary.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Cultural resources are site-specific. The project would involve construction of a mixed-use development on the Isabel Crossing Parcels and a land use designation change to allow for future residential uses on the No Net Loss Parcels. Previous and current efforts to identify cultural resources within the Isabel Crossing Parcels did not result in the identification of historic built environment resources, archaeological resources, or human remains. Records search results did not indicate the presence of recorded cultural resources within the Isabel Crossing or No Net Loss Parcels. The Isabel Crossing Project would involve significant excavation for building foundations, associated utilities, and amenities such as a pool, which are not substantially different from expected projects discussed in the 2018 EIR. However, background and archival research as well as results from a negative Sacred Lands File and records search conducted for this project in September and October 2023 indicate that the area is not sensitive to containing subsurface archaeological resources or human remains. Future development of the No Net Loss Parcels would result in similar levels of ground disturbance to the Isabel Crossing Project. Future development on the No Net Loss Parcels would be required to comply with INSP Policy P-ENV-37, which requires a project-level cultural resources study. Both the Isabel Crossing Project and future development of the No Net Loss Parcels would be required to comply with INSP Policies P-ENV-37 and P-ENV-40, which address potential impacts to archaeological resources and human remains respectively. Therefore, the proposed project would not result in new or more severe impacts related to cultural resources beyond those identified in the 2018 EIR for the original project.

4.6 Energy

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Pages 3.4-22 through 3.4-29 of the 2018 EIR Pages 3.3-24 through 3.3-31 of the 2020 SEIR	No	No	N/A
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to energy were analyzed on pages 3.4-22 through 3.4-29 of the 2018 EIR and pages 3.3-24 through 3.3-31 of the 2020 SEIR. Energy impacts were determined to be less than significant in the 2018 EIR and the 2020 SEIR.

The following describes the analysis included in the 2018 EIR and 2020 SEIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The 2018 EIR and 2020 SEIR determined that the original project would not result in the unnecessary consumption of energy resources.

As discussed in Section 4.14, *Population and Housing*, the proposed Isabel Crossing Project would result in fewer residents on the Isabel Crossing Parcels than the original project and would not exceed the commercial or office space planned for the original project. Development facilitated by the proposed and future land use designation changes on the No Net Loss Parcels would have the potential to increase the number of residential units compared with the INSP; however, the commercial and office space would be reduced. The proposed Isabel Crossing Project, as well as

future development of the No Net Loss Parcels, would not involve the use of unusual construction equipment or materials that were not accounted for in the original project and analyzed in the 2018 EIR and 2020 SEIR. Similar to the original project, the proposed Isabel Crossing Project and future development of the No Net Loss Parcels would be required to comply with applicable State and local energy efficiency, renewable energy, green building, water conservation, and solid waste diversion plans and requirements for new development. The proposed project would be required to comply with the policies in the INSP that encourage renewable energy production, bicycle and pedestrian trips, and carpooling. The proposed project would therefore result in no new or more severe impacts related to wasteful, inefficient, or unnecessary consumption of energy resources; or the potential to conflict with state or local plans for renewable energy or energy efficiency beyond that identified in the 2018 EIR or 2020 SEIR for the original project.

4.7 Geology and Soils

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	Page 3.12-15 of the 2018 EIR	No	No	N/A
2. Strong seismic ground shaking?	Pages 3.12-15 through 3.12-16 of the 2018 EIR	No	No	N/A
3. Seismic-related ground failure, including liquefaction?	Page 3.12-16 of the 2018 EIR	No	No	N/A
4. Landslides?	Pages 3.12-16 through 3.12-17 of the 2018 EIR	No	No	N/A
b. Result in substantial soil erosion or the loss of topsoil?	Pages 3.12-17 through 3.12-18 of the 2018 EIR	No	No	N/A
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Page 3.12-18 of the 2018 EIR	No	No	N/A

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Pages 3.12-18 through 3.12-19 of the 2018 EIR	No	No	N/A
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Page 3.12-19 of the 2018 EIR	No	No	N/A
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Page 3.13-17 through 3.13-18 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to geology and soils were analyzed on pages 3.12-15 through 3.13-18 of the 2018 EIR. Impacts to paleontological resources were analyzed on pages 3.13-17 through 3.13-18 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to geology and soils from the 2018 EIR. The 2018 EIR determined that seismic activity, unstable soil, expansive soils, and paleontological resources would be less than significant and that there would be no impact regarding soils incapable of supporting septic tanks.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a.1 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The 2018 EIR determined that there are no known active faults within the INSP planning area; therefore, there would be no impact resulting from the rupture of a known earthquake fault. Because the Isabel Crossing and No Net Loss Parcels are entirely within the INSP Planning Area

considered under the 2018 EIR, the proposed project would result in no new or more severe impacts beyond those identified in the 2018 EIR for the original project.

a.2 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The 2018 EIR determined that compliance with existing CBC requirements, Caltrans standards, and standard industry practices would reduce potential impacts from ground shaking to the extent feasible and impacts would be less than significant.

Because the Isabel Crossing and No Net Loss Parcels are entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would result in no new or more severe impacts beyond those identified in the 2018 EIR for the original project. The proposed project would increase residential density and decrease commercial/office space compared with development planned for the INSP. Therefore, the proposed project would not result in new or more severe impacts from risk of loss, injury, or death related to seismic ground shaking risks beyond those identified in the 2018 EIR.

a.3 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The 2018 EIR determined that in areas of moderate risk of liquefaction where buildings or roadways would be constructed, impacts from ground failure resulting from liquefaction would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements or Caltrans standards and standard industry practices. These studies would reduce potential impacts related to ground-failure resulting from liquefaction to a less than significant level.

Because the project site is entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would not result in a larger development footprint than was considered in the INSP and 2018 EIR. Like the original project, the Isabel Crossing Project and future development on the No Net Loss Parcels would be subject to site-specific geotechnical studies. Therefore, the proposed project would not result in new or more severe impacts from risk of loss, injury, or death related to seismic ground failure or liquefaction risks beyond those identified in the 2018 EIR.

a.4 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The 2018 EIR determined that compliance with CBC requirements or Caltrans standards and adherence to standard industry practices would ensure that adverse landslide impacts would be less than significant.

Because the project site is entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would not result in a larger development footprint than was considered in the INSP and 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts from risk of loss, injury, or death associated with landslides beyond those identified in the 2018 EIR.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The 2018 EIR determined that compliance with applicable codes and regulations would reduce the potential for substantial soil erosion or topsoil loss resulting from implementation of the original project to be less than significant.

Because the project site is entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would not result in a larger development footprint than was considered in the INSP and 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts from risks related to soil erosion or topsoil loss beyond those identified in the 2018 EIR.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The 2018 EIR determined that potential hazards of unstable soil or geologic units would be addressed through the integration of geotechnical information into the planning and design process for future projects within the INSP Planning Area and that geotechnical investigations would be enforced through compliance with CBC requirements or Caltrans standards. Therefore, with compliance with standard industry practices and State requirements, impacts related to landslides, lateral spreading, subsidence, liquefaction, or collapse resulting from implementation of the original project were determined to be less than significant.

Because the project site is entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would not result in a larger development footprint than was considered in the INSP and 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts from unstable soils beyond those identified in the 2018 EIR.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The 2018 EIR determined that development in areas with expansive and corrosive soils would require compliance with State and local building codes (structures) or with Caltrans standards (roadways). Compliance with these codes or standards would require soil and geologic investigations, which would ensure that the impact resulting from the location of structures on expansive or corrosive soils would be less than significant.

Because the proposed project is entirely within the INSP Planning Area considered under the 2018 EIR, the proposed project would not result in a larger development footprint than was considered in the INSP and 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts from risks related to expansive soils beyond those identified in the 2018 EIR.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The 2018 EIR determined that new development would tie into the City's existing wastewater collection system. Therefore, implementation of the INSP would have no impact related to the location of structures on soils incapable of supporting septic tanks or alternative wastewater disposal systems.

Because the proposed project is entirely within the INSP Planning Area considered under the 2018 EIR and would tie into the City's existing wastewater collection system, the proposed project would result in no new or more severe impacts beyond those identified in the 2018 EIR for the original project.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The 2018 EIR found that the INSP Planning Area is highly sensitive for paleontological resources. However, the 2018 EIR determined that implementation of Policies P-ENV-35 and P-ENV-36 would avoid potentially significant impacts to paleontological resources, and impacts would be reduced to a less than significant level.

Paleontological resources and unique geologic features are site-specific. The Isabel Crossing and No Net Loss Parcels are entirely within the Planning Area analyzed in the 2018 EIR. The project proposes changes to land use compared to the original project; however, the overall buildout would not exceed development planned for the original project, and excavation would occur within areas identified for grading under the original project and analyzed in the 2018 EIR. Furthermore, the project would be required to implement INSP Policies P-ENV-35 and P-ENV-36, consistent with the original project. Therefore, the proposed project would result in no new or more severe impacts on paleontological resources beyond those identified in the 2018 EIR.

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4.8 Greenhouse Gas Emissions

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Page 3.4-30 of the 2018 EIR Page 3.3-24 of the 2020 SEIR	No	No	Yes
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Page 3.4-37 of the 2018 EIR Page 3.3-40 of the 2020 SEIR	No	No	Yes

Analysis in Previous Environmental Documents

Impacts to GHG emissions were analyzed on pages 3.4-1 through 3.4-48 of the 2018 EIR and pages 3.3-1 through 3.3-52of the 2020 SEIR. Greenhouse gas emission impacts related to the generation of construction and operational GHG emissions and conflicts with applicable plans related to GHG emission reductions were determined to be less than significant with implementation of Mitigation Measure AQ-1 (provided under Section 4.3, *Air Quality*), Policy P-LU-60, Policy P-ENV-15, and Mitigation Measure GHG-1 (provided below).

MM GHG-1: Operational GHG Emissions Reduction Measures. Implement the following GHG emissions reduction strategies to guide future development within the Planning Area:

1. Require that a minimum of 20 percent of housing allowed under the proposed Project be affordable (below market-rate) housing.
2. Incorporate street and intersection traffic calming measures to a minimum of 25 percent of streets and intersections in the Planning Area. Street traffic calming features may include, but are not limited to, on-street parking, planter strips with street trees, chicanes, horizontal shifts (lane centerline that curves or shifts), bollards, rumble strips, and woonerfs, Intersection traffic calming measures may include, but are not limited to, marked crosswalks, count-down signal timers, curb extensions, channelization islands, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, and traffic circles or mini-circles.
3. Expand the existing local bus network in the Planning Area by a minimum of 25 percent by adding or modifying bus routes to increase accessibility to the Valley Link station at Isabel Avenue
4. Require all new development to install indoor water efficient appliances and fixtures to achieve a minimum of 15 percent reduction in water usage and require applicants for new development to submit landscape and irrigation plans capable of achieving a minimum of 10 percent reduction in outdoor water usage. The percent reductions should be achieved over baseline water use conditions in the City at the time of development.

5. Require a minimum solid waste diversion rate of 85 percent to be achieved by 2040.
6. Require employers with more than 50 employees to provide a suite of travel demand reduction measures (TDM) capable of reducing single-vehicle trips by at least 20 percent compared to normal trip generation rates.

The following describes the analysis included in the 2018 EIR and 2020 SEIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The project would not involve construction equipment or material that was not accounted for in the original project, as the Isabel Crossing Project would require less structural construction activities on the Isabel Crossing Parcels because of the proposed reduction of 39 housing units and 92,823 commercial square footage compared to the 2020 SEIR. Future development facilitated by the No Net Loss Specific Plan Amendment Project would result in a net increase of residential units and net decrease in office/commercial space; however, overall development would not exceed the intensity of development planned in the INSP. Therefore, no new or more severe GHG emissions impacts beyond what was analyzed in the 2018 EIR and 2020 SEIR for the original project would result from construction of the Isabel Crossing and No Net Loss Specific Plan Amendment Project.

GHG emissions were modeled for the Isabel Crossing Project and No Net Loss Specific Plan Amendment Project separately, in order to show the net change with the currently proposed development on the Isabel Crossing Parcels as well as to show the net change associated with the overall land use modifications that would be applied under the No Net Loss Specific Plan Amendment Project. It should be noted that the net change associated with the No Net Loss Specific Plan Amendment Project takes into consideration the unit shortfall associated with the Isabel Crossing Project, in addition to the unit shortfall associated with other existing and planned development in the INSP area.

Isabel Crossing Project

Operational GHG emissions modeled for the Isabel Crossing Project include mobile source emissions, energy emissions, area emissions, refrigerant emissions, water and waste emissions. Mobile source emissions are based on Kittelson & Associates total daily VMT estimate for the Isabel Crossing Project and for development originally planned for the Isabel Crossing Parcels under the INSP, included under Section 4.17, *Transportation*, below (Kittelson & Associates 2024). The Isabel Crossing Project's CalEEMod model uses default CalEEMod assumptions for area, energy, wastewater, solid waste, and refrigerant for the proposed land uses. As shown in Table 3, the Isabel Crossing Project would decrease operational GHG emissions compared with the original project. Operational GHG emissions would decrease because there would be fewer commercial retail spaces and no office land use. Therefore, the Isabel Crossing Project would result in less energy

consumption and a decrease in vehicle miles traveled, resulting in a reduction in mobile-and energy source GHG emissions.

In addition, the residential population would decrease with the incorporation of the Isabel Crossing Project, which would decrease area, water, and waste sources GHG emissions compared to the development originally planned for the Isabel Crossing Parcels. As shown in Table 3 below, the Isabel Crossing Project would generate less GHG emissions compared to the development planned under the INSP for the Isabel Crossing Parcels. However, similar to the original project, the Isabel Crossing Project without mitigation would exceed the 2020 SEIR 2040 "Substantial Progress" Efficiency Metric. Therefore, impacts would be potentially significant.

Table 3 Combined Annual Emissions for the Isabel Crossing Project – Unmitigated

Emission Source	2040 with Original Project	2040 with Proposed Project
Annual Emissions (MT CO_2e)		
Operational		
Mobile	23,949	20,377
Area	88	84
Energy	2,258	1,113
Water	142	103
Waste	372	327
Refrigerant	2	2
Total	**26,810**	**22,005**
Service Population		
Residents	3,956	3,703
Jobs	904	358
Service Population	**4,860**	**4,061**
Net Emissions		
Original Project Net Emissions Over Existing (for entire INSP)		52,230
Isabel Crossing Project Net Emissions (Original vs Project Emissions) (for the Isabel Crossing Parcels)		(4,805)
2020 SEIR Buildout Net Emissions With Isabel Crossing Project (for entire INSP)		**45,795**
Original Project Net Service Population (for entire INSP)		22,329
Net Service Population (Original Project vs Isabel Crossing Project Service Population) (for entire INSP)		21,530
Modified New 2020 SEIR Buildout Net Emissions per Net Service Population		**2.1**
2040 "Substantial Progress" Efficiency Metric		**1.7**
Exceed Threshold?		**Yes**

MT CO_2e = metric tons of carbon dioxide equivalent

Notes: Parenthetical values are negative numbers and are subtracted from the total emissions rather than added.

Source: See Appendix B for the CalEEMod worksheets

Mitigation Measure GHG-1 (provided above) from the 2018 EIR and 2020 SEIR requires GHG reduction measures such as traffic calming, affordable housing, transit improvements, water conservation, and solid waste recycling and diversion. As shown in Table 4, the proposed Isabel Crossing Project, with mitigation incorporated, would be below the 2040 "Substantial Progress" efficiency metric in page 3.3-36 of the 2020 SEIR. Therefore, similar to the original project, the Isabel Crossing Project would result in GHG emissions that are less than the efficiency metric, and would result in less than significant GHG impact. The Isabel Crossing Project would result in no new or more severe impacts related to GHG emissions beyond those identified in the 2018 EIR or 2020 SEIR for the Isabel Crossing Parcels.

Table 4 Combined Annual Emissions for the Isabel Crossing Project - Mitigated

Emission Source	2040 with Original Project	2040 with Proposed Project
Annual Emissions (MT CO_2e)		
Operational		
Mobile	23,949	20,377
Area	88	84
Energy	2,258	1,113
Water	121	87
Waste	56	49
Refrigerant	2	2
Total	**26,473**	**21,712**
Net Emissions		
Original Project Net Mitigated Emissions Over Existing		3,722
Isabel Crossing Project Net Mitigated Emissions (Original vs Project Emissions)		(4,761)
2020 SEIR Buildout Mitigated Emissions Minus Isabel Crossing Project Net Mitigated Emissions		**(1,039)**
Net Service Population (2020 SEIR vs Net Isabel Crossing Project Service Population)		21,530
Modified 2020 SEIR Buildout Net Emissions per Net Service Population		**(0.1)**
2040 "Substantial Progress" Efficiency Metric		**1.7**
Exceed Threshold?		**No**

MT CO_2e = metric tons of carbon dioxide equivalent
Notes: Parenthetical values are negative numbers and are subtracted from the total emissions rather than added.
Source: See Appendix B for the CalEEMod worksheets

No Net Loss Specific Plan Amendment Project

The modeled operational GHG emissions for the No Net Loss Specific Plan Amendment Project include emissions from mobile sources, energy use, area emissions, refrigerants, water, and waste. The mobile source emissions are based on trip generation rates provided by Kittelson & Associates, Inc. for low-rise apartments near rail transit, low-rise apartments not close to rail transit, and commercial office land use (Kittelson & Associates, Inc. 2024). The modeling details described in Section 4.3, *Air Quality*, also apply to the GHG modeling. The CalEEMod model for the No Net Loss

Specific Plan Amendment Project uses default assumptions for area, energy, waste, solid waste, and refrigerant for the proposed land uses. Additionally, the GHG reduction measures outlined in Mitigation Measure GHG-1 from the 2018 EIR and 2020 SEIR, such as traffic calming, affordable housing, transit improvements, water conservation, and solid waste recycling and diversion, were applied in the modeling.

As shown in Table 5, the No Net Loss Specific Plan Amendment Project would reduce operational GHG emissions compared to development originally planned for the No Net Loss Parcels. The No Net Loss Specific Plan Amendment Project would lead to lower energy consumption and fewer total vehicle miles traveled, reducing mobile and energy source GHG emissions. Additionally, the increase in residential units under the No Net Loss Specific Plan Amendment Project would result in lower water and waste source GHG emissions and increased area source emissions due to apartment fireplaces, as compared to development planned for the No Net Loss Parcels under the INSP. The No Net Loss Specific Plan Amendment Project without mitigation would exceed the 2020 SEIR 2040 "Substantial Progress" Efficiency Metric.

Table 5 Combined Annual Emissions for the No Net Loss Specific Plan Amendment Project – Unmitigated

Emission Source	Original Project BART and Comcast Parcels: Commercial Use (Decrease of 1,531,486 sf of Office Space)	Proposed Project BART and Comcast Parcels: Residential Use (Increase of 1,431 Residential Units)
Annual Emissions (MT CO_2e)		
Operational		
Mobile	(14,986)	8,702
Area	(22)	91
Energy	(4,965)	2,021
Water	(535)	100
Waste	(445)	330
Refrigerant	(1)	2
Total	**(20,953)**	**11,246**
Service Population		
Residents	-	4,078[2]
Jobs	(5,304)[1]	-
Service Population	**(5,304)**	**4,078**
Net Emissions		
Original Project Net Emissions Over Existing (for entire INSP)		52,230
No Net Loss Specific Plan Amendment Project Net Mitigated Emissions (Commercial vs Residential Emissions)		(9,707)
2020 SEIR Buildout Mitigated Emissions Minus No Net Loss Specific Plan Amendment Project Net Mitigated Emissions		**42,523**
Original Project Net Service Population (for entire INSP)		22,329

Emission Source	Original Project BART and Comcast Parcels: Commercial Use (Decrease of 1,531,486 sf of Office Space)	Proposed Project BART and Comcast Parcels: Residential Use (Increase of 1,431 Residential Units)
Net Service Population (Original Project vs No Net Loss Specific Plan Amendment Project) (for entire INSP)[3]		21,103
No Net Loss Specific Plan Amendment Project Buildout Net Emissions per Net Service Population		**2.0**
2040 "Substantial Progress" Efficiency Metric		**1.7**
Exceed Threshold?		**Yes**

MT CO_2e = metric tons of carbon dioxide equivalent; sf = square feet
Notes: Parenthetical values are negative numbers and are subtracted from the total emissions rather than added.
[1] Based on the 2020 SEIR, 2,104,200 square feet of non-residential square feet would generate 9,200 jobs, or 288.7 square feet per job.
[2] Based on 2020 SEIR, stated that Livermore's projected household size for development through 2040 would be 2.85 persons per household
[3] No Net Loss Specific Plan Amendment Project net service population = 4,078 – 5,304 = (1,226).
Source: Appendix B

As shown in Table 6, which includes implementation of the required Mitigation Measure GHG-1 from the 2018 EIR and 2020 SEIR, the No Net Loss Specific Plan Amendment Project would result in GHG emissions below the 2040 "Substantial Progress" efficiency target identified in the 2020 SEIR. Therefore, the No Net Loss Specific Plan Amendment Project would not lead to new or more severe impacts related to GHG emissions beyond those that were identified in the 2018 EIR or 2020 SEIR for the No Net Loss Parcels.

Table 6 Combined Annual Emissions for the No Net Loss Specific Plan Amendment Project – Mitigated

Emission Source	Original Project BART and Comcast Parcels: Commercial Use (Decrease of 1,531,486 sf of Office Space)	No Net Loss Specific Plan Amendment Project BART and Comcast Parcels: Residential Use (Increase of 1,431 Residential Units)
Annual Emissions (MT CO_2e)		
Operational		
Mobile	(14.986)	8,204
Area	(22)	91
Energy	(4,965)	2,021
Water	(455)	85
Waste	(67)	50
Refrigerant	(1)	2
Total	**(20,495)**	**10,453**

Emission Source	Original Project BART and Comcast Parcels: Commercial Use (Decrease of 1,531,486 sf of Office Space)	No Net Loss Specific Plan Amendment Project BART and Comcast Parcels: Residential Use (Increase of 1,431 Residential Units)
Net Emissions		
Original Project Net Mitigated Emissions Over Existing		3,722
No Net Loss Specific Plan Amendment Project Net Mitigated Emissions (Commercial vs Residential Emissions)		(10,042)
2020 SEIR Buildout Mitigated Emissions Minus No Net Loss Specific Plan Amendment Project Net Mitigated Emissions		**(6,320)**
Net Service Population (2020 SEIR vs No Net Loss Specific Plan Amendment Project Service Population)		21,103
No Net Loss Specific Plan Amendment Project Buildout Net Emissions per Net Service Population		**(0.3)**
2040 "Substantial Progress" Efficiency Metric		**1.7**
Exceed Threshold?		**No**

MT CO_2e = metric tons of carbon dioxide equivalent; sf = square feet
Notes: Parenthetical values are negative numbers and are subtracted from the total emissions rather than added.
Source: Appendix B

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Two plans have been adopted to reduce GHG emissions in Livermore and at the State level, including CARB's Scoping Plan and the City of Livermore CAP. The 2017 Scoping Plan and City of Livermore CAP adopted in 2012 were the latest GHG reduction plans analyzed in the 2020 SEIR; therefore, the proposed project is also compared to those plans. Similar to the original project, the proposed project would be required to comply with applicable State and local energy efficiency, renewable energy, green building, water conservation, and solid waste diversion requirements for new development. The proposed project would be required to comply with the policies in the INSP that encourage increased water conservation, solid waste diversion, renewable energy production, bicycle and pedestrian trips, and carpooling. In addition, development facilitated by the proposed project would include mixed-use land uses and development on the Isabel Crossing Parcels and BART Parcel would be located near transit. As shown in Table 3 and Table 6, the proposed project would emit less GHG emissions compared to the original project. Therefore, the proposed project would have no new or more severe impacts related to GHG emissions beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

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4.9 Hazards and Hazardous Materials

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Pages 3.8-17 through 3.8-18 in the 2018 EIR	No	No	N/A
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Page 3.8-18 in the 2018 EIR	No	No	N/A
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Page 3.8-18 through 3.8-19 in the 2018 EIR	No	No	N/A
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Pages 3.8-19 in the 2018 EIR	No	No	N/A
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Pages 3.8-20 through 3.8-21 in the 2018 EIR Page 3.2-73 in the 2020 SEIR	No	No	N/A

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Page 3.8-22 in the 2018 EIR	No	No	N/A
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Page 3.8-23 in the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to hazards and hazardous materials were analyzed on pages 3.8-17 through 3.8-23 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to hazards and hazardous materials from the 2018 EIR. Impacts related to hazards and hazardous materials were determined to be less than significant and the 2018 EIR and 2020 SEIR determined there would be no impact regarding safety of people residing or working within the vicinity of an airstrip.

The following describes the analysis included in the 2018 EIR and 2020 SEIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The 2018 EIR found that the INSP would result in new housing units, mixed-use facilities, commercial uses, and industrial space. The 2018 EIR determined that with implementation of existing federal, State, and local programs and regulations, impacts regarding the routine transport, use, or disposal of hazardous materials would be less than significant. The 2018 EIR found that while risks of upset and accident conditions involving the release of hazardous materials into the environment cannot be completely eliminated, they can be reduced to a manageable level. The 2018 EIR determined that with implementation of existing federal, State, and local programs and regulations, impacts regarding upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

The Isabel Crossing and No Net Loss Parcels are entirely within the INSP Planning Area evaluated under the 2018 EIR and would consist of operational uses similar to those planned for the original project. Compliance with regulations pertaining to the routine transport, handling, and disposal of hazardous materials would be mandatory and would minimize impacts of upset or hazards. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The 2018 EIR found that there are no active, existing schools within one-quarter mile of the INSP planning area. However, there is an overlay in the INSP Planning Area designating zones for K-12 school uses. The INSP includes goals and policies G-PF-3, P-PF-25, P-PF-26, and P-PF-27 to minimize the exposure of new development in the INSP Planning Area to hazardous materials which would reduce potential impacts to schools to a less than significant level.

The Isabel Crossing and No Net Loss Parcels are not located within 0.25 miles of the K-12 school overlays described in the 2018 EIR. As shown in Figure 2, land uses planned for the area south of the Isabel Crossing and BART Parcels immediately across the I-580 include education/institutional uses. This designation allows a range of uses including schools, transit facilities, public and private meeting facilities, park and recreation areas, administrative and professional offices, and research laboratories (City of Livermore 2020a). While this area is less than 0.25 miles from the Isabel Crossing Parcels and the BART Parcel, INSP goals and policies to minimize the exposure of new development in the INSP Planning Area to hazardous materials would apply to the project. The Comcast Parcels are located approximately 0.15 mile east of school overlay parcels, across Independence Drive. Similar to the Isabel Crossing and BART Parcels, while this area is less than 0.25 mile from the Comcast Parcels, INSP goals and policies to minimize the exposure of new development in the INSP Planning Area to hazardous materials would apply to the project. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The 2018 EIR found that there are three sites in the INSP Planning Area that are included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, and five permitted underground storage tanks. However, all three of the hazardous materials sites cases are closed, representing a low to moderate risk of encountering impact during potential future redevelopment. The 2018 EIR found that future construction activities associated with implementation of the plan may also generate hazardous materials and waste, such as fuels and oils from construction equipment and vehicles; however, compliance with applicable policies, regulations, and programs would reduce the impact to less than significant.

The Isabel Crossing and No Net Loss Parcels are not located on or adjacent to any of the three sites identified in the 2018 EIR or the permitted underground storage tank sites. No new open hazardous materials sites have been identified on the Isabel Crossing or No Net Loss Parcels since the 2018 EIR (State Water Resources Control Board 2023; California Department of Toxic Substances Control 2023). The proposed project would be required to comply with applicable policies, regulations, and

programs to reduce impacts. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The 2018 EIR found that the INSP exempts development in the INSP Planning Area from a City Development Code policy limiting building height to 40 feet within 5,000 feet of an airport runway; however, new development under the INSP would be subject to ALUCP height limits and regulations on airspace protection, in addition to scenic view and land use compatibility factors. Therefore, environmental impacts from this amendment would not be significant. The 2018 EIR also determined that INSP would be consistent with the ALUCP to prevent safety hazards for people residing and working in the Planning Area near the Livermore Municipal Airport. The 2020 SEIR determined that the INSP does not propose any elements that would affect the established flight patterns for the Livermore Airport as the Plan is consistent with the ALUCP and federal aviation regulations on height and safety, therefore, the impact on flight patterns would be less than significant.

As discussed in Section 4.1, *Aesthetics*, some of the proposed buildings on the Isabel Crossing Parcels would exceed heights under the INSP scenic view requirements; however, several of the proposed building heights would be reduced compared to the original project, and these changes would be consistent with the INSP land uses with concessions and waivers approved under the State Density Bonus. Future development on the No Net Loss Parcels would be required to comply with the height requirements set forth in the INSP. The proposed project would continue to be subject to ALUCP height limits and regulations on airspace protection. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The 2018 EIR determined that development facilitated by the INSP would result in new development and population growth, resulting in an increase in demand for emergency services, which could affect implementation of the Alameda Local Hazard Mitigation Plan and the Tri-Valley Hazard Mitigation Plan; however, with implementation of existing local programs and regulations, impacts would be less than significant.

The project site is located within the INSP Planning Area and would not exceed the overall buildout potential of the original project. As discussed in Section 4.17, *Transportation*, a Technical Memorandum prepared by Kittelson and Associates in May 2024 (Appendix E) conducted VMT analysis for the Isabel Crossing Project and determined overall VMT would be lower compared with the original project proposed at the Isabel Crossing Parcels. A subsequent analysis prepared by Kittelson and Associates in June 2024 (Appendix E) determined that determined that fewer daily trips and less total VMT would be generated by anticipated future development of the No Net Loss Parcels compared to development planned under the INSP. Therefore, traffic impacts during an emergency or evacuation event would not exceed those considered for the original project and no revisions to the 2018 EIR or 2020 SEIR would be required. Similar to the original project, the proposed project would be required to comply with existing regulations, and policies in the Livermore General Plan including Policy P3 which requires residential, commercial, and industrial

areas to provide efficient and safe access for emergency vehicles, to reduce the potential to interference with adopted emergency response or emergency evacuation plans. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The 2018 EIR found that while the City of Livermore has identified high wildfire severity zones in the INSP Planning Area, none of the INSP Planning Area constitutes a very high fire hazard severity zone and development would be consistent with Livermore's Fire Code and Chapter 9, Fire Protection Systems, of the California Building Code, which requires improvements such as fire sprinkler systems and fire alarms. The 2018 EIR determined that with implementation of existing State and local programs and regulations as well as the policies of the INSP, impacts would be less than significant.

The Isabel Crossing and No Net Loss Parcels are entirely within the Planning Area studied in the 2018 EIR for the INSP and is not located in a fire hazard severity zone. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

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4.10 Hydrology and Water Quality

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Pages 3.9-19 through 3.9-23 in the 2018 EIR	No	No	N/A
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Pages 3.9-23 through 3.9-24 in the 2018 EIR	No	No	N/A
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site	Pages 3.9-25 through 3.9-26 in the 2018 EIR	No	No	N/A
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	Page 3.9-26 in the 2018 EIR	No	No	N/A
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Pages 3.9-26 through 3.9-28 in the 2018 EIR	No	No	Yes
(iv) Impede or redirect flood flows?	Page 3.9-29 in the 2018 EIR	No	No	N/A

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Pages 3.9-29 through 3.9-30 in the 2018 EIR	No	No	N/A
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Pages 3.9-23 through 3.9-24 in the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to hydrology and water quality were analyzed on pages 3.9-19 through 3.9-30 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to hydrology and water quality from the 2018 EIR. Hydrology and water quality impacts regarding water quality and groundwater recharge were determined to be less than significant, while impacts related to stormwater runoff capacity were determined to be less than significant with mitigation and adherence to INSP policies P-PF-39 and P-PF-42, and it was determined that there would be no impact regarding exposing people to flood hazards or the project resulting in seiche, tsunami, or mudflow.

The following describes the analysis included In the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The 2018 EIR determined that future specific projects would be required to comply with, at a minimum, the Clean Water Act, the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the San Francisco Bay Basin (Region 2) Water Quality Control Plan, and all INSP policies intended to avoid or minimize increases in stormwater flows and the associated degradation of water quality. Projects that disturb one or more acre of ground surface require a Construction General Permit which requires development and implementation of a SWPPP, which includes BMPs to eliminate or reduce stormwater and other discharge from construction sites and

ensure that water quality is not degraded. Projects would be required to comply with NPDES requirements during construction and would be designed in accordance with the Phase I MS4 Permit, Provision C.3.c, for post-construction stormwater management. Compliance with waste discharge requirements and dewatering regulations would ensure that dewatering activities are monitored and treated as required and that no violations of any water quality standards or waste discharge requirements occur. The 2018 EIR determined that compliance with all construction and design related stormwater regulatory requirements, the projects implemented under the INSP would not violate water quality standards or waste discharge requirements or provide substantial additional sources of polluted runoff and impacts would be less than significant.

The 2018 EIR determined that individual projects implemented under the INSP would be required to implement hydromodification BMPs to reduce the volume of runoff, include stormwater management measures as part of the design, and conform to INSP guidelines including stormwater runoff reduction and capture measures. The 2018 EIR found that with adherence to these requirements, development under the INSP would not change impervious surface area such that infiltration of groundwater would be affected. The 2018 EIR also found that water demand from the INSP would be accommodated by current water sources and impacts related to groundwater recharge would be less than significant.

The project site is located within the INSP Planning Area studied in the 2018 EIR for the INSP and would not exceed the buildout planned for the INSP. As discussed in Section 4.19, *Utilities and Service Systems*, water demand for the proposed Isabel Crossing and No Net Loss Specific Plan Amendment Project would be greater than the original project (Appendix F). The project would result an increase in water demand of approximately 134,514 gallons per day (GPD) and the reduction in office space would result in a decrease in approximately 32,030 GPD for a net water demand increase of approximately 102,484 GPD, or 115 acre-feet per year (AFY) compared with planned development under the INSP. The net water demand would comprise approximately 5.7 percent of the 2020 remaining water supply (Cal Water 2021). This additional demand would not be substantial and could be accommodated by the districts' existing water supply sources (Appendix F). Thus, no new or additional water infrastructure or water supply resources would be required.

The level of ground disturbance for the proposed Isabel Crossing Project and potential future development on the No Net Loss Parcels would be similar to that of the original project; therefore, impacts on groundwater supplies and groundwater recharge would be similar to the impacts determined for the original project. The proposed Isabel Crossing Project and future development on the No Net Loss Parcels would introduce new impervious surfaces such as roads and driveways which would increase surface runoff; however, new impervious surfaces from proposed development on the project site would not exceed those of development accounted for under the original project in the 2018 EIR. The proposed project would not introduce land uses that would increase the sources of polluted runoff compared to the original project. While the proposed project changes the land use compared with the original project, it would not introduce entirely new types of land use that are not already considered in the 2018 EIR for the original project and would not introduce new types of pollutants compared with the original project. Like the original project, construction and design related stormwater regulatory requirements, hydromodification BMPs, INSP policies and guidelines, and other federal, state and local regulations would apply to the proposed project, which would ensure compliance with the applicable Water Quality Control Plan (San Francisco Bay Regional Water Quality Control Board Basin Plan) and Zone 7 Alternative Groundwater Sustainability Plan. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or situation on- or off-site?

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The 2018 EIR determined that with adherence to regulatory requirements and implementation of the policies and associated design guidelines contained in the INSP, future development within the INSP Planning Area would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site. The 2018 EIR determined that with the application of the Phase I MS4 Permit, projects implemented within the INSP Planning Area would not substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. Therefore, the 2018 EIR determined impacts would be less than significant related to erosion and siltation and on or off-site flooding. The 2018 EIR determined that projects that would create one acre or more of new impervious surface would be required to analyze the project runoff and provide on-site or regional BMPs to reduce the runoff rate. The 2018 EIR determined that with compliance with INSP Policies, P-PF-39, P- PF-42, P-ENV-33, and NPDES requirements, Phase I MS4 Permit, Provision C.3.c, for post-construction stormwater management including Low Impact Development (LID) impacts related to the potential to exceed stormwater drainage systems would be less than significant.

The proposed project would not involve work within surface waters, including streams or rivers. Total construction area and depth of excavation would not be substantially increased compared with that considered for the original project. The Isabel Crossing Project and future development on the No Net Loss Parcels would introduce new impervious surfaces such as roads and driveways which would increase surface runoff; however, new impervious surfaces from proposed development on the project site would not exceed those of development accounted for under the original project in the 2018 EIR. As described in the 2018 EIR, the proposed project would be required to implement BMPs to reduce the runoff rate, since it would create more than one acre of new impervious surfaces. The proposed Isabel Crossing Project would use biotreatment areas, on-site pervious pavers, on-site biotreatment and flowthrough planers, and a detention vault. Future development on the No Net Loss Parcels would be expected to install similar stormwater features. Therefore, construction and operation of the proposed project would not increase potential for substantial erosion compared to the original project.

The proposed project would not introduce land uses that would increase the sources of polluted runoff compared to the original project. While the proposed project changes the land use compared with the original project, it would not introduce entirely new types of land use that are not already considered in the 2018 EIR for the original project and would not introduce new types of pollutants compared with the original project.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

iv. Impede or redirect flood flows?

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The 2018 EIR found that while some portions of the INSP Planning Area are in 100-year flood hazard areas, impacts related to development within flood zones would be less than significant. The 2018 EIR found that the INSP Planning Area is not in a dam inundation area, and that there would be no impacts related to the risk of the failure of levees or dams; seiche; tsunami; or mudflow.

While the proposed project changes the land use compared with the original project, the proposed project would not introduce land uses or features that would alter the drainage pattern of the site or area more than under the original project. Similarly, the proposed project would not increase the amount of impervious surfaces beyond that of the original project. The proposed Isabel Crossing Project would include biotreatment areas, on-site pervious pavers, on-site biotreatment and flowthrough planters, and a detention vault. Similar to the original project, the proposed Isabel Crossing Project and future development on the No Net Loss Parcels would be subject to Plan Policy P-ENV-33, which requires preparation of a drainage study.

The project site is located within the INSP Planning Area studied in the 2018 EIR for the INSP. The Federal Emergency Management Agency National Flood Hazard Layer Map shows that the Isabel Crossing and No Net Loss Parcels are located in Flood Zone X, which is an area of minimal flood hazard (Federal Emergency Management Agency 2009). Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

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4.11 Land Use and Planning

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Physically divide an established community?	Page 3.1-16 of the 2018 EIR	No	No	N/A
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Page 3.1-17 through 3.1-25 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to land use and planning were analyzed on pages 3.1-16 through 3.1-25 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to land use and planning. Impacts regarding the potential to divide an established community were determined to be less than significant and impacts regarding the potential to conflict with land use plans, policies, and regulations for avoiding or mitigating an environmental impact would be less than significant with the implementation of INSP goals and policies.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project physically divide an established community?

The 2018 EIR determined that the INSP would not divide an established community, and impacts would be less than significant. The project site would be entirely within the INSP Planning Area analyzed in the 2018 EIR and would not exceed development considered in the 2018 EIR or introduce new features that would divide an established community. The proposed project would result in no new or more severe impacts related to dividing established communities beyond those identified in the 2018 EIR.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The 2018 EIR found that since the INSP would replace existing General Plan and zoning standards in the planning area, the General Plan and Development Code would be amended to accommodate development resulting from implementing the INSP, the INSP helps fulfill existing General Plan goals, and the INSP does not conflict with other applicable agencies' plans, policies, or regulations, impacts would be less than significant.

The project site would be entirely within the INSP Planning Area analyzed in the 2018 EIR and would not exceed development considered in the 2018 EIR. The Isabel Crossing Project proponent's use of the State density bonus law would not conflict with the INSP, as this provision allows for the slight modification of land uses from established land us plans to increase the availability of affordable housing throughout the state. Although the general mix of uses would shift and office and commercial uses would be reduced, land uses would remain generally similar to those envisioned in the adopted INSP. The Isabel Crossing Project's proposed Specific Plan Amendment would revise INSP Policies P-LU-8 and P-L-34 in a manner that allows the project to engage in master planning, which, under the amended INSP, would allow the averaging of densities and uses across the site, the assessment of INSP zoning and development standards based on proposed housing density and uses, the reconfiguration of site blocks, roads, and infrastructure elements, and alternative compliance with affordable housing requirements. In addition, the Isabel Crossing Project's Density Bonus "waiver or reduction" requests enable relief from certain INSP development standards, including, among others, for height in four different areas. The proposed master site plan includes a concentration of tall buildings near Gateway Avenue, transitioning downward in scale along Portola Avenue. The combined target unit count for Subareas 3b and 3c in the INSP was 1,477 housing units and a minimum unit count of 1,236 units. The Isabel Crossing project would involve construction of 1,299 housing units, with taller buildings located near Gateway Avenue, and modification of the street network as shown in the INSP. These project features are consistent with INSP Policies P-LU-8 and P-LU-37, as proposed for amendment.

The proposed land use designation change for the BART parcel would allow for the construction of 913 units, which is greater than is currently allowed in Subarea 3a. Subarea 1d is designated as Business Park which allows commercial and light industrial uses. Residential uses are not currently permitted on the Comcast Parcels. The No Net Loss Specific Plan Amendment Project would amend the INSP to change the land use designation of the BART Parcel to Residential Core, and the Comcast Parcels to Village and Transition, to ensure that there is adequate opportunity for the development of housing within the INSP area. The project would also be required to comply with INSP goals, policies, and actions described in the 2018 EIR for the original project related to environmental mitigation. The proposed project would result in no new or more severe impacts related to conflicts with any land use plan, policy, or regulation beyond those identified in the 2018 EIR.

4.12 Mineral Resources

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Page 3.15-1 through 3.15-2 of the 2018 EIR	No	No	N/A
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Page 3.15-1 through 3.15-2 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to mineral resources were analyzed on pages 3.15-1 through 3.15-2 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to mineral resources from the 2018 EIR. The 2018 EIR determined there would be no impact to mineral resources.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The 2018 EIR determined that the INSP Planning Area does not have known mineral resources of regional or statewide value, or locally-important mineral resource recovery sites that are delineated on a land use plan, therefore, the INSP would have no impact on mineral resources. The project site is entirely within the INSP Planning Area analyzed in the 2018 EIR and would result in no new or more severe impacts beyond those identified in the 2018 EIR.

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4.13 Noise

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Pages 3.6-20 through 3.6-34 and 3.6-38 through 3.6-39 of the 2018 EIR Pages 3.4-18 through3.4-34 and 3.4-38 through 3.4-40 of the 2020 SEIR	No	No	No
b. Generate excessive groundborne vibration or groundborne noise levels?	Pages 3.6-34 through 3.4-38 of the 2018 EIR Pages 3.4-34 through 3.4.38 of the 2020 SEIR	No	No	No
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	Pages 3.6-40 through 3.6-44 of the 2018 EIR Pages 3.4-40 through 3.4-44 of the 2020 SEIR	No	No	No

Analysis in Previous Environmental Documents

Impacts to noise were analyzed on pages 3.6-17 through 3.6-44 of the 2018 EIR and pages 3.4-16 through 3.4-44 of the 2020 SEIR. Noise impacts related to construction activities, stationary equipment, and airport noise were determined to be less than significant. Impacts related to traffic noise were determined to be significant and unavoidable despite implementation of Mitigation Measure NOI-1 (included below). Impacts related to groundborne vibration from construction activities were determined to be significant and unavoidable, despite implementation of Policy P-ENV-6 of the INSP.

MM NOI-1 Implement Traffic Noise Reduction Measures at Existing Sensitive Receptors.

The City shall implement off-site traffic noise reduction measures along the following three roadway segments such that the Plan-related increase in traffic noise for sensitive receptors is 3 dB or less:

- Portola, east of Tranquility Circle
- East Airway Boulevard east of Sutter Street and west of Via Mateo (around the mobile home development)
- East Airway Boulevard east of Via Mateo and West/North of Portola Avenue (around the mobile home development)

Measures that can be implemented include, but are not limited to:

- Construction of solid barriers between the roadway and adjacent residential use; and
- Installation of "quiet" pavement, such as open-graded asphalt, along the area of the roadway adjacent to residences.

The City shall prepare a noise control plan for impacted existing land uses that identifies the location, design, and effectiveness of the specific treatments to be implemented.

The following describes the analysis included in the 2018 EIR and 2020 SEIR, and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise-sensitive receptors closest to the Isabel Crossing Parcels include future residences currently under construction approximately 150 feet to the north across Portola Avenue and existing multi-family residences in the Montage multi-family residential neighborhood, located approximately 250 feet north of the project site on Dovecote Lane. Additional multi-family residences are located approximately 700 feet east on Tranquility Circle, and Cayetano Park approximately 540 feet northeast of the project site across Portola Avenue and Isabel Avenue.

Noise-sensitive receptors closest to the BART Parcel include residences located approximately 750 feet to the east on Tranquility Circle. Noise-sensitive receptors closest to the Comcast Parcels include residences located approximately 70 feet to the northeast on Copper Crest Common.

Construction

As described in the 2018 EIR and 2020 SEIR, construction activities associated with future projects and related construction noise impacts would be temporary. Each individual construction activity would have the potential to generate noise levels that could be in excess of applicable local

thresholds, or that could cause a disturbance to nearby noise-sensitive receptors. As stated in the 2020 SEIR, at 50 feet from the source, construction noise levels could potentially be above 80 dBA.

The City noise ordinance allows construction during daytime hours of Monday through Friday from 7:00 a.m. to 8:00 p.m., Saturday from 9:00 a.m. to 6:00 p.m., and prohibits construction on Sundays and City-observed holidays. Development under the proposed project would be required to comply with these restrictions. As stated in the 2018 EIR and 2020 SEIR, construction that complies with the time-of-day restrictions for construction activities would result in less than significant noise impacts with regard to the generation of noise in excess of thresholds. Therefore, as the Isabel Crossing Project and future development of the No Net Loss Parcels would be required to comply with the hourly restrictions for construction activities, this impact would not be more severe than identified in the 2018 EIR and 2020 SEIR.

Operation

The primary on-site operational noise source from the project would be HVAC units on each of the proposed buildings within the Isabel Crossing Parcels. According to the site plans provided by William Hezmalhalch Architects for the Isabel Crossing Project (WHA 2023; Appendix A), the closest sensitive receptor to a potential HVAC unit would be approximately 150 feet north across Portola Avenue. Specific planning data for the future HVAC systems, including any that may be proposed with development on the No Net Loss Parcels, are not available at this stage of project design. The development of new residences could result in the exposure of existing residential land uses to noise that exceeds the City's noise standards.

Future development under the project would be required to comply with policies included in the City's General Plan that would help reduce noise effects to surrounding sensitive receptors. Pursuant to the City's General Plan Objective N-1.5, Policy P1, project impacts would be significant if exterior noise levels exceed 55 dBA L50 at a residential property during the hours of 7:00 a.m. – 10:00 p.m. and 45 dBA L50 during the hours of 10:00 p.m. to 7:00 a.m. Conservatively assuming that HVAC units would be running 24 hours each day, the project would be required to comply with the City of Livermore's nighttime exterior noise policy of 45 dBA L50.

However, even with General Plan Objective N-1.5, Policy P1, it is possible that noise levels from HVAC could result in potentially significant noise at adjacent noise-sensitive residential receptors. Implementation of Policy P-ENV-7 would reduce noise impacts from HVAC to less than significant levels. Therefore, this impact would not be more severe than those identified in the 2018 EIR and 2020 SEIR.

Special Events

As discussed in the 2020 SEIR, the project would include the development of parks and plazas which could be used for gatherings or events. The types of potential events that could occur at proposed or future parks and plazas within the project site are not known at this time, so it is not possible to estimate potential temporary or periodic noise generated by gatherings in these areas. However, all special events would be required to obtain a special event permit in accordance with the City of Livermore rules. To obtain a permit, event organizers must be certain that all even activities comply with the local laws applicable to noise abatement (City of Livermore 2017). Any special event in the City would need to obtain a special event permit in accordance with the City of Livermore rules. Therefore, noise impacts related to special events occurring at the project site would not be more severe than those identified in the 2018 EIR and 2020 SEIR.

Traffic

The proposed project would involve construction of 1,431 greater residential units than the original project. This increase in residential units would balance out with the decrease in commercial and office space, resulting in a corresponding net reduction in total daily vehicle trips to and from the Isabel Crossing and No Net Loss Parcels (Appendix E). Because the project would result in a net decrease in daily vehicle trips, the project would not result in a significant traffic noise increase and this impact would not be more severe than those identified in the 2018 EIR and 2020 SEIR.

b. Would the project generate excessive groundborne vibration or groundborne noise levels?

The 2018 EIR and 2020 SEIR determined that construction groundborne vibration would be significant. Operation of the proposed and future residential development projects would not include substantial vibration sources. Thus, construction activities have the greatest potential to generate groundborne vibration affecting nearby sensitive receptors. Construction equipment would be consistent with that analyzed in the 2020 SEIR. Therefore, construction activities known to generate excessive groundborne vibration, such as pile driving, may be required for project construction. INSP Policy P-ENV-6 would help reduce construction vibration effects at sensitive land uses by requiring the project developer to implement measures to reduce vibration. Such measures could include: operating heavy equipment as far as practical from residential uses; using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and using quiet pile driving technology when feasible.

For purposes of this analysis, the greatest anticipated source of vibration during general project construction activities would be from an impact pile driver, which could be used within 70 feet from the nearest residential building, located northeast of the Comcast Parcels, and 40 feet from the nearest industrial/commercial building, located west of the Comcast Parcels. As stated in the 2020 SEIR, vibration impacts would be significant if they would exceed 0.5 in/sec PPV (Caltrans 2013) at the new residential buildings and the modern industrial/commercial buildings which is the level at which structural damage may occur. At a distance of 40 feet, an impact pile driver would typically create approximately 0.384 PPV (in/sec) at the existing commercial buildings, and at a distance of 70 feet, an impact pile driver would create approximately 0.208 PPV (in/sec) at the existing residential buildings (Federal Transportation Administration 2018). This would not exceed the architectural damage criterion for new residential buildings and modern industrial/commercial buildings of 0.5 PPV (in/sec) and impacts would be less than significant. Therefore, construction vibration impacts resulting from use of an impact pile driver within 40 feet of the nearest industrial/commercial building and within 70 feet of the nearest residential building would be less severe than those identified in the 2018 EIR and 2020 SEIR.

c. Would the project be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and expose people residing or working in the project area to excessive noise levels?

The project site is located approximately 0.5 mile northeast of the closest public airport, the Livermore Municipal Airport. As stated in the Livermore Executive Airport, Airport Land Use Compatibility Plan (City of Livermore 2012), all project parcels are located inside the Airport Protection Area and Influence Area, and outside the limit of any noise contour. Therefore, no substantial noise exposure from airport noise would occur to people residing or working in the

project area, and impacts would not be more severe than those identified in the 2018 EIR and 2020 SEIR.

Additionally, the project site is located approximately 6.3 miles northwest of the closest private airport, Meadowlark Field Airport. As stated in the 2020 SEIR, this small private airport has only six aircraft based at the field. At this distance, and based on the size of this airstrip, no substantial noise exposure from airport noise would occur to people residing or working in the project area, and impacts would not be more severe than those identified in the 2018 EIR and 2020 SEIR.

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4.14 Population and Housing

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	Page 3.1-25 through Page 3.1-29 of the 2018 EIR	No	No	N/A
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Page 3.1-29 through Page 3.1-32 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to population and housing were analyzed on pages 3.1-25 through 3.1-32 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to population and housing from the 2018 EIR. Population and housing impacts regarding unplanned population growth were determined to be less than significant and impacts related to the displacement of people or housing would be less than significant with implementation of INSP goals and policies.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The 2018 EIR determined that direct inducement of population growth through new housing and businesses would not be considered a significant impact because development facilitated by the INSP would be within the overall General Plan capacity and would be paced as part of the City's growth management program and the INSP phasing program. The 2018 EIR found that buildout of

the INSP would generate at least 20 percent subsidized housing units, which may serve people displaced from existing housing due to rising rents. The 2018 EIR determined that the INSP includes policies to reduce potential displacement and maximize affordable housing options that build upon existing City programs and policies, therefore, impacts would be less than significant.

As described in Section 1.5, *Project Description*, the Isabel Crossing and No Net Loss Specific Plan Amendment Project would result in a net increase of 1,431 residential units beyond the total residential buildout in the adopted INSP. The project would also result in a net decrease of 1,531,486 square feet of office and commercial space compared to the adopted INSP. Livermore's average household size for development is 2.6 persons per household (California Department of Finance [DOF] 2024). Using this estimate, the population increase facilitated by the proposed project would be approximately 3,720 residents beyond the original project. INSP goals and policies described for the original project in the 2018 EIR would continue to apply for the modified project. As described in the 2018 EIR, the City's General Plan establishes an overall development capacity for the city of 41,000 residential units and 9,100 new jobs. Of the total 41,000 residential units anticipated by the General Plan, 4,500 units were associated with an anticipated new BART station. The proposed project would result in 1,431 residential units beyond those considered in the INSP EIR, which would exceed the anticipated growth for the BART station area. However, at this time, only the Isabel Crossing Parcels are proposed for project-specific development. The No Net Loss Specific Plan Amendment Project would allow the BART and Comcast Parcels to be developed with residential uses at a later date. As described in the INSP EIR, the INSP includes growth management strategies to ensure there is adequate public infrastructure and services through the allocation of residential units to development projects at the entitlement phase. Additionally, it should be noted that the City has observed a shortfall in housing unit production in the INSP area from existing and proposed development projects, resulting in a unit shortfall which the No Net Loss Specific Plan Amendment Project is intended to address. Because the population increase facilitated by the proposed project would be subject to the INSP growth management strategies and is intended to address housing unit shortfalls currently experienced in the INSP area, the project would result in no new or more severe impacts related to population growth beyond those identified in the 2018 EIR. Because there are no existing residences on the project site, the project would not displace housing or people. Therefore, the proposed project would result in no new or more severe impacts to population and housing beyond those identified in the 2018 EIR.

4.15 Public Services

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
1	Fire protection?	Page 3.11-13 of the 2018 EIR	No	No	N/A
2	Police protection?	Page 3.11-13 through 3.11-15 of the 2018 EIR	No	No	N/A
3	Schools?	Page 3.11-12 through 3.11-13 of the 2018 EIR	No	No	N/A
4	Parks?	Page 3.11-8 through 3.11-12 of the 2018 EIR	No	No	N/A
5	Other public facilities?	Page 3.11-15 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to public services were analyzed on pages 3.11-13 through 3.11-15 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to public services from the 2018 EIR. Impacts regarding the expansion of public services were determined to be less than significant with implementation of INSP policies.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative

impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:*

   1. *Fire protection?*
   2. *Police protection?*
   3. *Schools?*
   4. *Parks?*
   5. *Other public facilities?*

Fire Protection Services

According to the LPFD 2020 year-end report, the department had 121 full-time employees serving a population of 171,385 (LPFD 2021). This would yield a ratio of 0.71 firefighters per 1,000 residents. The additional residential units proposed for the Isabel Crossing Project and future development facilitated by the No Net Loss Specific Plan Amendment Project would result in an increase in population of approximately 3,720 persons beyond the 2018 EIR and 2020 SEIR. This increase in population would result in a ratio of 0.69 firefighters per 1,000 residents. The change in ratio for fire protection services would not be considered substantial as the number of staff needed to offset this increase would be limited to approximately three firefighters. Although three new firefighters may be required to serve the project, the incremental increase in staff alone would not warrant construction of new or expanded fire facilities.

The Isabel Crossing Project, as well as future development facilitated by the No Net Loss Specific Plan Amendment Project, would be subject to INSP Policies P-PF-26 and P-PF-27, which require ongoing coordination between the City and the LPFD to ensure the adequate provision of fire protection services in the INSP area, as development occurs. As part of the ongoing coordination efforts, the Livermore-Pleasanton Fire Department (LFPD) has indicated there are increasing demands for fire protection services citywide, including within the INSP area. Separate from this project, the LPFD is preparing a comprehensive Community Risk Assessment report, anticipated to be completed mid-summer of 2024, that will further identify operational needs and provide recommendations to address future fire protection services citywide, including those in the INSP area. Consistent with the INSP policies cited above, the project would be subject to the recommendations of the Community Risk Assessment when completed.

Furthermore, the Isabel Crossing Project proponent would be required to pay fair share fees into the City's Community Benefit Fund, which is intended to fund infrastructure improvements, such as necessary community service facility expansions or renovations. Future development of the No Net Loss Parcels would be required to make similar fair share payments. Additionally, the Isabel Crossing Project and future development facilitated by the No Net Loss Specific Plan Amendment Project would generate tax revenue during project operation, which includes contribution to the City's

General Fund. Collectively, the project's contributions to the General Fund, in addition to the Community Benefit Fund, would be used to ensure adequate services, facilities, and infrastructure are provided within the INSP area, including fire protection services. No new impacts or substantially increased impacts related to fire protection services would occur.

Police Services

According to the Livermore Police Department (LPD) 2022 annual report, there were a total of 97 police officers employed by LPD (LPD 2023). The DOF estimates that the 2022 population was 85,769. This yields a ratio of 1.13 officers per 1,000 people.

The additional residential units proposed for the Isabel Crossing Project and future development facilitated by the No Net Loss Specific Plan Amendment Project would result in an increase in population of approximately 3,720 persons beyond the 2018 EIR and 2020 SEIR. This increase in population would result in a new ratio of 1.08 officers per 1,000 people. The decrease in office space would result in a reduced demand for police services, which would offset some of the increase in demand for police protection services from the increase in residential uses. The increase in demand for police services would not be substantial; the number of staff needed to offset this increase would be approximately four police officers. Although four new police officers may be required to serve the project, the increase in staff would not warrant construction of new or expanded police facilities. Furthermore, the Isabel Crossing Project proponent would be required to pay fair share fees into the City's Community Benefit Fund, which is intended to fund infrastructure improvements, such as necessary community service facility expansions or renovations. Future development of the No Net Loss Parcels would be required to make similar fair share payments. No new impacts or substantially increased impacts related to police services would occur.

Schools

According to the 2019 Livermore Community Services and Infrastructure Report, the Livermore Valley Joint Unified School District (LVJUSD) has a total school capacity of 16,150 students (City of Livermore 2020b). Census data shows that the 2022-23 enrollment total for LVJUSD was 12,956 students.

The additional residential units proposed for the Isabel Crossing Project and future development facilitated by the No Net Loss Specific Plan Amendment Project would result in approximately 600 new students in the LVJUSD beyond the 2018 EIR and 2020 SEIR, for a total enrollment in LVJUSD of 13,556 students, or approximately 84 percent of the total school capacity of the LVJUSD. This would remain below LVJUSD's total school capacity. No new impacts or substantially increased impacts related to schools would occur.

Parks

According to the Livermore General Plan, the Livermore Area Recreation and Park District's (LARPD) standard for neighborhood parks is 2 acres per 1,000 residents or 1 park per 3,000 to 5,000 residents, for community parks is 2 acres per 1,000 residents, for regional parks is 15 acres per 1,000 residents, and for special use parks is 3 acres per 1,000 residents (City of Livermore 2004). The INSP includes 236.1 acres of combined parkland, including three new neighborhood parks, and a buildout population in the INSP Planning Area of 13,720 residents (City of Livermore 2018).

The additional residential units proposed for the Isabel Crossing Project and future development facilitated by the No Net Loss Specific Plan Amendment Project would generate a population of

approximately 3,720 people beyond the 2018 EIR and 2020 SEIR, for a new INSP buildout population of 17,440 people. While this would exceed the 1 neighborhood park per 3,000 to 5,000 resident ratio, Policy P-PF-4 of the INSP requires individual developers to provide land and/or in lieu fees for the development of parks to maintain acceptable parks to resident ratios. Future development on the No Net Loss Parcels would be required to satisfy this INSP requirement. No new impacts or substantially increased impacts related to parks would occur.

4.16 Recreation

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Page 3.11-15 of the 2018 EIR	No	No	N/A
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Page 3.11-15 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to recreation were analyzed on page 3.11-15 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to recreation from the 2018 EIR. Recreation impacts were determined to be less than significant.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The 2018 EIR determined that because new development is required to dedicate park and recreational facilities or pay in-lieu fees that are used to build and maintain parks and recreational facilities and INSP policies would reduce impacts, impacts related to the use and deterioration of neighborhood and regional parks would be less than significant.

The proposed Isabel Crossing project includes 2.56 acres of common open space, which is greater than the original project planned for the Isabel Crossing project site by 0.39 acres. This exceeds the Livermore Area Recreation and Parks District (LARPD) standard of 2 acres per 1,000 residents or 1 park per 3,000-5,000 residents which was considered in the 2018 EIR for the original project.

The additional residential units facilitated by the land use change proposed on the No Net Loss Parcels would generate a population of approximately 3,720 people beyond the 2018 EIR and 2020 SEIR, for a new INSP buildout population of 17,440 people. While this would exceed the 1 neighborhood park per 3,000 to 5,000 resident ratio, Policy P-PF-4 of the INSP requires individual developers to provide land and/or in lieu fees for the development of parks to maintain acceptable parks to resident ratios. Future development on the No Net Loss Parcels would be required to satisfy this INSP requirement. No new impacts or substantially increased impacts related to parks would occur beyond those identified in the 2018 EIR.

4.17 Transportation

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a.	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Page 3.2-32 through 3.2- 46 of the 2018 EIR Pages 3.2-31 through 3.2-51 of the 2020 SEIR	No	No	Yes
b.	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	N/A	No	No	N/A
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	Page 3.2-64 of the 2018 EIR Page 3.2-73 of the 2020 SEIR	No	No	N/A
d.	Result in inadequate emergency access?	Page 3.2-64 of the 2018 EIR Page 3.2-74 of the 2020 SEIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to transportation were analyzed on pages 3.2-32 through 3.2-36 of the 2018 EIR and pages 3.2-31 through 3.2-74 of the 2020 SEIR. Impacts related to the potential for the INSP to conflict with a program, plan or ordinance addressing the circulation system were determined to be significant and unavoidable in the 2018 EIR and 2020 SEIR. Impacts related to hazards due to a geometric design feature or emergency access were determined to be less than significant in the 2018 EIR and 2020 SEIR.

The following describes the analysis included in the 2018 EIR and 2020 SEIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The 2020 SEIR found that the INSP would result in unacceptable operations at the intersection of North Livermore Avenue & Portola Avenue (#3) during the weekday PM peak hour under Cumulative 2040 Conditions and cause vehicular delay during the PM peak hour, which is operating below the LOS D standard, to increase by more than five seconds compared the no-project (15 seconds). The 2020 SEIR included a mitigation measure which consists of adding additional left turn lanes to the impacted intersection under 2040 conditions, which would require the widening of North Livermore Avenue and Portola Avenue. However, the 2020 SEIR determined that due to right-of-way constraints on both roads, the addition of new lanes would not be feasible, and impacts would remain significant and unavoidable.

The Isabel Crossing Project would alter some aspects of the roadway system analyzed in the 2020 SEIR for the original project, including street locations and internal circulation within the Isabel Crossing Parcels. However, roadways for the Isabel Crossing Project and future roadways associated with development of the No Net Loss Parcels would be required to comply with City standards and would result in no new or substantially more severe impacts than those identified in the 2018 EIR or 2020 SEIR for the original project. The proposed project would be entirely within the Planning Area considered for the INSP in the 2018 EIR and 2020 SEIR. While the development pattern would be modified by the Isabel Crossing and No Net Loss Specific Plan Amendment Project, intersection operations would not be substantially degraded with the proposed project, and no new or more severe impacts on roadway facilities would occur (Appendix E).

The Isabel Crossing Project would include pedestrian sidewalks and a multi-use trail for bicycles and pedestrians on the Isabel Crossing Parcels. Development facilitated by the No Net Loss Specific Plan Amendment Project would similarly include bicycle and pedestrian facilities, as required by INSP policies P-TRA-1, P-TRA-3 through P-TRA-6, P-TRA-8, P-TRA-9, and P-TRA-11 through P-TRA-13, which require the provision of adequate pedestrian and bicycle facilities throughout the INSP area and as part of individual development projects. Therefore, the proposed project would result in no new or more severe impacts on bicycle and pedestrian facilities beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

The proposed project would be on the same project site as the original project. Therefore, the proposed project would be in proximity to the same transit stops as the original project. As described under Section 4.14, *Population and Housing*, the proposed project would result in more residents on the project site than the original project. Accordingly, there would be a corresponding increase in demand for transit. Development facilitated by the No Net Loss Specific Plan Amendment Project would be required to satisfy INSP policies P-TRA-14 through P-TRA-19, P-TRA-21, and P-TRA-22, which require improvements to existing and planned transit facilities throughout the INSP area and as part of individual development projects. The proposed project would result in no new or more severe impacts on transit facilities beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b), which was added to the *CEQA Guidelines* in November 2018, defines acceptable criteria for analyzing transportation impacts under CEQA. It states that land use

projects with vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact, and that projects that decrease VMT compared to existing conditions should be presumed to have a less than significant transportation impact.

While the 2018 EIR and 2020 SEIR did not address VMT as an impact metric pursuant to Senate Bill 743, analysis conducted by Kittelson & Associates Inc. directly compares the INSP VMT to proposed project VMT to disclose whether there would be additional total VMT or increased VMT metrics generated by the changes in the proposed project (Appendix E). VMT was modeled for the Isabel Crossing Project and No Net Loss Specific Plan Amendment Project separately, in order to show the net change with the currently proposed development on the Isabel Crossing Parcels as well as to show the net change associated with the overall land use modifications that would be applied under the No Net Loss Specific Plan Amendment Project. It should be noted that the net change associated with the No Net Loss Specific Plan Amendment Project takes into consideration the unit shortfall associated with the Isabel Crossing Project, in addition to the unit shortfall associated with other existing and planned development in the INSP area.

Isabel Crossing Project

Table 7 shows daily VMT calculations for the original project compared with the Isabel Crossing Project for residential, employment, and retail uses. Table 8 shows VMT per capita for the original project compared with the Isabel Crossing Project for residential and employment uses.

Table 7 VMT Analysis for Original Project Compared with Isabel Crossing Project (Total VMT)

Land Use	Original Project	Isabel Crossing Project	Net Change in VMT
Residential	126,704	87,620	-39,084
Employment	50,474	44,260	-6,214
Retail	235,940	193,155	-42,785

Source: Appendix E

Table 8 VMT Analysis for Original Project Compared with Isabel Crossing Project (VMT per Capita)

Land Use	Original Project	Isabel Crossing Project	Net Change
Residential	24.5	20.8	-3.7
Employment	12.7	13.4	+0.6

Source: Appendix E

Analysis by Kittelson & Associates Inc. concluded that the Isabel Crossing Project would result in a slight increase in VMT per employee compared with the original project due to the reduction in office land use by the Isabel Crossing Project; however, the total VMT for all land uses would be lower under the Isabel Crossing Project. The Isabel Crossing Project also would be within 0.5 miles of quality transit, like the original project, and would be required to adhere to transportation demand management measures associated with INSP Policies P-TRA-19 and P-TRA-24 described in the 2020 SEIR. Therefore, the Isabel Crossing Project would not increase VMT impacts compared to impacts analyzed in the 2020 SEIR. The Isabel Crossing Project would result in no new or more severe impacts to VMT beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

No Net Loss Specific Plan Amendment Project

Table 9 shows the total daily VMT calculations for the original project compared with the No Net Loss Specific Plan Amendment Project for the entire INSP area.

Table 9 Daily VMT Analysis for Original Project Compared with No Net Loss Specific Plan Amendment Project

	No Project (2013)	Original Project (2040)	No Net Loss Specific Plan Amendment Project (2040)
Daily Vehicle Trips	57,730	112,183	104,657
Daily VMT	599,393	1,168,901	1,157,280
Service Population	14,671	36,273	35,328
VMT/Service Population	40.9	32.2	32.8

Source: Appendix E

Analysis by Kittelson & Associates Inc. concluded that the No Net Loss Specific Plan Amendment Project would result in a slight increase in VMT per service population compared with the original project due updated VMT analysis methodology; however, the daily vehicle trips and total daily VMT would be lower under the No Net Loss Specific Plan Amendment Project. The BART Parcel also would be within 0.5 miles of quality transit, and future development facilitated by the No Net Loss Specific Plan Amendment Project would be required to adhere to transportation demand management measures associated with INSP Policies P-TRA-19 and P-TRA-24, described in the 2020 SEIR. Therefore, the No Net Loss Specific Plan Amendment Project would not increase VMT impacts compared to impacts analyzed in the 2020 SEIR. The No Net Loss Specific Plan Amendment Project would result in no new or more severe impacts to VMT beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

Because the Isabel Crossing Project and No Net Loss Specific Plan Amendment Project would both result in less total VMT than the INSP as described in the 2018 EIR and 2020 SEIR, the proposed project as a whole would not result in a new or more severe impact to VMT beyond those identified in the 2018 EIR or 2020 SEIR for the original project.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The 2020 SEIR determined that implementation of the INSP would increase traffic levels in the study area and introduce new intersections and traffic signals to the existing street system. However, these new roadways and traffic signals would be designed to City Design standards and therefore should not substantially increase hazards due to a design feature or incompatible use and impacts would be less than significant.

The Isabel Crossing Project would include internal circulation within the Isabel Crossing Parcels that is different from the original project. However, like the original project, roadways and traffic signals would be designed to City Design standards and therefore should not substantially increase hazards due to a design feature or incompatible use. Similarly, future development facilitated by the No Net Loss Specific Plan Amendment Project that includes new roadways or traffic signals would similarly be required to meet City Design standards. Therefore, impacts related to design hazards and

incompatible use would not exceed those considered for the original project and no revisions to the 2018 EIR or 2020 SEIR would be required.

d. Would the project result in inadequate emergency access?

The 2020 SEIR determined that implementation of the INSP would increase traffic levels in the study area and introduce new intersections and traffic signals to the existing street system. However, these new roadways and traffic signals would be designed to City Design standards and therefore should not result in inadequate emergency access and impacts would be less than significant. The 2020 SEIR determined that new land uses would require additional emergency access to respond to emergencies, however, new roadways and intersections would be designed to City design standards that account for emergency access and impacts would be less than significant.

The Isabel Crossing Project would include internal circulation within the Isabel Crossing Parcels that is different from the original project. However, like the original project, roadways and traffic signals would be designed to City Design standards and therefore should not result in inadequate emergency access. Similarly, future development facilitated by the No Net Loss Specific Plan Amendment Project that includes new roadways or traffic signals would similarly be required to meet City Design standards. The transportation analysis conducted by TJKM in May 2024 (Appendix E) for the Isabel Crossing Project determined that fewer trips would be produced by the Isabel Crossing Project compared to the original project on the Isabel Crossing Parcels. Similarly, the transportation analysis conducted by Kittelson in June 2024 (Appendix E) for the No Net Loss Specific Plan Amendment Project determined that fewer trips would be produced by future development facilitated by the No Net Loss Specific Plan Amendment Project compared to the original project on the No Net Loss Parcels. Therefore, traffic impacts during an emergency or evacuation event would not exceed those considered for the original project and no revisions to the 2018 EIR or 2020 SEIR would be required.

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4.18 Tribal Cultural Resources

	Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	Page 3.13-19 of the 2018 EIR	No	No	N/A
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Page 3.13-19 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to tribal cultural resources were analyzed on page 3.13-19 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to tribal cultural resources from the 2018 EIR. Tribal cultural resources were determined to be less than significant.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

During preparation of the 2018 EIR, NAHC and seven Native American tribes were contacted, pursuant to AB 52 and SB 18. At the time the 2018 EIR was completed, no response had been received from the tribes. An updated sacred lands file search conducted for this project by the NAHC did not indicate the presence of additional Native American cultural resources within the planning area. The 2018 EIR determined that there would be no impact to tribal cultural resources within the planning area.

Pursuant to SB 18, the City reached out to tribes listed on the NAHC contact list. The Confederated Villages of Lisjan Nation requested information about the project and environmental documents which the City provided via email, and the North Valley Yokuts Tribe requested information regarding the Sacred Lands File Search which the City provided via email. No tribes requested further consultation at the time of this report.

The proposed project would be located at the same project site as the original project, and would not exceed the level of ground disturbance or intensity of development considered in the INSP. Therefore, the proposed project would result in no new or more severe impacts regarding tribal cultural resources beyond those identified in the 2018 EIR for the original project.

4.19 Utilities and Service Systems

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Page 3.10-11 through 3.10-13 of the 2018 EIR	No	No	N/A
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Page 3.10-13 of the 2018 EIR	No	No	N/A
c.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Page 3.10-11 of the 2018 EIR	No	No	N/A
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Page 3.10-13 through 3.10-15 of the 2018 EIR	No	No	N/A
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Page 3.10-15 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to utilities and service systems were analyzed on pages 3.10-11 through 3.10-15 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to utilities and service systems from the 2018 EIR. Utilities and service systems impacts were determined to be less than significant.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The 2018 EIR determined that the INSP would not require or result in the construction of new stormwater drainage, solid waste, wastewater, or water facilities. The 2018 EIR determined that implementation of the INSP would not result in insufficient water supplies available to serve the project from existing entitlements and resources or require expanded entitlements. The 2018 EIR determined that implementation of the INSP would not exceed wastewater treatment requirements of the San Francisco Regional Water Quality Board. The 2018 EIR determined that implementation of the INSP would not result in solid waste disposal needs that exceed the permitted landfill capacity serving the INSP planning area. The 2018 EIR determined that the INSP would be required to comply with federal, State, and local statutes and regulations related to solid waste, therefore, the impacts would be less than significant.

The proposed project would be on the same project site as the original project and entirely within the INSP Planning Area analyzed in the 2018 EIR. As described under Section 4.14, *Population and Housing*, the Isabel Crossing and No Net Loss Specific Plan Amendment Project would result in a net increase of 1,431 residential units beyond the total residential buildout in the adopted INSP. The project would also result in a net decrease of 1,531,486 square feet of office and commercial space as compared to the adopted INSP.

Water

The 2020 Livermore Urban Water Management Plan (UWMP) indicates adequate available water supply during all future year scenarios to meet anticipated water demands up to 10,128 AFY, with additional unused water supply available. The 2020 total water demand in the district was 9,571 AFY, with 2,003 AFY unused.

The project would result an increase in water demand of approximately 134,514 gallons per day (GPD) and the reduction in office space would result in a decrease in approximately 32,030 GPD for a net water demand of approximately 102,484 GPD, or 115 acre-feet per year (AFY) compared with planned development under the INSP. The net water demand would comprise approximately 5.7 percent of the 2020 remaining water supply (Cal Water 2021). This additional demand would not be substantial and could be accommodated by the districts' existing water supply sources (Appendix F). Thus, no new or additional water infrastructure or water supply resources would be required. The proposed project would result in no new or more severe impacts or the need for new or expanded water facilities beyond those identified in the 2018 EIR for the original project.

Wastewater

The Livermore Water Reclamation Plant has a capacity of 8.5 million GPD and as of 2020, treats 4 to 7 million GPD according to the 2020 Livermore UWMP (Cal Water 2021). The remaining capacity would be 1.5 million GPD.

Assuming that wastewater generation is approximately 80 percent of water demand due to system losses, the wastewater generation for development facilitated by the proposed project would be 82,987 GPD. The additional wastewater generated by development facilitated by the proposed project would represent approximately 5.5 percent of the remaining capacity, which would not be a substantial increase. Thus, no new or additional wastewater infrastructure would be required. The proposed project would result in no new or more severe impacts or the need for new or expanded wastewater facilities beyond those identified in the 2018 EIR for the original project.

Stormwater

As discussed in Section 4.10, *Hydrology and Water Quality,* the proposed project would introduce new impervious surfaces, and would change the land use compared with the original project; however, the proposed project would not introduce new impervious surfaces that would exceed those considered in the 2018 EIR for the original project and would not introduce land uses or features that would substantially alter the drainage pattern of the site or area compared with the original project. The Isabel Crossing Project would include biotreatment areas, on-site pervious pavers, on-site biotreatment and flowthrough planters, and a detention vault. Future development facilitated by the No Net Loss Specific Plan Amendment Project would include similar features, as required by local and state stormwater regulations. Similar to the original project, the proposed project would be subject to regulations regarding stormwater including INSP Policy P-ENV-33, which requires preparation of a drainage study. The proposed project would result in no new or more severe impacts or the need for new or expanded stormwater facilities beyond those identified in the 2018 EIR for the original project.

Solid Waste

According to the California Department of Resources Recycling and Recovery (CalRecycle) waste characterization rates, the residential solid waste rate is 8.6 pounds per unit per day, and the office rate is 6 pounds per 1,000 square feet per day (CalRecycle 2024a).

The City of Livermore sends its waste to the Vasco Road Landfill and the Altamont Landfill. The Vasco Road Landfill has a maximum permitted throughput of 2,518 tons per day and a total remaining capacity of 11.6 million cubic yards, and the Altamont Landfill has a maximum permitted throughput of 11,150 tons per day and a total remaining capacity of 65.4 million cubic yards (CalRecycle 2024b, 2024c). This amounts to a total maximum daily throughput of 13,668 tons per day and a total remaining capacity of 77.0 million cubic yards across both landfills.

The Isabel Crossing Project would decrease residential units and commercial and office space compared to development originally planned for those parcels under the INSP, therefore, the Isabel Crossing Project would not result in new or more severe impacts or the need for new or expanded solid waste facilities beyond those identified in the 2018 EIR for the original project.

The increase in solid waste generated by new residential uses facilitated by the No Net Loss Specific Plan Amendment Project would be approximately 12,307 pounds per day[1] and the decrease in solid waste generation by the removal of office space from the No Net Loss Parcels would be approximately 9,188 pounds per day[2] for a net increase in solid waste generation from the No Net Loss Specific Plan Amendment Project of approximately 3,119 pounds per day (1.6 tons per day). This equates to approximately 33 annual cubic yards of solid waste.

This increase in solid waste generation would be less than 0.02 percent of the maximum daily throughput and less than 0.001 percent of the total remaining capacity of the Vasco Road and Altamont Landfills. Thus, the current solid waste infrastructure would be adequate to accommodate the increased solid waste generation from the No Net Loss Specific Plan Amendment Project and no new or additional solid waste infrastructure would be required.

The proposed project would continue to be subject to applicable federal, State, and local statutes and regulations related to solid waste, including Chapter 8.08 of the LMC, like the original project. The proposed project would result in no new or more severe impacts or the need for new or expanded solid waste facilities beyond those identified in the 2018 EIR for the original project.

1 1,431 residential units multiplied by 8.6 pounds per day.
2 1,531,486 square feet multiplied by 6 pounds per 1000 square feet per day.

4.20 Wildfire

		Where was Impact Analyzed in the EIR?	Are Major Revisions to the EIR Required?	Are There New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Page 3.8-22 of the 2018 EIR	No	No	N/A
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	N/A	N/A	N/A	N/A
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	N/A	N/A	N/A	N/A
d.	Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Page 3.8 - 23 of the 2018 EIR	No	No	N/A

Analysis in Previous Environmental Documents

Impacts to wildfire were analyzed on pages 3.8-22 through 3.8 -23 of the 2018 EIR. The 2020 SEIR did not update or modify the analysis of impacts to wildfire from the 2018 EIR. Impacts regarding wildfire were determined to be less than significant.

The following describes the analysis included in the 2018 EIR and provides a review to determine whether there would be project-specific impacts that are either 1) peculiar to the project or the parcels on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The 2018 EIR determined that development facilitated by the INSP would result in new development and population growth, resulting in an increase in demand for emergency services, which could affect implementation of the Alameda Local Hazard Mitigation Plan and the Tri-Valley Hazard Mitigation Plan; however, with implementation of existing local programs and regulations, including the City's existing General Plan's Public Safety Element and Circulation Element, impacts would be less than significant.

The California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for Alameda County shows that none of the project parcels are not located in a State Responsibility Area or lands classified as Very High Fire Severity Zones (CAL FIRE 2022). The nearest State Responsibility Area is located approximately 0.11 mile west of the Comcast Parcels, 0.33 mile north of the Isabel Crossing Parcels, and 0.35 mile east of the BART Parcel and is classified as moderate. The proposed project would be located within the INSP Planning Area and would not exceed the buildout anticipated by the original project. Similar to the original project, the proposed project would be subject to existing local programs and regulations including the Livermore General Plan's Circulation Element which requires all residential, commercial, and industrial areas to provide efficient and safe access for emergency vehicles. In addition, the proposed project would be reviewed by the Livermore Fire Department which reviews and approves projects to ensure that emergency access standards are met, and therefore development facilitated by the project would be reviewed to ensure that it does not hinder emergency access or evacuation plans. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for Alameda County shows that none of the project parcels are not located in a State Responsibility Area or lands classified as Very High Fire Severity Zones (CAL FIRE 2022). The nearest State Responsibility Area is located approximately 0.11 mile west of the Comcast Parcels, 0.33 mile north of the Isabel Crossing Parcels, and 0.35 mile east of the BART Parcel and is classified as moderate. The 2018 EIR determined that with implementation of existing State and local programs and regulations as well as the policies of the INSP, impacts would be less than significant.

While pollutant concentrations from wildfire and the installation or maintenance of associated infrastructure were not specifically addressed in the 2018 EIR, the proposed project would be on the same project site as the original project and entirely within the INSP planning area analyzed in the 2018 EIR, and would not substantially change existing conditions or require the installation or maintenance of associated infrastructure beyond what was planned for the INSP and considered in the 2018 EIR. Therefore, the proposed project would not result in new or more severe impacts beyond those identified in the 2018 EIR for the original project.

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5 Cumulative Impacts

In addition to the specific impacts of individual projects, CEQA requires consideration of potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other past, present, and probable future projects producing related or cumulative impacts. For example, noise impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. The cumulative impact analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA Guidelines Section 15130 requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a summary of projections contained in an adopted planning document such as a general plan.

Impacts Identified in the 2018 EIR and 2020 SEIR

The cumulative setting for the analysis in the 2020 EIR is explained in Section 4.2, *Cumulative Impacts*, of the 2020 SEIR. As stated in that section, cumulative impacts of the INSP were considered in conjunction with the Valley Link Project, which would construct new rail stations at Greenville Road and Isabel Avenue in Livermore, traversing the INSP area. The 2020 SEIR indicates that some sections of the EIR are cumulative in nature, including air quality, energy, greenhouse gas emissions, noise, and transportation. The 2018 EIR provides an additional cumulative analysis for the following topics: aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems.

The 2018 EIR and 2020 SEIR determined that the following resource areas would have a considerable contribution to a cumulative impact: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, greenhouse gas emissions, population and housing, noise, transportation, and tribal cultural resources.

The 2018 EIR and 2020 SEIR determined that the following resource areas would not have a considerable contribution to a cumulative impact: geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, public services, recreation, and utilities and service systems.

Impacts of the Proposed Project

Since certification of the 2018 EIR and 2020 SEIR, there has been no new development proposed within the INSP area that was not considered as part of the INSP. Similarly, the Valley Link Project has not changed substantially since the 2018 EIR and 2020 SEIR. There are no new cumulative projects in the INSP area that were not previously considered in the 2018 EIR and 2020 SEIR. The cumulative conditions in the 2018 EIR and 2020 SEIR have not substantially changed; therefore, the cumulative setting in the 2018 EIR and 2020 SEIR remains the same for the purposes of this analysis.

The proposed project would not result in new impacts compared to the INSP as analyzed in this Addendum. While the project would result in the potential future development of a greater number of housing units and less commercial and office space in the INSP area than analyzed in the 2018 EIR and 2020 SEIR, the physical development area of the INSP would not be modified. Therefore, no new or additional cumulatively considerable contributions to a significant cumulative impact would occur as a result of the project.

Conclusion

The proposed project would not result in new or more severe cumulatively considerable impacts than were identified in the 2018 EIR and 2020 SEIR. No new or substantially more severe significant effects would occur to cumulative impacts, and no new mitigation measures are required. No substantial changes have occurred that require major revisions to the 2018 EIR and 2020 SEIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to cumulative impacts than were identified in the 2018 EIR and 2020 SEIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

6 Conclusion

Analysis in Section 2, *Overview of CEQA Guidelines Section 15162 and Section 15164*, and Section 4, *Impact Analysis*, there are no project-specific significant effects which are peculiar to the proposed project or its site; potentially significant off-site impacts and cumulative impacts which were not discussed in the 2018 EIR or 2020 SEIR; or previously identified significant effects which, as a result of substantial new information, which was not known at the time the 2018 EIR or 2020 SEIR were certified, are determined to have a more severe adverse impact.

Analysis in Section 4, *Impact Analysis*, determined that substantial changes are not proposed to the original project nor have substantial changes occurred that would require major revisions to the 2018 EIR or 2020 SEIR prepared for the original project. Substantially more severe impacts beyond those identified and analyzed in the 2018 EIR and 2020 SEIR would not occur as a result of the proposed project. Overall, the proposed project would result in no new impact or mitigation information of substantial importance that would generate new, more severe impacts or require new mitigation measures compared to those identified for the original project in the 2018 EIR and 2020 SEIR. As such, the proposed project would not result in conditions identified in *CEQA Guidelines* Section 15162 requiring supplemental environmental review or a Subsequent EIR, and these are therefore not required for the proposed project.

Therefore, the City concludes that the analyses conducted, the conclusions reached, and the mitigation measures adopted in the 2018 EIR and 2020 SEIR would not be substantially changed for the proposed project. The proposed project would remain subject to all previously adopted mitigation measures and uniformly applicable development policies included in the 2018 EIR and 2020 SEIR for the original project. Based on the above analysis, no subsequent action under *CEQA Guidelines* Sections 15162 or 15164 is required.

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Appendix A

Project Site Plans



VTTM SUBMITTAL
WITH CONCEPTUAL DESIGN
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

JUNE 07, 2024

EXHIBIT C





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VTTM SUBMITTAL
WITH CONCEPTUAL DESIGN | **JUNE 07, 2024**

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ARCHITECTURE

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Private Recreation Center [Parcel N3-C]

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CIVIL

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EXHIBIT C



Key Map

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NORTHBOUND ISABEL AVE APPROACHING GATEWAY AVENUE

AR-1

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TOWN SQUARE
LOOKING NORTHWEST FROM ISABEL AVENUE

AR-2

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TOWN SQUARE
LOOKING NORTHWEST FROM ISABEL AVENUE

AR-3

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GATEWAY VIEW
LOOKING NORTHWEST FROM ISABEL AVENUE

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POCKET PLAZA
LOOKING NORTHWEST FROM TOWN SQUARE

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POCKET PLAZA

LOOKING NORTHWEST AT GATEWAY AVENUE AND MAIN STREET

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POCKET PLAZA
LOOKING SOUTHWEST TOWARD GROCERY STORE

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MAIN STREET WITH FARMER'S MARKET
LOOKING NORTH FROM TOWN SQUARE

AR-8

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MAIN STREET WITH FARMER'S MARKET
LOOKING NORTH

AR-9

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MAIN STREET
LOOKING NORTH

AR-10

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PORTOLA AVENUE AND ISABEL AVE
LOOKING WEST TOWARD INTERSECTION

AR-11

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PORTOLA AVENUE AND ISABEL AVENUE
LOOKING SOUTHWEST TOWARD INTERSECTION

AR-12

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PORTOLA AVENUE AND ISABEL AVENUE
LOOKING WEST TOWARD INTERSECTION

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PORTOLA AVENUE
LOOKING WEST

AR-14

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PORTOLA AVENUE
LOOKING WEST TOWARD MAIN STREET ENTRANCE

AR-15

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VIEW SOUTH FROM MONTAGE
APPROXIMATELY FROM SECOND FLOOR

AR-16

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PORTOLA AVENUE AND MAIN STREET
LOOKING SOUTH

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AERIAL PARK VIEW
LOOKING NORTHWEST FROM MAIN STREET

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AERIAL PARK VIEW
LOOKING WEST FROM MAIN STREET

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PARK PLAYGROUND

LOOKING NORTH AT INTERSECTION OF 'A' STREET AND 'C' STREET

AR-20

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PRIVATE RECREATION BUILDING
LOOKING NORTHWEST AT INTERSECTION OF 'A' STREET AND 'C' STREET

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PRIVATE RECREATION BUILDING
LOOKING SOUTHWEST AT POOL DECK

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CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHWEST ON FREEWAY NEAR WB 580 ONRAMP

AR-23

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1193

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Key Map

Note: Artist Concept; Subject to change at Final Site & Design Review

CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHEAST ON FREEWAY NEAR WB 580 ONRAMP WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

AR-24

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CONCEPT DESIGN

VIEW SIMULATION
LOOKING NORTHWEST

AR-25

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CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHWEST UNDER PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

AR-26

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CONCEPT DESIGN

VIEW SIMULATION
LOOKING NORTHEAST ON FREEWAY

AR-27

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CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHWEST ON FREEWAY WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

AR-28

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CONCEPT DESIGN

VIEW SIMULATION
LOOKING NORTHEAST ON FREEWAY

AR-29

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1199

EXHIBIT C



Key Map

Note: Artist Concept; Subject to change at Final Site & Design Review

CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHWEST ON FREEWAY AT BEGINING OF ISABEL AVE. OFFRAMP WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

AR-30

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Note: For Conceptual Illustration Purposes Only. Final Design Subject to Change Based on Landscape Design.

MASTER PLANNING
ILLUSTRATIVE MASTER PLAN

SP-1

CONCEPT DESIGN

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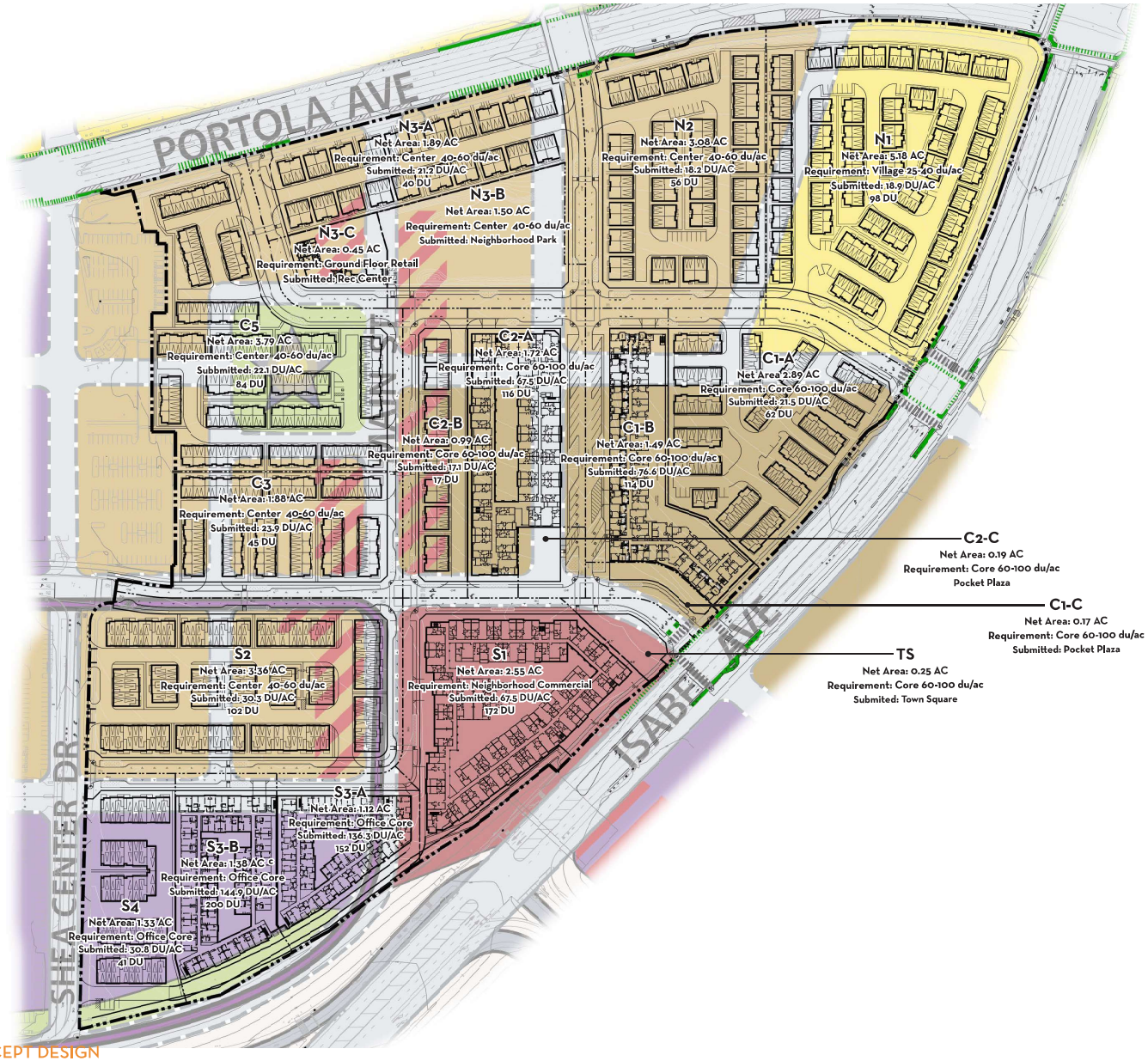
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1201

EXHIBIT C



Existing INSP Density Requirement

- Village: 25-40 du/ac
- Center: 40-60 du/ac
- Core: 60-100 du/ac
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

Density Comparison Planning Area	Existing Requirement Designation	Density	Submitted Density	Homes
N1	Village	25-40 du/ac	18.9 du/ac	98 du
N2	Center	40-60 du/ac	18.2 du/ac	56 du
N3-A	Center	40-60 du/ac	21.2 du/ac	40 du
N3-B	Center	40-60 du/ac	NA	NA
N3-C	Center	40-60 du/ac	NA	NA
C1-A	Core	60-100 du/ac	21.5 du/ac	62 du
C1-B	Core	60-100 du/ac	76.6 du/ac	114 du
C2-A	Core	60-100 du/ac	67.5 du/ac	116 du
C2-B	Core	60-100 du/ac	17.1 du/ac	17 du
C3	Center	40-60 du/ac	23.9 du/ac	45 du
C5	Center	40-60 du/ac	22.1 du/ac	84 du
S1	Nbhd Comm	NA	67.5 du/ac	172 du
S2	Center	25-40 du/ac	30.3 du/ac	102 du
S3-A	Office Core	NA	136.3 du/ac	152 du
S3-B	Office Core	NA	144.9 du/ac	200 du
S4	Office Core	NA	30.8 du/ac	41 du

CONCEPT DESIGN

MASTER PLANNING COMPARISON - LUP EXISTING

SP-2

ISABEL PORTOLA OWNER, LLC

WHA

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LIVERMORE, CALIFORNIA

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EXHIBIT C



Proposed INSP Land Use

- Village
- Center
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

CONCEPT DESIGN

MASTER PLANNING COMPARISON - LUP PROPOSED

SP-3

ISABEL PORTOLA OWNER, LLC

WHA.

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1203

EXHIBIT C



Proposed INSP Land Use

- Village
- Center
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Parcel	Proposed Product	Product Type	Units	Gross Land Area (AC)	Perimeter ROW Areas (AC)	Net Land Area (AC)	Density (Net DU/AC)	Average Unit Size (sqft)	Residential Building Area (sqft)	Non-Residential Building Area (sqft)
Residential			1,299	34.86	2.22	32.65			1,743,741	74,362
N1	Product 2C	3-Story Attached (Duplex & Triplex)	98	5.59	0.41	5.18	18.9	1,943	190,432	
N2	Product 1	3-Story Attached (Duplex & Triplex)	56	3.17	0.10	3.08	18.2	2,324	130,116	
N3-A	Product 1	3-Story Attached (Duplex)	40	2.11	0.22	1.89	21.2	2,322	92,860	
C1-A	Product 17	3-Story Attached (Townhouse)	62	3.02	0.13	2.89	21.5	1,730	107,260	
C1-B	Product 15	Type V Apartments over Retail	114	1.53	0.04	1.49	76.6	889	101,373	22,520
C2-A	Product 16	Type V Stacked Flat Condos over Retail	116	1.72	0.00	1.72	67.5	1,394	161,680	27,918
C2-B	Product 1	3-Story Attached (Duplex & Triplex)	17	0.99	0.00	0.99	17.1	2,326	39,546	
C3	Product 2	3-Story Attached (Townhouse)	45	1.88	0.00	1.88	23.9	1,900	85,500	
C5	Product 2	3-Story Attached (Townhouse)	84	3.87	0.08	3.79	22.1	1,899	159,492	
S1	Product 9	Type V Stacked Flat Condos over Grocery	172	2.78	0.23	2.55	67.5	1,267	217,872	23,924
S2	Product 4	3-Story Attached (Townhouse)	102	3.46	0.10	3.36	30.3	1,326	135,284	
S3-A	Product 10	Type V Apartments	152	1.41	0.29	1.12	136.3	685	104,160	0
S3-B	Product 12	Type III Apartments	200	1.61	0.24	1.38	144.9	816	163,240	0
S4	Product 4	3-Story Attached (Townhouse)	41	1.71	0.38	1.33	30.8	1,340	54,926	
Non-Residential				10.51	0.02	10.50				8,575
N3-B		Neighborhood Park		1.50	0.00	1.50				
N3-C		Rec Center		0.45	0.00	0.45				8,575
C1-C		Pocket Plaza		0.17	0.00	0.17				
C2-C		Pocket Plaza		0.19	0.00	0.19				
TS		Town Square		0.27	0.02	0.25				
ROW				7.94		7.94				
Total			1,299	45.37	2.23	43.14	30.1		1,743,741	82,937

Product Summary		
Market-Rate For Sale Duplex & Triplex	211	
Market-Rate For Sale Townhomes:	334	
Market-Rate For Sale Condos:	231	
Affordable For Sale Condos:	57	
Market-Rate For Rent Apartments:	160	
Affordable For Rent Apartments:	306	
Total Market-Rate Units:	**936**	*72%*
Total Affordable Units:	**363**	*28%*
Total Units:	1299	100%

Notes:
Amenity space for Parcels C1-B, C2-A, S1, S3-A and S3-B included in total non-residential space
Perimeter ROW includes ROW of Portola Avenue, Isabel Avenue, Trail & EVA, and Shea Center Drive

CONCEPT DESIGN

MASTER PLANNING PARCEL SUMMARY

SP-4

ISABEL PORTOLA OWNER, LLC
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EXHIBIT C



Proposed INSP Land Use

- Village
- Center
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

Parcel	Product Type	Product	Bed / Bath	Units	Total Beds	Total Baths	Total Half Bath	Unit SQFT	Total Residential SQFT	Total Non-Res SQFT	Total Usable SQFT	Gross Construction Area: Residential Parking Area	Non-Residential Parking Area	Residential Area	Non-Residential Area	Total Area
N1	3-Story Attached (Duplex & Triplex)	Product 2C		98	362	264	30	1,943	190,432		190,432	46,452		190,432	18,080	254,964
		Plan 1C	3 / 2.5	30	90	60	15	1,851	55,530			13,710		55,530	4,950	74,190
		Plan 2C	4 / 3.5	30	120	90	15	1,895	56,850			13,590		56,850	4,770	75,210
		Plan 3C	4 / 3.0	38	152	114	0	2,054	78,052			19,152		78,052	8,360	105,564
N2	3-Story Attached (Duplex & Triplex)	Product 1		56	197	168	28	2,324	130,116		130,116	28,532		130,116	10,860	169,508
		Plan 1	3 / 3.5	14	42	42	7	2,192	30,688			6,888		30,688	2,800	40,376
		Plan 2	3 / 3.5	13	39	39	7	2,290	29,770			6,448		29,770	2,405	38,623
		Plan 3	4 / 3.5	29	116	87	15	2,402	69,658			15,196		69,658	5,655	90,509
N3-A	3-Story Attached (Duplex)	Product 1		40	140	120	20	2,322	92,860		92,860	20,360		92,860	7,750	120,970
		Plan 1	3 / 3.5	10	30	30	5	2,392	21,930			4,920		21,930	2,000	28,840
		Plan 2	3 / 3.5	10	30	30	5	2,290	22,900			4,960		22,900	1,850	29,710
		Plan 3	4 / 3.5	20	80	60	10	2,402	48,040			10,480		48,040	3,900	62,420
N3-C	Rec Center / Pool Building	Rec Building								8,575	8,575				8,575	8,575
C1-A	3-Story Attached (Townhouse)	Product 17		62	217	155	16	1,730	107,260		107,260	31,806		107,260	9,021	148,087
		Plan 1	3 / 2.5	31	93	62	16	1,613	50,003			14,725		50,003	3,534	68,262
		Plan 2	4 / 3.0	31	124	93	0	1,847	57,257			17,081		57,257	5,487	79,825
C1-B	Type V Apartments over Retail	Product 15		134	183	162	11	889	101,373	22,520	123,893	72,655		127,143	22,520	222,318
		Unit A-1	1 / 1.0	63	63	63	0	731	46,053							
		Unit A-2	1 / 1.0	3	3	3	0	1,005	3,015							
		Unit B-1	2 / 2.0	24	48	48	0	950	22,800							
		Unit B-2	2 / 2.0	3	6	6	0	1,148	3,444							
		Unit C-1	3 / 2.5	21	63	42	11	1,241	26,061							
C2-A	Type V Stacked Flat Condos over Retail	Product 16		116	220	208	14	1,394	161,680	27,918	189,598	75,661		219,996	27,918	323,575
		Unit A-1	1 / 1.0	24	24	24	0	949	22,776							
		Unit B-1	2 / 2.0	64	128	128	0	1,373	87,872							
		Unit B-2	2 / 2.5	16	32	32	8	1,685	26,960							
		Unit C-1	3 / 2.5	12	36	24	6	2,006	24,072							
C2-B	3-Story Attached (Duplex & Triplex)	Product 1		17	60	51	9	2,326	39,546		39,546	8,668		39,546	3,295	51,509
		Plan 1	3 / 3.5	4	12	12	2	2,192	8,768			1,968		8,768	800	11,536
		Plan 2	3 / 3.5	4	12	12	2	2,290	9,160			1,984		9,160	740	11,884
		Plan 3	4 / 3.5	9	36	27	5	2,402	21,618			4,716		21,618	1,755	28,089
C3	3-Story Attached (Townhouse)	Product 2		45	171	126	18	1,900	85,500		85,500	20,880		85,500	7,758	114,138
		Plan 1	3 / 2.5	9	27	18	5	1,827	16,443			4,113		16,443	1,485	22,041
		Plan 2	4 / 3.5	27	108	81	14	1,873	50,571			12,231		50,571	4,293	67,095
		Plan 3	4 / 3.0	9	36	27	0	2,054	18,486			4,536		18,486	1,980	25,002
C5	3-Story Attached (Townhouse)	Product 2		84	320	236	34	1,899	159,492		159,492	38,932		159,492	14,428	212,852
		Plan 1	3 / 2.5	16	48	32	8	1,827	29,232			7,312		29,232	2,640	39,184
		Plan 2	4 / 3.5	52	208	156	26	1,873	97,396			23,556		97,396	8,268	129,220
		Plan 3	4 / 3.0	16	64	48	0	2,054	32,864			8,064		32,864	3,520	44,448
S1	Type V Stacked Flat Condos over Grocery	Product 9		172	328	300	0	1,267	217,872	23,924	241,796	164,022		296,184	23,924	484,130
		Unit A-1	1 / 1.0	44	44	44	0	949	41,756							
		Unit B-1	2 / 2.0	84	168	168	0	1,373	115,332							
		Unit C-1	3 / 2.0	24	72	48	0	1,418	34,032							
		Unit D-1	2 / 2.0	16	32	32	0	1,338	21,408							
		Unit E-1	3 / 2.0	4	12	8	0	1,336	5,344							
S2	3-Story Attached (Townhouse)	Product 4		102	236	236	35	1,326	135,284		135,284	57,936		135,284	9,168	202,388
		Plan 1	2 / 2.5	35	70	70	18	1,177	41,195			18,585		41,195	3,395	63,175
		Plan 2	2 / 2.5	35	70	70	18	1,315	46,025			18,935		46,025	3,885	68,845
		Plan 3	3 / 3.0	32	96	96	0	1,502	48,064			20,416		48,064	1,888	70,368
S3-A	Type V Apartments	Product 10		152	272	192	0	685	104,160		104,160	79,879		135,124	0	215,003
		Unit A-1	Studio / 1.0	40	40	40	0	453	18,120							
		Unit A-2	1 / 1.0	32	32	32	0	533	17,056							
		Unit B-1	2 / 1.0	36	72	36	0	710	25,560							
		Unit B-2	2 / 1.0	4	8	4	0	786	3,144							
		Unit C-1	3 / 2.0	40	120	80	0	1,007	40,280							
S3-B	Type III Apartments	Product 12		200	280	280	0	816	163,240		163,240	105,273		214,395	0	319,668
		Unit A-1	1 / 1.0	120	120	120	0	727	87,240							
		Unit B-1	2 / 2.0	80	160	160	0	950	76,000							
S4	3-Story Attached (Townhouse)	Product 4		41	97	97	13	1,340	54,926		54,926	23,506		54,926	3,589	82,021
		Plan 1	2 / 2.5	13	26	26	7	1,177	15,301			6,903		15,301	1,261	23,465
		Plan 2	2 / 2.5	13	26	26	7	1,315	17,095			7,033		17,095	1,443	25,571
		Plan 3	3 / 3.0	15	45	45	0	1,502	22,530			9,570		22,530	885	32,985
Total				1,299	3,083	2,595	227		1,743,741	82,937	1,826,678	774,562	0	1,988,258	166,886	2,929,706

CONCEPT DESIGN

MASTER PLANNING PRODUCT SUMMARY

SP-5

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EXHIBIT C



Minimum Parking Requirements:

Village/ Transition		Core/Center	
Studio/ 1-Bed:	1.0 Spaces/ Unit	Studio:	0.75 Spaces/ Unit
2-Bed:	1.5 Spaces/ Unit	1-Bed:	1.0 Spaces/ Unit
3-Bed +:	2.0 Spaces/ Unit	2+ Bed:	1.25 Spaces/ Unit

Guest Parking: 1 Space/ 8 Units (0.13 Spaces / Unit)
*Note: Onstreet parking for parcels C1-B, C2-A, and S1 is provided for the Retail & Commercial Parking requirement

Neighborhood Commercial and Ground Floor Retail/ Flex Space:
General Commercial:

Maximum Parking Requirements:

Village/ Transition		Core/ Center		AB 2345 Denisty Bonus Parking Requirment:	
Studio/ 1-Bed:	1.25 Spaces/ Unit	Studio:	0.75 Spaces/ Unit	Studio/ 1-Bed:	1.0 Spaces/ Unit
2-Bed:	2.0 Spaces/ Unit	1-Bed:	1.5 Spaces/ Unit	2-Bed:	1.5 Spaces/ Unit
3-Bed +:	2.5 Spaces/ Unit	2-Bed +:	2.0 Spaces/ Unit	3-Bed +:	1.5 Spaces/ Unit
Guest Parking	1 Space/ 4 Units			Guest Parking:	No Guest Parking required

Commercial

General Commercial	1 Space/ 600 SF
Retail	2 Space/ 400 SF

				Ground Floor		All Parcels										Podium Buildings C1-B, C2-A, S1, S3-A, S3-B															Duplex / TH	Bicycle Parking					
					Res	Min. Required			Max Required			Resident			Guest			ADA Parking		Electric Vehicle				Update Electric Vehicle eff. 7/1/24			Total	EV	Village		Center/Core		Nbhd Comm &	
				Comm	Lobby	Res	Guest	Comm	Res	Guest	Comm	Res	Res	Res	Guest	Guest	Guest	Commercial		Commercial				Res 40%	Res 10%	Van	Spaces	1 unit	Resident	Visitor	Resident	Visitor	Ground Floor Flex	
PA	Designation	Units	Bdrms	SF	Amenity	Reqd	Reqd	Reqd	Reqd	Reqd	Reqd	Provd	ADA 2%	ADA Van	Provd*	ADA 5%	ADA Van	Provd*	ADA	ADA Van	Capable	EVSE	ADA Van	ADA Std	LP Lev2	Lev 2	Access	Provd		1:1 unit	1:4 units	1:4 Bdrm	1:20 Units	1: 1400 SF	
N1	Village	98	361			196	12		245	26		196	0	0	23	0	0											219	98	98	25				
N2	Village	56	224			112	7		141	16		112	0	0	25	0	0											137	56	56	14				
N3-A	Village	40	160			80	5		100	16		80	0	0	5	0	0											85	40	40	10				
N3-B	Open Space														8																				
N3-C	Open Space														9	(1)	(1)											9								
C1-A	Village	62	217			124	8		156	8		124	0	0	17	(1)	(1)											141	62	62	16				
C1-B	Core	114	183	19,294	3,226	127	14	33	196	30	78	168	(4)	(1)	14	(1)	(1)	33	(2)	(1)	8	(2)	(1)	(1)	73	18	(4)	215				46	6	17	
C2-A	Core	116	220	24,690	3,228	139	15	42	220	29	99	163	(4)	(1)	15	(1)	(1)	40	(2)	(1)	8	(2)	(1)	(1)	71	18	(4)	218				55	6	20	
C2-B	Village	17	68			34	2		43	5		34	0	0	11	0	0											45	17	17	5				
C3	Village	45	171			90	6		114	13		90	0	0	16	(1)	(1)											106	45	45	12				
C5	Village	84	320			168	11		210	21		168	0	0	14	(1)	(1)											182	84	84	21				
S-1	Nbhd Comm	172	328	21,651	2,273	204	21	40	322	43	87	253	(6)	(1)	21	(2)	(1)	40	(2)	(1)	8	(2)	(1)	(1)	110	27	(6)	314				82	9	18	
S2	Village	102	236			170	13		220	26		204	0	0	35	(1)	(1)											239	102	102	26				
S3-A	Core	152	272			172	** 0		268	39		178	(4)	(1)	4	0	0								73	18	(4)	182				68	8		
S3-B	Core	200	280			220	25		340	50		220	(5)	(1)	25	(2)	(1)								98	25	(5)	245				70	10		
S4	Village	41	97			70	5		90	12		82	0	0	9	(1)	(1)											91	41	41	11				
				65,635	8,727	**1906**	**143**	**115**	2,665	334	2164	**2072**			**251**			**113**																	

* Parking provided in common garage, at-grade or on-street
** AB2345 State Density Bonus Req'd

Overall Total Parking Spaces Required: 2164

Overall Total Parking Spaces Provided: 2436

Overall Total Bicycle Parking Required: 1100
Overall Total Bicycle Parking Provided: 1100

CONCEPT DESIGN

MASTER PLANNING PARKING ANALYSIS

SP-6

ISABEL PORTOLA OWNER, LLC

WHA

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LIVERMORE ISABEL CROSSING
LIVERMORE, CALIFORNIA

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EXHIBIT C



FAR COMPARISON	Requirement		Submitted	
PA	Designation	FAR	FAR	
N1	Village	NA	NA	
N2	Village	NA	NA	
N3-A	Village	NA	NA	
N3-B	Village	NA	NA	
N3-C	Village	NA	NA	
C1-A	Core	NA	NA	
C1-B	Core	NA	NA	
C2-A	Core	NA	NA	
C2-B	Core	NA	NA	
C3	Village	NA	NA	
C5	Village	NA	NA	
S1	Nbhd Comm	.04 - 1.0	0.30	Waiver
S2	Village	NA	NA	
S3-A	Core	NA	NA	
S3-B	Core	NA	NA	
S4	Village	NA	NA	

CONCEPT DESIGN

MASTER PLANNING
F.A.R. ANALYSIS

SP-7

ISABEL PORTOLA OWNER, LLC

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EXHIBIT C



						Common Area Provided[4]								Private Open Space Provided[4]				
Parcel	INSP Requirement	Land Use	Units	Common Area Required[1] (AC)	Common Area Open Space per unit SF	Neighborhood Park (AC)	Common Open Space Total (SF)		Playgrounds/ Community Gardens/ Pocket Parks and Pocket Plazas (AC)	Plazas (AC)	Trails (AC)	Setback[5] (AC)	Total Area (AC)	Private Open Space (SF)	Private Open Space per unit (SF)	Total Open Space Provided (SF)	Total Open Space per unit (SF)
Residential			**1,299**	**2.24**		**0.00**	**4.47**	SF	**4.11**	**0.00**	**0.76**	**3.57**	**8.81**				
N1	Village	3-Story Attached (Duplex & Triplex)	98	0.17	430		42,154	SF	0.97			0.67	1.64	8,618	88	50,772	518
N2	Village	3-Story Attached (Duplex & Triplex)	56	0.10	183		10,241	SF	0.24			0.39	0.62	3,757	67	13,998	250
N3-A	Village	3-Story Attached (Duplex)	40	0.07	130		5,192	SF	0.12			0.41	0.53	2,680	67	7,872	197
C1-A	Village	3-Story Attached (Townhouse)	62	0.11	249		15,420	SF	0.35			0.38	0.74	4,960	80	20,380	329
C1-B	Core	Type V Apartments over Retail	116	0.20	128		14,618	SF	0.34			0.07	0.48	5,700	50	20,318	178
C2-A	Core	Type V Stacked Flat Condos over Retail	116	0.20	102		11,887	SF	0.27			0.06	0.40	5,800	50	17,687	152
C2-B	Village	3-Story Attached (Duplex & Triplex)	17	0.03	109		1,847	SF	0.04			0.11	0.16	1,163	68	3,010	177
C3	Village	3-Story Attached (Townhouse)	45	0.08	96		4,336	SF	0.10			0.24	0.34	3,870	86	8,206	182
C5	Village	3-Story Attached (Townhouse)	84	0.14	191		16,053	SF	0.37			0.44	0.80	7,220	86	23,275	277
S1	Neighborhood Center	Type V Stacked Flat Condos over Grocery	172	0.30	111		19,071	SF	0.44		0.23	0.27	0.98	8,600	50	27,671	161
S2	Village	3-Story Attached (Townhouse)	102	0.18	90		9,186	SF	0.21			0.30	0.51	5,409	53	14,595	143
S3-A	Core	Type V Apartments	152	0.26	84		12,841	SF	0.24		0.22	0.05	0.57	7,600	50	20,441	134
S3-B	Core	Type III Apartments	200	0.34	115		23,075	SF	0.34		0.19	0.04	0.68	10,000	50	33,075	165
S4	Village	3-Story Attached (Townhouse)	41	0.07	214		8,770	SF	0.08		0.12	0.15	0.35	2,280	56	11,050	270
Non-Residential				**0.00**		**1.50**	**0.00**		**0.00**	**0.61**	**0.00**	**0.00**	**2.11**				
N3-B	Center	Neighborhood Park				1.50						0.00	1.50				
C1-C	Core	Pocket Plaza								0.17		0.00	0.17				
C2-C	Core	Pocket Plaza								0.19		0.00	0.19				
TS	Neighborhood Center	Town Square								0.25		0.00	0.25				
Sub-Total			**1,299**	**2.24**		**1.50**	**4.47**		**4.11**	**0.61**	**0.76**	**3.58**	**10.92**	**77,657**		**272,347**	
N3-C	Park	Community Rec Center[2]					0.25		0.25			0.09	0.45				
Total			**1,299**	**2.24**		**1.50**	**4.72**		**4.36**	**0.61**	**0.76**	**3.67**	**65646.01**	**77,657**		**272,347**	

Perimeter ROW includes ROW of Portola Avenue, Isabel Avenue, Trail & EVA, and Shea Center Drive

[1] Min. 75 sq. ft. per unit

[2] Up to 10% may be provided through indoor space

[3] Setback areas have not been counted toward the common area provided.

[4] Common areas must have a minimum dimension in any direction of 10 ft, include Common Garden/pocket parks, and Trails.

[5] Area counted towards common area excludes building footprint

[6] Private Open Space must have a mimimum dimension of 4'x8' of 50 sf in Core/Center

[7] Private Open Space must have a mimimum dimension of 6'x8' of 75 sf in Village

Min/ Max Park Sizes

Playground	N/A
Community Gardens	0.1 AC - 1.0 AC
Neighborhood Pocket Parks	0.1 AC - 1.0 AC
Pocket Plazas	0.1 AC - 1.0 AC
Plazas	0.25 AC - 2.0 AC

CONCEPT DESIGN

MASTER PLANNING
OPEN SPACE ANALYSIS

SP-8

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EXHIBIT C



Affordable Housing Table

Planning Area	VLI	LI	Med	Mod	TOTALS
S3A (rental)	53	99			152
C1B (rental)			57	57	114
S3B (rental)*	12	14	8	6	40
S1 (for sale)			5	15	20
C2-A (for sale)			4	11	15
S4 (for sale)			3	7	10
S1 or C2-A (add'l for sale)			6	6	12

Total Affordable Units:	363	28%
Total For Rental	306	24%
Total Very Low Income Rental	(65)	(5%)
Total Low Income Rental	(113)	(8.7%)
Total Median Rental	(65)	(5%)
Total Moderate Rental	(63)	(5%)
Total For Sale	57	4%
Total Median For Sale	(18)	(1%)
Total Moderate For Sale	(39)	(3%)
Total Market-Rate Units:	936	72%
Total Units	1,299	100%

*per LDC, Sec. 10.06.050-D(4)(c)(2)

CONCEPT DESIGN

MASTER PLANNING
AFFORDABLE HOUSING LOCATION SITE PLAN

SP-9

ISABEL PORTOLA OWNER, LLC

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EXHIBIT C



Project Summary - N1

Gross Land Area: ±5.6 Acres

Net Land Area: ±5.2 Acres

Total Units: 98 Homes

Density: 18.9 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 14,700 SF Total (150 SF per home)
- Common: 7,350 SF (75 SF per home; 10' min. dim.)
- Private: 7,350 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 50,772 SF Total (518 SF per home)
- Common: 42,153 SF (10' Min. Dimension)
- Private: 8,618 SF (88 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: N1	Proposed	Provded	Notes
Existing Zoning: Village	Village		
Front	**Facing Main Street:** Refer to Tabe 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	na 34 ft from PL 10 ft from PL	n/a Compliant Compliant
Interior	Min. `5 ft. where abutting existing residential uses;otherwise, Min. 0 ft. setback br all stories along alleyways and for first story net along alleyways; Min. 5 ft. for second ston; Min. 10 ft. for third story and above	Min garage setback from alley.3'. Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. `0 ft. separation between primary windows (living, dining, bedroom) of residential units.	6'-6" iin this request, there are no primary wincows from living, dining, bedrooms) 15' between porches.	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 26 ft. measured garage face to garage face along alleys, unless otherwise approvec by LPFC and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porches	Porches facing each other must be separated by 15ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	2 Porches are separated 7.5' & 9.9' Porch to Porch	Waiver
Notes:			Four (4) triplex buildings have been added to fit the site constraints.

CONCEPT DESIGN

MASTER PLANNING
N1 OPEN SPACE EXHIBIT

SP-10

ISABEL PORTOLA OWNER, LLC

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EXHIBIT C



Project Summary - N2

Gross Land Area: ± 3.2 Acres

Net Land Area: ± 3.1 Acres

Total Units: 56 Homes

Density: 18.2 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 8,400 SF Total (150 SF per home)
- Common: 4,200 SF (75 SF per home; 10' min. dim.)
- Private: 4,200 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 13,998 SF Total (250 SF per home)
- Common: 10,241 SF (10' Min. Dimension)
- Private: 3,540 SF (67 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: N2	Proposed	Provided	Notes
Existing Zoning: Center	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	10 all floors. Table 2.5 doesn't apply because there is no ground floor retail or 31ft from PL 10ft from PL	Compliant Compliant Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all sories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. Setback from interior PL: 13' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-3" (in this request, there are no primary windows from living, dining,	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys unless otherwise approved by LPFD and City Staf. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Bulding Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.01.020 are permitted.	189' separation between poches. Porches encroach 2'-4" into the setback	Compliant
Notes			Two (2) triplex buildings have been added to fit the site constraints.

CONCEPT DESIGN

MASTER PLANNING
N2 OPEN SPACE EXHIBIT

SP-11

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LIVERMORE, CALIFORNIA

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EXHIBIT C



Project Summary - N3-A

Gross Land Area: ±2.11 Acres

Net Land Area: ±1.89 Acres

Total Units: 40 Homes

Density: 21.2 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 6,000 SF Total (150 SF per home)
- Common: 3,000 SF (75 SF per home; 10' min. dim.)
- Private: 3,000 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 7,872 SF Total (197 SF per home)
- Common: 5,192 SF (10' Min. Dimension)
- Private: 2,680 SF (67 SF per home)

Porches:
- Porch Condition
- Corner Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: N3-A	Proposed	Provided	Notes
Existing Zoning: Center	Village		
Front	**Facing Main Street:** Refer to T able 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Majo Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	10' for all floors 27 ft from curb 10 ft from PL	Compliant Compliant Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback or all stories along alleyways and for first story not along alleyways; Min. .5 ft. for second story; Min. 10 ft. for third story and above	Setback from Main Street PL: 2nd &3rd floor are setback 12.9' & and 1st floor is setback 14.9'. Side setback along A street is 10' on all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining,bedroom) of residential units.	7'-6" building Separation Porches do not ace each other.	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face b garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width /Min. 26' Fire Lane / Min.30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.)along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches do not ace each other. Porches encroach 2'-6" into the setback	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
N3-A OPEN SPACE EXHIBIT

SP-12

ISABEL PORTOLA
OWNER, LLC

WHA.

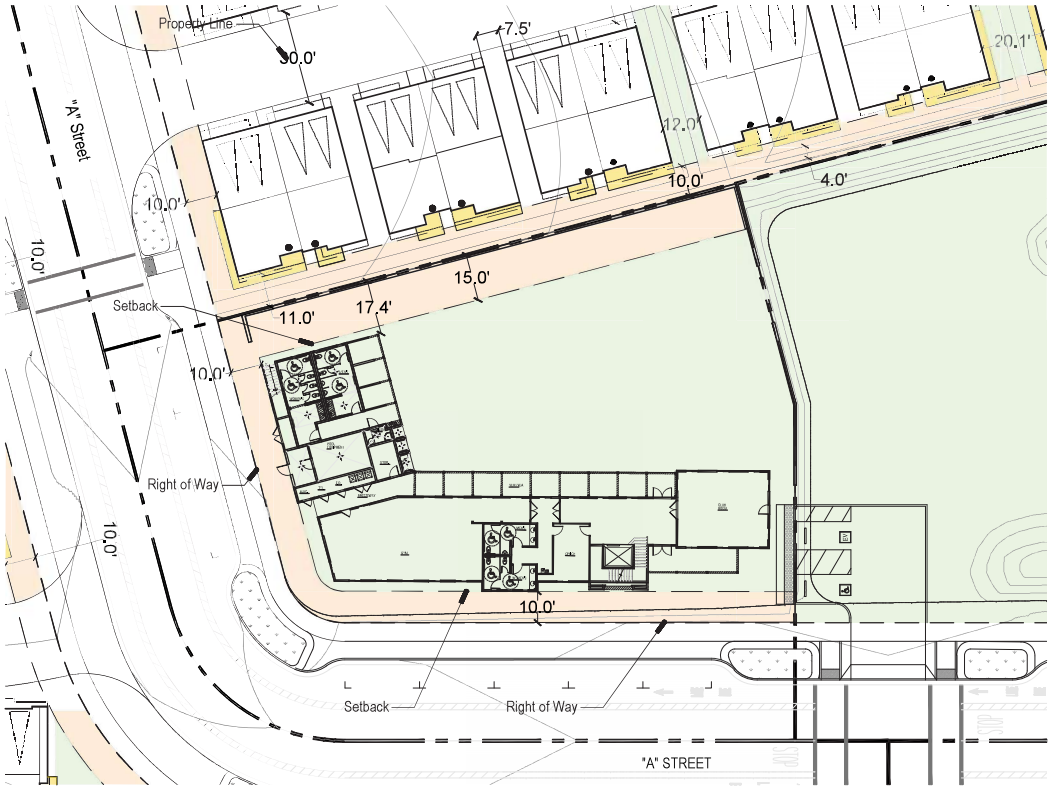
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EXHIBIT C



Project Summary - N3-C

Gross Land Area: ±0.45 Acres

Setbacks:

Setback Table PA	Original	Provided	Notes
N3-C	Center		
Front	**Facing Main Street:** Refer o Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb **Facing All Other Streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	10 ft from PL	
Interior	Mn. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Mn. 5 ft. for second story; Min. 10 ft. for hird story and above	17.4' setback provided	Compliant
Rear	Same as Interior Setback		
Building Separation	Mn. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.		
Alley Garage Separation	Mn. 20 ft. paved width for aleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.		
Notes			

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EXHIBIT C



Project Summary - C1-A

Gross Land Area: ±3.02 Acres

Net Land Area: ±2.89 Acres

Total Units: 62 Homes

Density: 21.5 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 9,300 SF Total (150 SF per home)
- Common: 4,650 SF (75 SF per home; 10' min. dim.)
- Private: 4,650 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 20,380 SF Total (329 SF per home)
- Common: 15,420 SF (249 SF per home)
- Private: 4,960 SF (80 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: C1-A	Proposed	Provided	Notes
Existing Zoning: Core	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	20 ft from curb 10 ft from P-	Compliant Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story Min. 10 ft. for third story and above	Min garage setback from alley 3'. Setback from interior PL 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10 between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Minimum 15' separation between porches. Porches encroach 2'-6" into the setback	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
C1-A OPEN SPACE EXHIBIT

SP-14

ISABEL PORTOLA OWNER, LLC

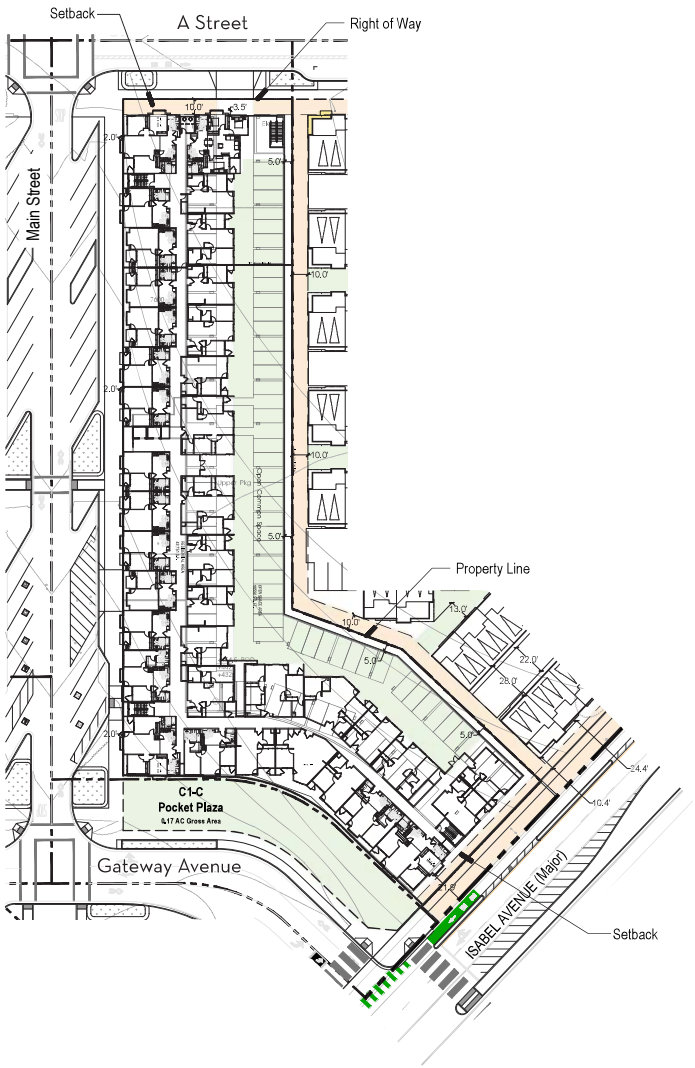
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Project Summary - C1-B

Gross Land Area: ± 1.53 Acres

Net Land Area: ± 1.49 Acres

Total Units: 114 Homes

Density: 76.6 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 14,250 SF Total (125 SF per home)
- Common: 8,550 SF (75 SF per home; 10' min. dim.)
- Private: 5,700 SF (50 SF per home; 4' W. x 8' D min. dim.)

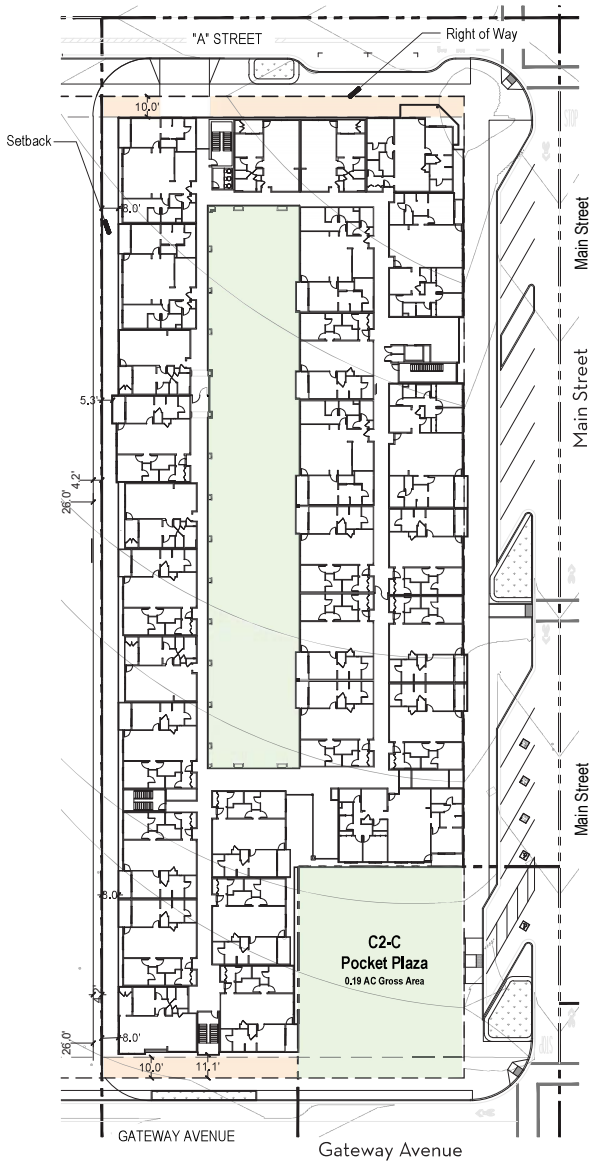
Provided: 20,318 SF Total (178 SF per home)
- Common: 14,618 (10' Min. Dimension)
- Private: 5,700 SF (50 SF per home)

Setback:

Setback Table PA: C1-B	Proposed	Provided	Notes
Existing Zoning: Core	Core		
Front	**Facing Main Street** Refer to Table 2-5: Building Projections along Main Street - Architectural projections such as balconies, awnings, and arcades may project up to 5' feet over the property line along Main Street, if located at least 8 feet above sidewalk grade	0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 5' over PL	Waiver (Refer to page CM-2)
	Facing Major Streets: 20 ft.(min.) from the curb	21.8' setback from Isabel Avenue	Compliant
	Facing All Other Streets: Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	10 ft from PL Top floor balconies unroofed for stepback	Compliant
Interior	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise, Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage first story 5' setback from interior PL. All other floors 10' setback from interior PL.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium garage structure – doesn't apply.	
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Podium garage structure – doesn't apply.	
Notes		The entry to the lower garage level serving both commercial and residential uses is located on the Main Street frontage. The entry to the upper residential-only garage level comes from the street to the north.	

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EXHIBIT C



Project Summary - C2-A

Gross Land Area: ±1.7 Acres

Net Land Area: ±1.7 Acres

Total Units: 116 Homes

Density: 67.5 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 14,500 SF Total (125 SF per home)
- Common: 8,700 SF (75 SF per home; 10' min. dim.)
- Private: 5,800 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 17,687 SF Total (152 SF per home)
- Common: 11,887 (10' Min. Dimension)
- Private: 5,800 SF (50 SF per home)

Setback:

Setback Table PA: C2-A	Proposed	Provided	Notes
Existing Zoning: Core	Core		
Front	**Facing Main Street:** Refer to Table 2-5: Building Projections along Main Street - Architectural projections such as balcones, awnings, and arcades may project up to 5' feet over the property line along Main Street,if located at least 8 feet above sidewalk grade **Facing Major Streets:** 20 ft. (min.) from the curb **Facing All Other Streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 6' over PL. 10 ft from PL	Waiver (Refer to page CM-3) Compliant
Interior	Min. 0 ft. side setback along Main St. alleyways, and for first story not along alleyways; otherwise. Min. 5 ft. for second story. Min. 10 ft. for third story and above	10' for all floors from PL along A Street. 12'for all floo's from PL along Gatway Avenue.	Compliant
Rear	Same as Interior Setback	Min garagefirst story 8' setback fron rear PL.	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	Psdium garage structure – doesn't appy.	
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Psdium garage structure – doesn't appy.	
Notes			

CONCEPT DESIGN

MASTER PLANNING
C2-A OPEN SPACE EXHIBIT

SP-16

ISABEL PORTOLA
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Project Summary - C2-B

Gross Land Area: ±0.99 Acres

Net Land Area: ±0.99 Acres

Total Units: 17 Homes

Density: 17.1 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

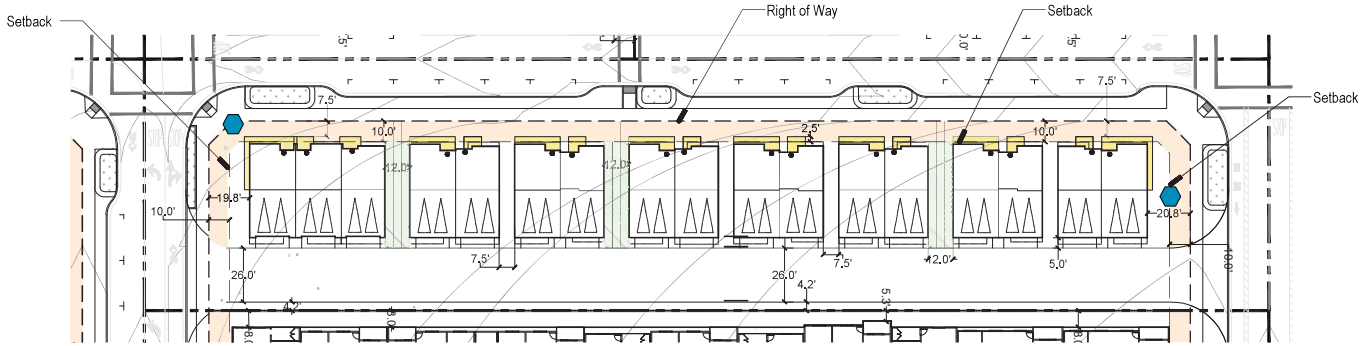
Required: 2,550 SF Total (150 SF per home)
- Common: 1,275 SF (75 SF per home; 10' min. dim.)
- Private: 1,275 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 3,010 SF Total (177 SF per home)
- Common: 1,847 SF (10' Min. Dimension)
- Private: 1,163 SF (68 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition (Enhanced Elevation)

Enhanced Elevation:

Setback:



Setback Table PA: C2-B	Proposed	Provided	Notes
Existing Zoning: Core	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	10 ft from PL	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways. Min. 5 ft. for second story; Min. 10 ft. for third story and above	10 ft from PL	Compliant
Rear	Same as interior Setback	Setback from rear PL: appx. 33' all floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-6" between buildings. There are no primary windows from living, dining, bedrooms)	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 26' paved width / garage face to garage face doesn't apply because garages do not face each other.	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches encroach 2'-6" into the setback	Compliant
Notes			One (1) triplex building has been added to fit the site constraints.

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EXHIBIT C

Project Summary - C3

Gross Land Area: ±1.88 Acres

Net Land Area: ±1.88 Acres

Total Units: 45 Homes

Density: 23.9 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 6,750 SF Total (150 SF per home)
- Common: 3,375 SF (75 SF per home; 10' min. dim.)
- Private: 3,375 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 8,206 SF Total (182 SF per home)
- Common: 4,336 SF (10' Min. Dimension)
- Private: 3,870 SF (86 SF per home)

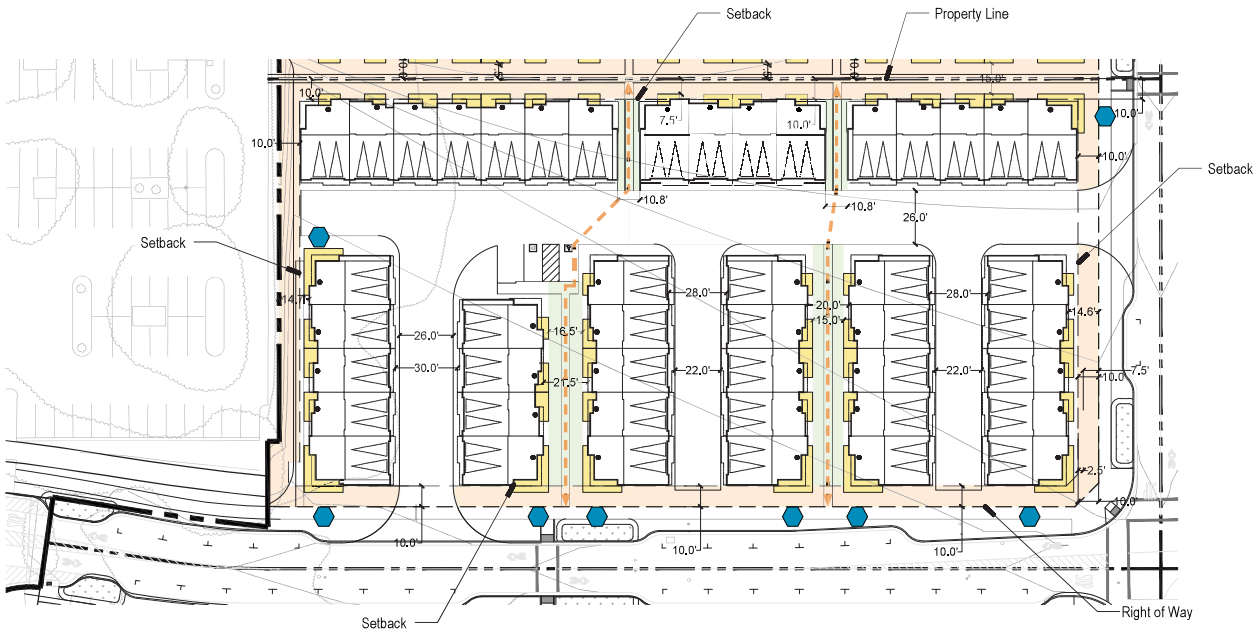
Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: C3	Proposed	Provided	Notes
Existing Zoning: Center	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft fron PL	10' for all floors from PL	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story no along alleyways; Min. 5 ft. for second story; Min. 10 ft. for thirc story and above	10 ft from PL	Compliant
Rear	Same as Interior Setback	Setback from rear PL: appx. 33' all floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) o residential units.	10' min	Compliant
Alley Garage Separation	Min. 20 ft. pavedwidth for alleys, unless otherwise approved by LPFD and City Staff. Min. 26 ft. measured garage face togarage face along alley, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 25' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.02 are permitted.	15' min between porches. Porches encroach 2'-6" into the setback	Compliant
Notes			



MASTER PLANNING
C3 OPEN SPACE EXHIBIT

SP-18

CONCEPT DESIGN

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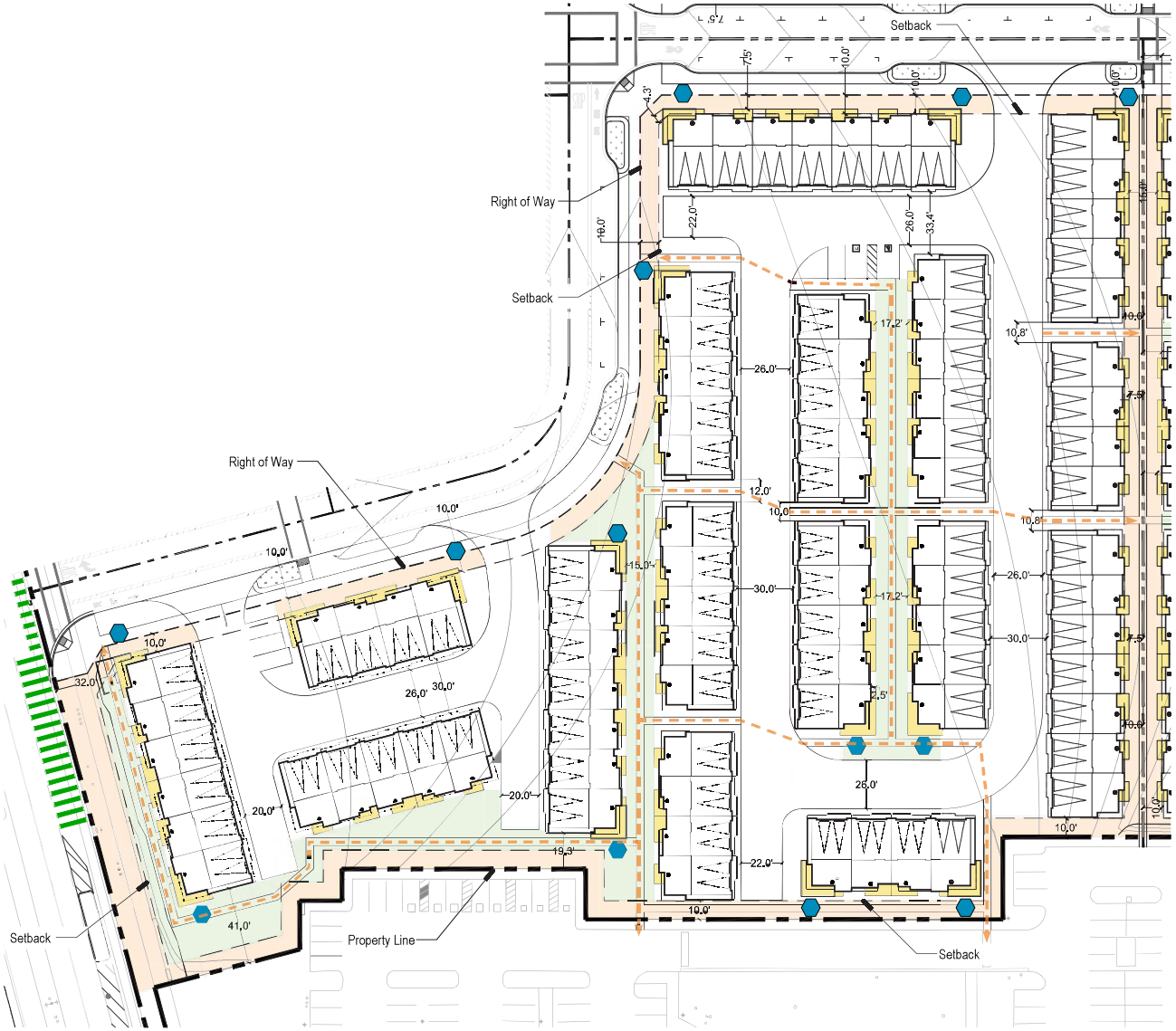
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EXHIBIT C



Project Summary - C5

Gross Land Area: ±3.87 Acres

Net Land Area: ±3.79 Acres

Total Units: 84 Homes

Density: 22.1 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 12,600 SF Total (150 SF per home)
- Common: 6,300 SF (75 SF per home; 10' min. dim.)
- Private: 6,300 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 23,273 SF Total (277 SF per home)
- Common: 16,053 SF (10' Min. Dimension)
- Private: 7,220 SF (86 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA:C5	Proposed	Provided	Notes
Existing Zoning: Center	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	Approximately 32' ft from curb 10 ft from PL	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min. garage setback from alley: 3'. Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 14 ft. separation between primary windows (living, dining, bedroom) of residential units.	0' between buildings. 15' between porches	Compliant
Alley Garage Separation	Min. 24 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 24 ft. measured garage face to garage face abng alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
[illegible] Separation	Porches facing each other must be separated by 15 f. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches . Porches encroach 2'-6" into the setback	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
C5 OPEN SPACE EXHIBIT

SP-19

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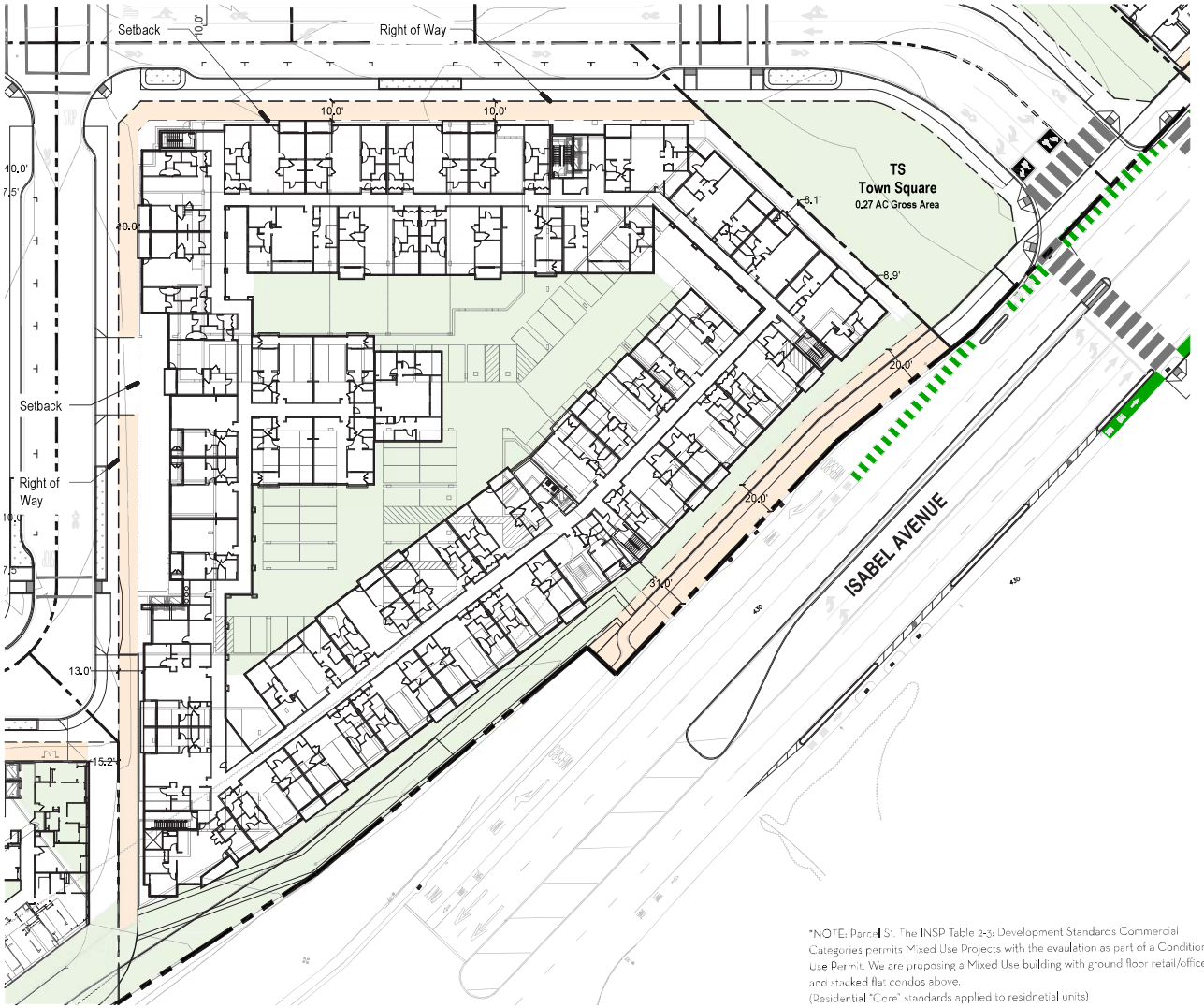
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1219

EXHIBIT C



*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Project Summary - S1

Gross Land Area: ±2.8 Acres

Net Land Area: ±2.5 Acres

Total Units: 172 Homes

Density: 67.5 Homes per Acre

Open Space:

Neighborhood Commercial
Required: Min. 0.25 acres on Neighborhood Commercial block

Neighborhood Commercial
Provided: *Provided 0.27 AC plaza in Town Square (TS)

Residential (Core)
Required: 21,500 SF Total (125 SF per home)
- Common: 12,900 SF (75 SF per home; 10' min. dim.)
- Private: 8,600 SF (50 SF per home; 4' W. x 8' D min. dim.)

Residential (Core)
Provided: 27,671 SF Total (161 SF per home)
- Common: 19,071 SF (10' Min. Dimension)
- Private: 8,600 SF (50 SF per home)

Setback:

Setback Table PA: S1	Proposed	Provided	Notes
Existing Zoning: Neighborhood Commercial (Mixed Use)	Neighborhood Commercial (Applied to Ground Floor Retail)		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20' from curb **Facing all other streets**: 0' min to 10' max from PL.	Appx. 31' from curb. 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Compliant
Interior	N/A	10' at parking podium, 10' residential stories	
Rear	N/A	Same as Interior Setback	
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 5' into setback areas.	Compliant
Notes			
Existing Zoning: Neighborhood Commercial (Mixed Use)	Con (Applied to Residential on top)		
Front	**Facing Main Street:** Refer to Table 2-5: Building Pojections alongMain Street - Architectural projections such as balconies, awnings, and arcades may project up to 5'feet over the property line along Main Street, if located atleast 8 feet above sidewalk grade **Facing Major Streets:** 2(ft. (min.) from the curb **Facing All Other Streets** Min. 5 ft.; Max.12 ft. Min. 10 ft. for 3rd story & above	Appx. 31' from curb. 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Compliant
Interior	Min. 0 ft. side setback along Main St, alleyways, and for first story not alongalleyways; otherwise, Min. 5 ft. for second story, Min. 10 ft. for third story and above	10' at parking podium, 10 residential stories	Compliant
Rear	Same as Interior Setback	Same as interior Setback	
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) o residential units.	Single structure – doesn't apply	
Building Pojection	Decks, canopies, etc. canproject up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
S1 OPEN SPACE EXHIBIT

SP-20

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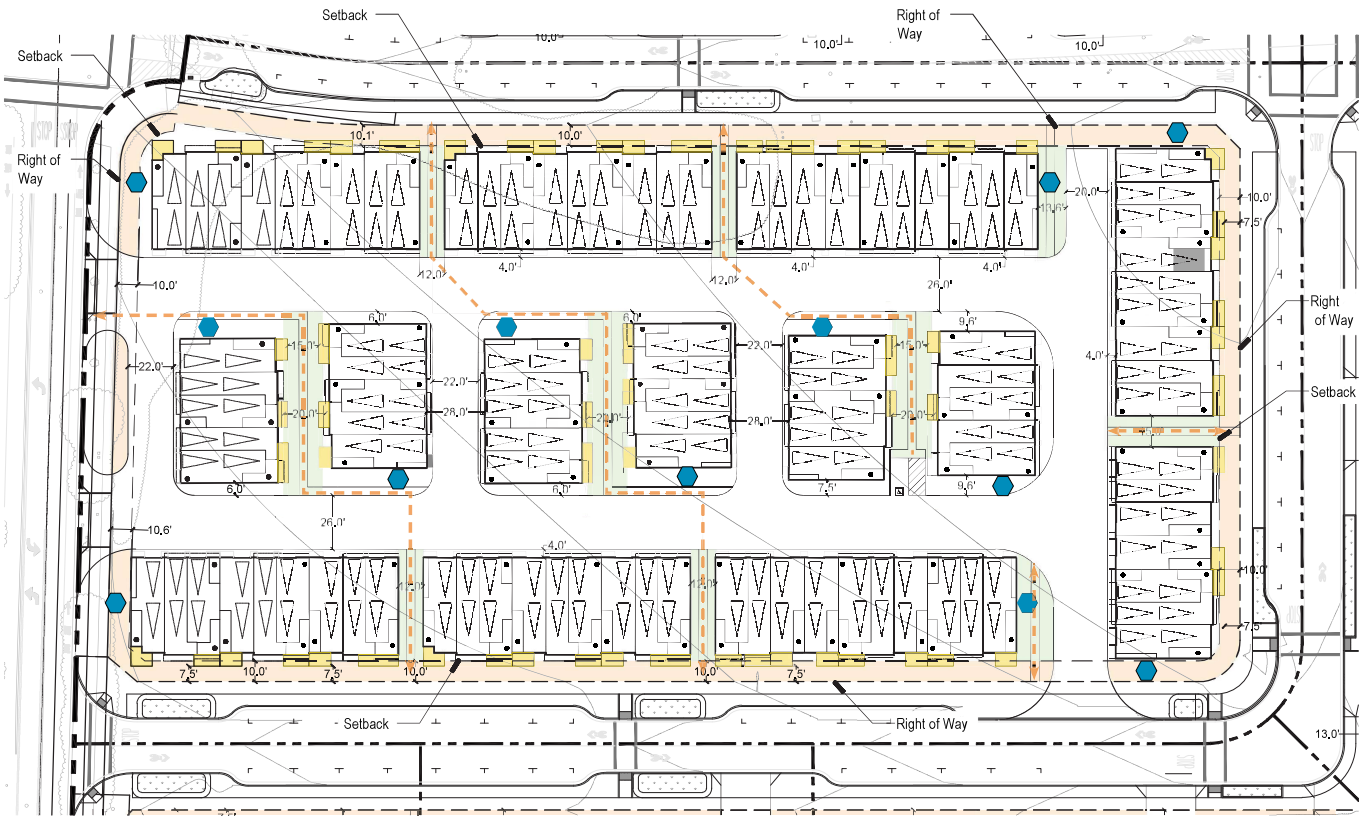
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EXHIBIT C



Project Summary - S-2

Gross Land Area: ±3.46 Acres

Net Land Area: ±3.36 Acres

Total Units: 102 Homes

Density: 30.3 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 15,300 SF Total (150 SF per home)
- Common: 7,650 SF (75 SF per home; 10' min. dim.)
- Private: 7,650 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 14,595 SF Total (143 SF per home)
- Common: 9,186 SF (10' Min. Dimension)
- Private: 5,409 SF (53 SF per home)

Porches:
- Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA: S2	Proposed	Provided	Notes
Existing Zoning: Center	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	10 ft from PL	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley. 3'. There are no interior PL for this parcel.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	12' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches.. Porches encroach 2'-3" into the setback	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
S2 OPEN SPACE EXHIBIT

SP-21

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OWNER, LLC

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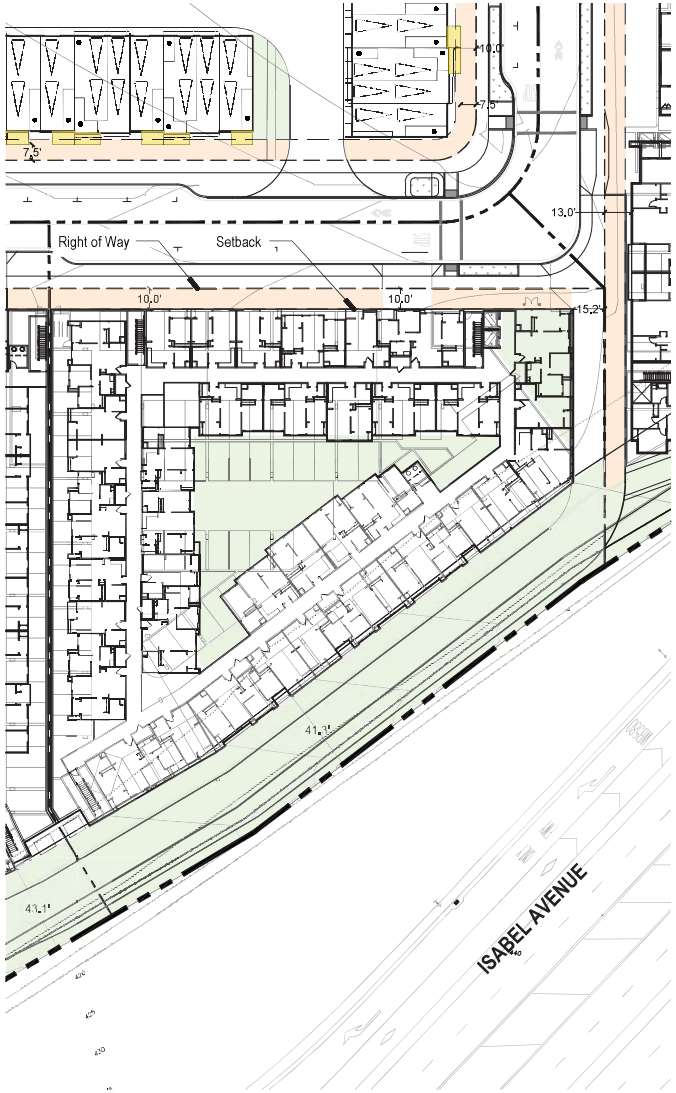
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EXHIBIT C



Project Summary - S3-A

Gross Land Area: ±1.4 Acres

Net Land Area: ±1.1 Acres

Total Units: 152 Homes

Density: 136.3 Homes per Acre

Open Space:

Required: 19,000 SF Total (125 SF per home)
- Common: 11,400 SF (75 SF per home; 10' min. dim.)
- Private: 7,600 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 21,314 SF Total (140 SF per home)
- Common: 13,714 SF (10' Min. Dimension)
- Private: 7,600 SF (50 SF per home)

Setback:

Setback Table PA: S3-A	Proposed	Provided	Notes
Existing Zoning: Office Core	Core		
Front	**Facing all other streets:** 0' min to 20' max from PL.	Facing all other streets: 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise, Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage; 10' setback all other floors	Compliant
Rear	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise, Min. 5 ft. for second story; Min. 10 ft. for third story and above	41' setback all other floors	Compliant
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
Notes			

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Project Summary - S3-B

Gross Land Area: ±1.6 Acres

Net Land Area: ±1.4 Acres

Total Units: 200 Homes

Density: 145 Homes per Acre

Open Space:

Required: 25,000 SF Total (125 SF per home)
- Common: 15,000 SF (75 SF per home; 10' min. dim.
- Private: 10,000 SF (50 SF per home; 4' W. x 8' D min. dim.)

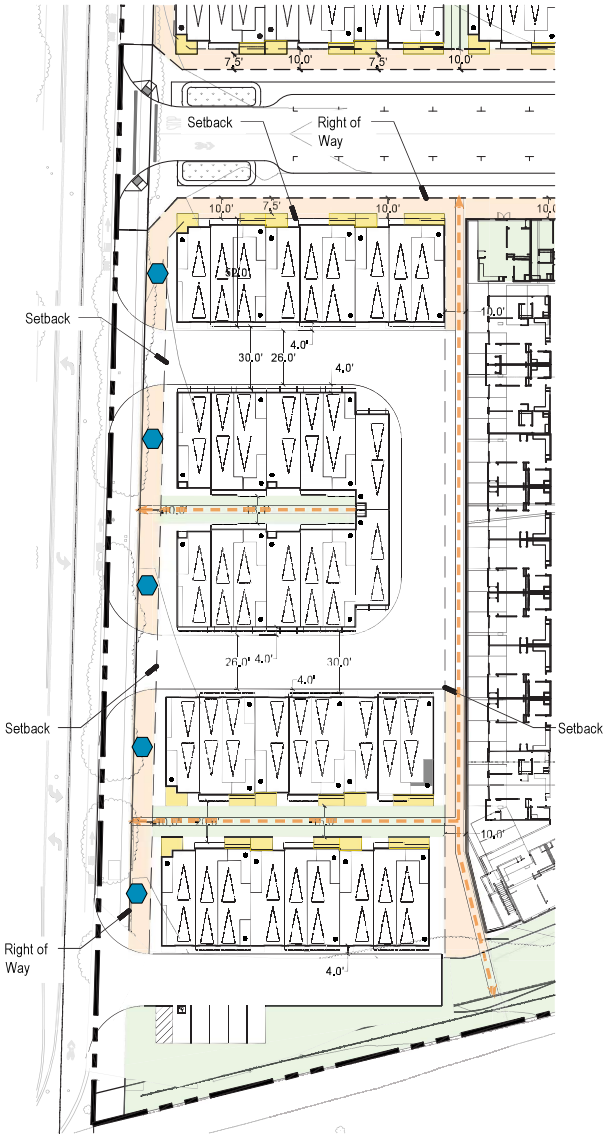
Provided: 33,075 SF Total (165 SF per home)
- Common: 23,075 SF (10' min dimension)
- Private: 10,000 SF (50 SF per home)

Setback:

Setback Table PA: S3-B	Proposed	Provided	Notes
Existing Zoning: Office Core	Core		
Front	Facing All Other Streets: Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	Facing all other streets: 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage, 10' setback all other floors	Compliant
Rear	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise, Min. 5 ft. for second story; Min. 10 ft. for third story and above	43' setback all other floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by	Single structure – doesn't apply	
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
Notes			

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EXHIBIT C



Project Summary - S4

Gross Land Area: ±1.71 Acres

Net Land Area: ±1.33 Acres

Total Units: 41 Homes

Density: 30.8 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 6,150 SF Total (150 SF per home)
- Common: 3,075 SF (75 SF per home; 10' min. dim.)
- Private: 3,075 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 11,050 SF Total (270 SF per home)
- Common: 8,770 SF (10' Min. Dimension)
- Private: 2,280 SF (56 SF per home)

Porches:

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA:S4	Proposed	Provided	Notes
Existing Zoning: Office Core	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex).		
	Facing Major Streets: 20 ft from curb		
	Facing All Other Streets: 10 ft from PL	Provided 10'	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Provided 10'	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	20' between building to building.	Compliant
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' Garage to Garage	Compliant
Perch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.05.020 are permitted.	15' between porches. . Porches encroach 2'-6" into the setback	Compliant
Notes			

CONCEPT DESIGN

MASTER PLANNING
S4 OPEN SPACE EXHIBIT

SP-24

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EXHIBIT C

Parcel N1			
Existing Zoning: Village			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	4 Stories Max, 2 Stories Min (Height Zone 490 S) (Height Zone 495 N) (Height Zone 505 NW)	3 Stories: Max. Hgt: 490.25 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd =208 Max. Req'd =271 Proposed=219	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 430 SF/DU Private Open Space: 88 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 34' ft. from the curb. **Facing all other streets:** 10 ft. from PL.	N/A Compliant Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	6'-6" (in this request, there are no primary windows from living, dining, bedrooms) 15' between porches	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	2 Porches are separated 7.5' & 9.9'	Waiver
Note:		Four (4) Triplex buildings have been added to fit site constraints.	

Parcel N2			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. , 2 Stories Min. (Height Zone 495 S) (Height Zone 505 N)	3 Stories: Max. Hgt: 486.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 119 Max. Req'd = 157 Proposed = 137	Compliant within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 183 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 67 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb.	**Facing Main Street:** 10' all floors **Table 2.5** doesn't apply because there is no ground floor retail or flex **Facing Major Streets:** Appx. 31 ft. from the curb.	Compliant Compliant
	Facing all other streets: 10 ft. (min.) from PL.	**Facing all other streets:** 10' for all floors from PL.	Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-6" (in this request, there are no primary windows facing each other from living, dining, bedrooms)	Compliant
Alley Garage Separation **Alley Garage Separation (Cont.)**	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	18.9' separation between porches. Porches encroach 2'-6" into the setback	Compliant
Note:		Two (2) Triplex buildings have been added to fit the site constraints	

Parcel N3-A			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max., 2 Stories Min (Height Zone 485 W) (Height Zone 495 E)	3 Stories: Max. Hgt: 487.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 85 Max. Req'd = 116 Proposed = 85	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 130 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 67 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex).	**Facing Main Street:** 10' for all floors	Compliant
	Facing Major Streets: 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Major Streets:** Appx. 27 ft. from the curb. **Facing all other streets:** 10' for all floors from PL.	Compliant Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7.5' Building Separation (in this request, there are no primary windows from living, dining, bedrooms)	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches do not face each other. Porches encroach 2'-6" into the setback	Compliant

Parcel N3-B			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces		Neighborhood Park 1.5 acres	
Height	4 Stories (485-490)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	7 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 65,340 SF N/A	N/A N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min 10' from PL.	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

COMPLIANCE MATRIX

CM-1

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.
architects . planners . consultants

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EXHIBIT C

Parcel N3C Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Rec Center	Park	Compliant
Height	4 Stories (Height Zone 490 S) (Height Zone 495 N)	2 Stories : 468.2 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	10 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	N/A	N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** Min 10' for all floors from PL.	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	Same as Interior Setback	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

Parcel C1-A Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	6 Stories Max, 3 Stories Min (Height Zone 495 S & 500 N)	3 Stories : Max. Hgt: 483 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 132 Max. Req'd = 164 Proposed=141	
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 249 SF/DU Private Open Space: 80 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Min. 20 ft. from the curb. **Facing all other streets:** 10' for all floors from PL.	N/A Compliant Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors -	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches Porches encroach 2'-6" into the setback	Compliant

Parcel C1-B Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	6 Stories (Height Zone 495) Table 2-5: Retail Floor to Clg: 14' min	3 Stories over tall retail level Retail Flr to Clg: ≥14' Avg (sloping site): 488.9 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 174 Max. Req'd = 226 Proposed = 215	Compliant Within range of min/max
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 128 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** 0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 5' over PL **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Waiver See **Parcel C1-B (Cont.)** table below N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage first story 5' setback from interior PL. All other floors 10' setback from interior PL.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 20 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Podium garage structure – doesn't apply.	N/A
NOTE:	Parking	The entry to the lower garage level serving both commercial and residential uses is located on the Main Street frontage. The entry to the upper residential-only garage level comes from the street to the north.	

Parcel C1-B (Cont.) Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Table 2-5	Ground Floor Retail		
Residential Density	Refer to the density range of the underlying residential zone; spaces designed as live/work units shall count as one dwelling unit each.	Core applied to the units above	N/A
Floor to Ceiling Height	Min. 16 ft.	14'	Waiver
Front setbacks along Main Street	Must be 0 for a minimum 75% of street frontage per block; Min. 15 ft. for a minimum 15% of street frontage per block for public open space/outdoor dining area. For the 4th story and above, an additional 10 ft. setback	Pocket Plaza has been provided through C1-C Same as above 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Same as above Waiver
Building Projections along Main Street	Architectural projections such as balconies, awnings, and arcades may project up to 5 feet over the property line along Main Street, if located at least 8 feet above sidewalk grade.	Canopies & Balconies project up to 5' over PL	Compliant

Parcel C1-C Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Pocket Plaza	0.17 acres	N/A
Height	6 Stories (Height Zone 500)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4 Comm 1:400 1:250	N/A	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 7,405 SF	N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	N/A N/A N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

COMPLIANCE MATRIX

CM-2

CONCEPT DESIGN

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EXHIBIT C

Parcel C2-A			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	6 Stories Max, 3 Stories Min. (Height Zone 500 S) (Height Zone 490 N) Table 2-5: Retail Floor to Clg: 14' min	4 Stories over tall retail level Retail Flr to Clg: 14' Avg (sloping site) Exceeds Height Envelope by appx. 8.5' at north end only: 498.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd =200 Max. Req'd =249 Proposed=218 Within range of min/max.	Compliant
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 102 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** 0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 5' over PL **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Waiver See **Parcel C2-A (Cont.)** table below Compliant Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage first story 5' setback from interior PL. All other floors 10' setback from interior PL.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Podium garage structure – doesn't apply.	N/A

Parcel C2-A (Cont.)			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Table 2-5	Ground Floor Retail		
Residential Density	Refer to the density range of the underlying residential zone; spaces designed as live/work units shall count as one dwelling unit each.	Core applied to the units above	N/A
Floor to Ceiling Height	Min. 16 ft.	14'	Waiver
Front setbacks along Main Street	Must be 0 for a minimum 75% of street frontage per block; Min. 15 ft. for a minimum 15% of street frontage per block for public open space/outdoor dining area. For the 4th story and above, an additional 10 ft. setback	Pocket Plaza has been provided through C2-C Same as above 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Same as above Waiver
Building Projections along Main Street	Architectural projections such as balconies, awnings, and arcades may project up to 5 feet over the property line along Main Street, if located at least 8 feet above sidewalk grade.	Canopies & Balconies project up to 5' over PL	Compliant

Parcel C2-B			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	6 Stories Max, 3 Stories Min (Height Zone 500)	3 Stories : Max. Hgt: 474.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 36 Max. Req'd = 48 Proposed = 45	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 109 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 68 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** Min 10'	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min 10' from PL	Compliant
Rear	Same as Interior Setback	Setback from rear PL: appx. 33' all floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-6" (in this request, there are no primary windows facing each other from living, dining, bedrooms)	Compliant Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 26' paved width / garage face to garage face doesn't apply because garages do not face each other.	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches do not face each other. Porches encroach 2'-6" into the setback	Compliant
Notes			One (1) triplex building has been added to fit site constraints.

Parcel C2-C			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Pocket Plaza	0.19 acres	N/A
Height	6 Stories (500)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4 Comm 1:400 1:250	0 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 7,248 SF N/A	N/A N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	N/A N/A N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A

Parcel C3			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. 4 Stories Min (Height Zone 495W & 500E)	3 Stories: Max. Hgt: 469.3 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 96 Max. Req'd = 127 Proposed=106	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 96 SF/DU Private Open Space: 86 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10.8' min building separation	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' garage face to garage face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' min between porches. Porches encroach 2'-6" into the setback	Compliant

COMPLIANCE MATRIX

CM-3

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.
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EXHIBIT C

Parcel C5			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. 4 Stories Min. (Height Zone 455 S & 485 N) Note: 455 was INSP park site	3 Stories : Max. Hgt: 478.3 MSL	Compliant *Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd =179 Max. Req'd = 231 Proposed=182	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 191 SF/DU Private Open Space: 86 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Approximately 32' ft from curb **Facing all other streets:** 10' for all floors from PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min. garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches. Porches encroach 2'-6" into the setback	Compliant

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Parcel S-1			
Existing Zoning: Neighborhood Commercial			
	Proposed	**Submittal**	**Compliance**
Zoning	Neighborhood Commercial		
Height	(Height Zone 485)	Exceeds Height Envelope by appx. 11.5': 496.5 MSL	Waiver
Residential Density (Mixed Use Projects)	To be evaluated as part of Conditional Use Permit	Provided Mix Use building with ground floor retail and stacked flat condos above. (Core Standards applied to residential units)	Compliant
Block Dimension	Maximum 300 feet between publicly accessible paths of travels (including streets, pathways, and driveways.)	Block dimensions along C Street are 120' (Building edge to driveway) & 116' (driveway to driveway) & Along Gateway are 190' (building edge to pathway)	Compliant
FAR	0.4-1.0	0.30	Waiver
Parking	Type: Min Max Comm 1:600 1:300	Min. Req'd = 43 Max. Req'd = 85 Proposed = On Street Parking = (8) Commercial Parking = (35) Provided Parking = 43 *Note: Onstreet parking for parcel S1 is provided for the Commercial Parking requirement	Compliant Within range of min/max.
Open Space	Public: Min. 0.25 acres on Neighborhood Commercial block	0.25-acre Town Square provided	Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing all other streets:** 0' min to 10' max from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 31' from curb. **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	N/A Compliant Compliant
Interior Setback (Side/Rear)	N/A	10' at parking podium, 10' residential stories	N/A
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
On-Site Landscaping	Min 10% of site area. Trees shall be planted in accordance with City Stds and Guidelines. Street setback areas and setbacks adjacent to residential shall include trees.	0.60 ac. Podium Courtyard, 0.24 ac. Trail, 0.24 ac. setbacks = 1.08 ac On net site area of 2.55 ac = 42.3% Setbacks include trees.	Compliant
Public Open Space	Min 0.25 acres on Neighborhood Commercial Block	Provided on NB Block in "TS" as a town square.	Compliant

Parcel S-1 Continued			
Existing Zoning: Neighborhood Commercial			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 485)	Exceeds Height Envelope by appx. 11.5': 496.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 268 Max. Req'd = 450 Proposed = 311	Compliant Within range of min/max
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 169 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 31' from curb. **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	10' at parking podium, 10' residential stories	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 20 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
NOTE:		The entry to the lower garage level serving both commercial and residential uses is located on the Main Street frontage. The entry to the upper residential-only garage level comes from the street to the north.	

Parcel S2			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max., 2 Stories Min. (Height Zone 485 W) (Height Zone 490 E)	3 Stories: Max. Hgt: 463.5 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 183 Max. Req'd = 246 Proposed = 239	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 90 SF/DU Private Open Space: Plan 1: 10'-3" x 7'-3" @ 75 SF Plan 2: 14'-2" x 5'-4" ~~@ 75 SF~~ Plan 3: 10'-8" x 7'-6" @ 87 SF Provided 53 SF/DU	Compliant Waiver - Plan 2 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** 10' from face of building to PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. There are no interior PL for this parcel.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	12' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' minimum between porches. Porches encroach 2'-6" into the setback	Compliant

COMPLIANCE MATRIX CM-4

CONCEPT DESIGN

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EXHIBIT C

Parcel S3-A			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 485)	Max. Hgt: 491 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 172 Max. Req'd = 307 Proposed = 182	Compliant Within range of min/max
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 84 SF/DU Private Open Space: Complies, min. 50 SF/Unit	Compliant Compliant
Setback			
Front	**Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior Setback (Side)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage, 10' setback all other floors	Compliant
Interior Setback (Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	41' setback all other floors	Compliant
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	Does not Apply
Building Projections	Decks, canopies, etc. can project up to 5' into the public ROW or required setbacks.	Decks and canopies will project up to 3' into setback areas.	Compliant

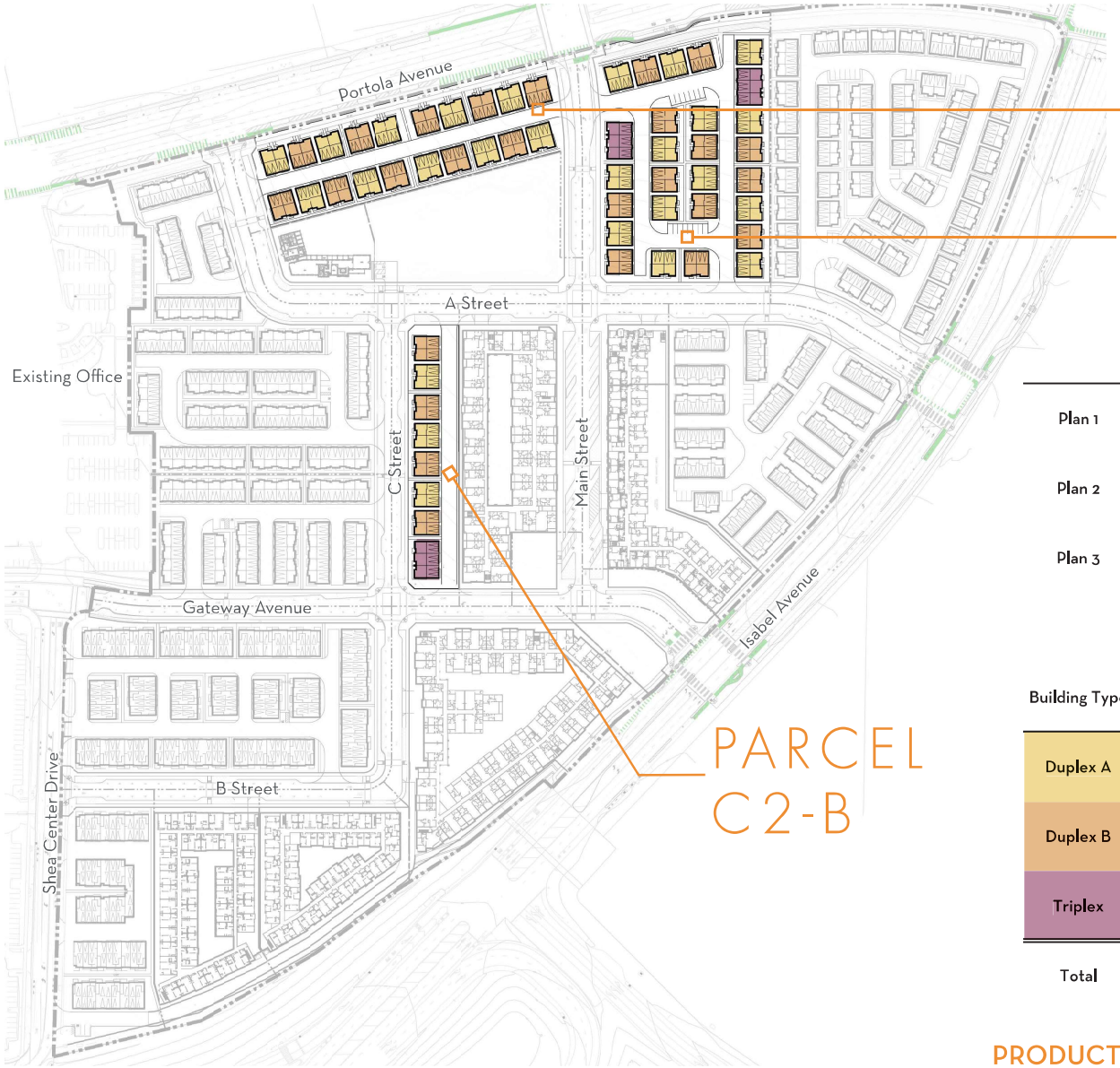
Parcel S3-B			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 475)	Max. Hgt: 495.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 245 Max. Req'd = 390 Proposed = 245	Compliant Within range of min/max
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 115 SF/DU Private Open Space: Complies, min. 50 SF/Unit	Compliant Compliant
Setback			
Front	**Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior Setback (Side)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage, 10' setback all other floors	Compliant
Interior Setback (Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	43' setback all other floors	Compliant
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	Does not Apply
Building Projections	Decks, canopies, etc. can project up to 5' into the public ROW or required setbacks	Decks and canopies will project up to 3' into setback areas.	Compliant

Parcel S4			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	(Height Zone 475)	Max. Hgt: 459 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 75 Max. Req'd = 102 Proposed = 91	Compliant
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 214 SF/DU Private Open Space: Plan 1: 10'-3" x 7'-3" @ 75 SF Plan 2: 14'-2" x 5'-4" @ ~~75 SF~~ Plan 3: 10'-8" x 7'-6" @ 87 SF Provided 56 SF/DU	Compliant Waiver - Plan 2 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing all other streets:** 10 ft. (min.) from PL.	Provided 10'	Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. There are no interior PL for this parcel.	Compliant
Building Separation	Min. 20 ft. window to window separation	Min. 20 ft. window to window separation Min 15' porch to porch	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' Building to Building	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' minimum between porches. Porches encroach 2'-6" into the setback	Compliant

Parcel TS			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces		Town Square	
Height	(Height Zone 485)	0 Stories	N/A
FAR	0.4-1.0	N/A	N/A
Parking	Type: Min Max Comm 1:600 1:300	0 Provided	N/A
Open Space		Total Area 10,890 SF	N/A
Setback			
Front	**Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 0' min to 10' max from PL.	**Facing Major Streets:** N/A **Facing all other streets:** N/A	N/A N/A
Interior Setback (Side/Rear)	N/A	N/A	N/A
Building Separation	Min. 20 ft. window to window separation	N/A	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	N/A	N/A

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	2,192	3	3.5
Plan 2	2,290	3	3.5
Plan 3	2,402	4	3.5

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
Duplex A	26	0	26	52	119,444
Duplex B	0	26	26	52	121,992
Triplex	0	3	6	9	21,282
Total	**26**	**29**	**58**	**113**	**258,588**

Height Limit N2:	**490'-505'***
Max. Height:	486.5 MSL
Height Limit N3-A:	**485'**-495'***
Max. Height:	487.5 MSL
Height Limit C2-B:	**490'-500'***
Max. Height:	474.5 MSL
Building Height:	**± 37.5'**
Stories:	**3**

*Height above MSL

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED PRODUCT ALLOCATION

A1-1

CONCEPT DESIGN

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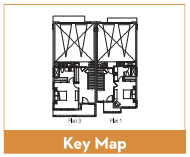
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LIVERMORE, CALIFORNIA

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Key Map

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3A PERSPECTIVE

A1-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



ENHANCED LEFT



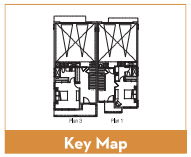
FRONT



RIGHT



REAR



Key Map

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 ELEVATIONS A

A1-3

CONCEPT DESIGN

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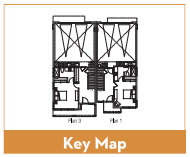
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EXHIBIT C





CONCEPT DESIGN

B - TRADITIONAL

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3B PERSPECTIVE

A1-4

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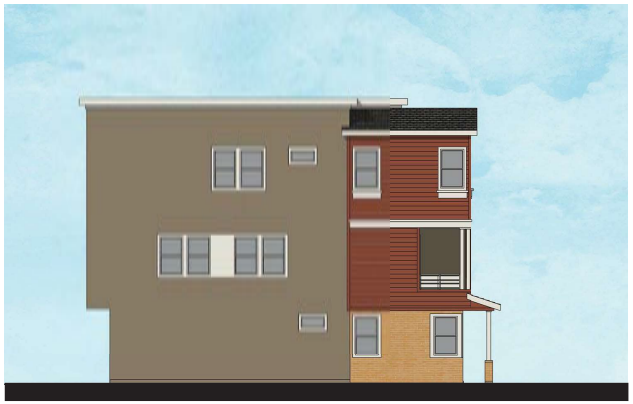
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EXHIBIT C



LEFT



ENHANCED LEFT

ALTERNATE COLOR SCHEME SHOWN



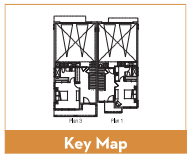
FRONT



RIGHT



REAR



Key Map

B - TRADITIONAL

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 ELEVATIONS B

A1-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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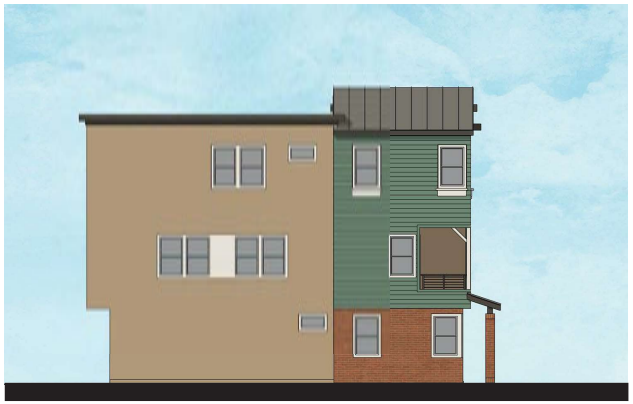
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LEFT



ENHANCED LEFT

ALTERNATE COLOR SCHEME SHOWN



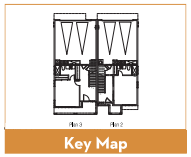
FRONT



RIGHT



REAR



Key Map

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 2-3 ELEVATIONS A

A1-6

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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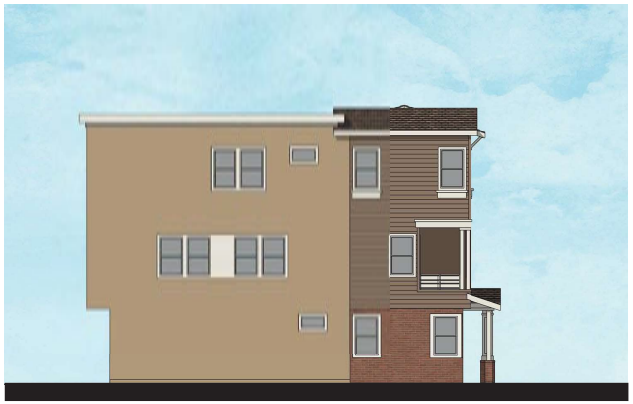
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LEFT



ENHANCED LEFT



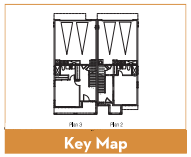
FRONT



RIGHT



REAR



Key Map

B - TRADITIONAL

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 2-3 ELEVATIONS B

A1-7

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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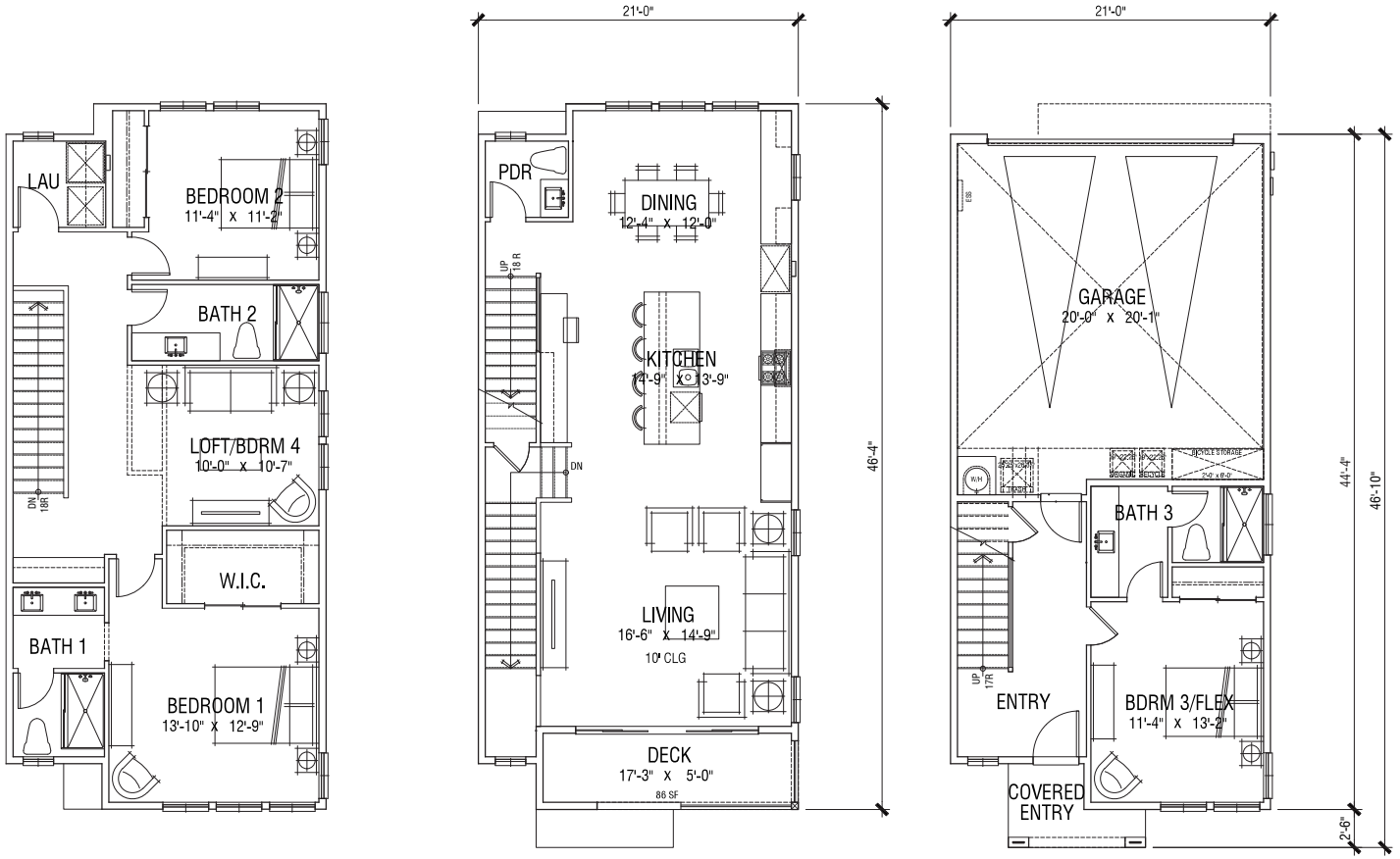
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Third Floor

Second Floor

First Floor

PLAN 1

3 Bedroom | 3.5 Bath | Loft
2- Bay Garage
2,192 S.F.

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
PLAN 1 FLOOR PLAN

A1-8

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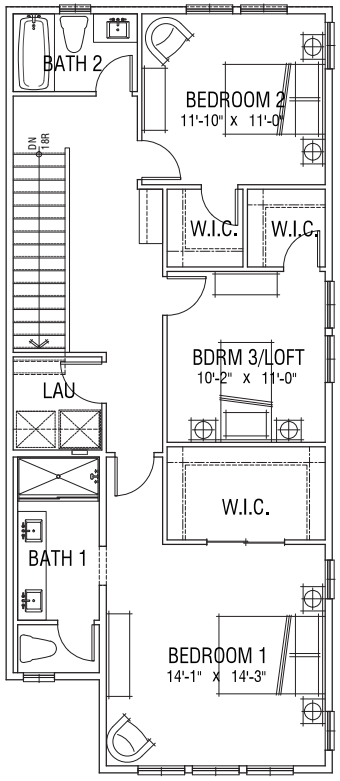
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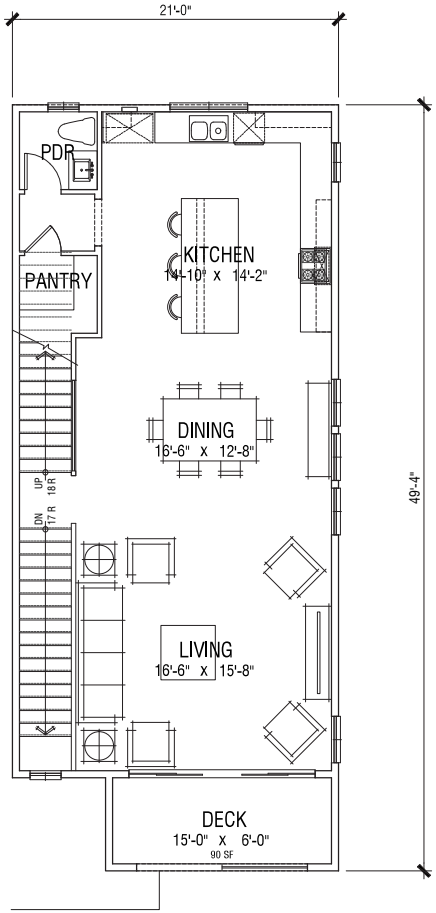
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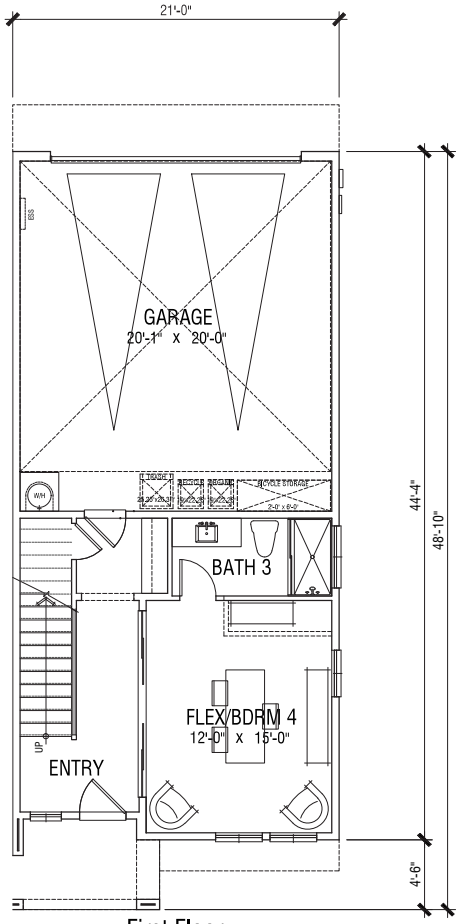
EXHIBIT C



Third Floor



Second Floor



First Floor

PLAN 2

3 Bedroom | 3.5 Bath
2- Bay Garage
2,290 S.F.

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
PLAN 2 FLOOR PLAN

A1-9

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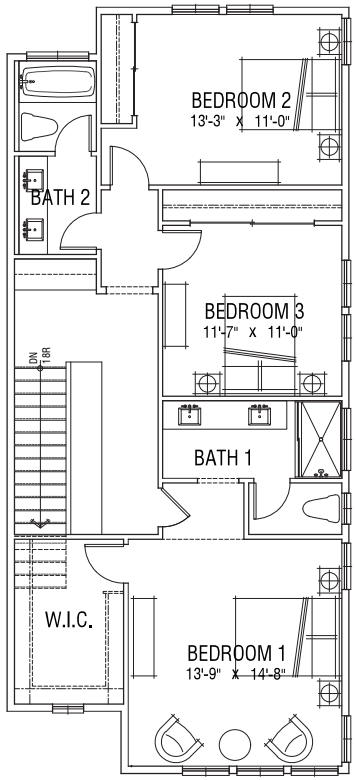
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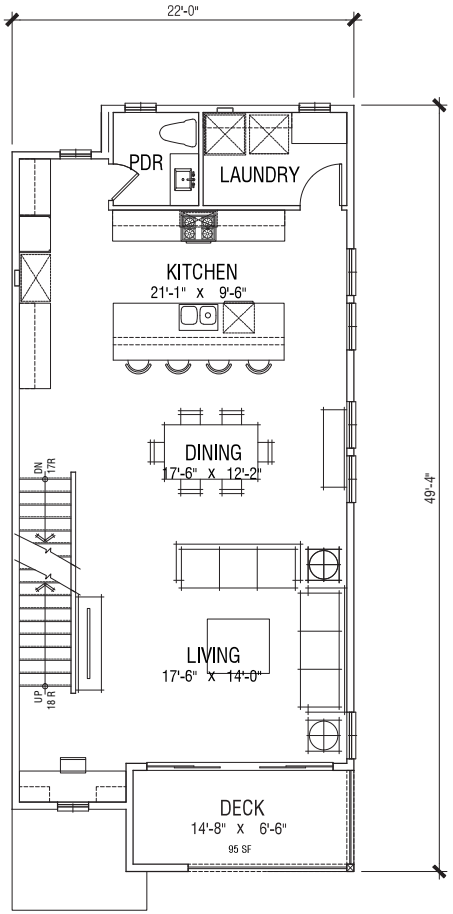
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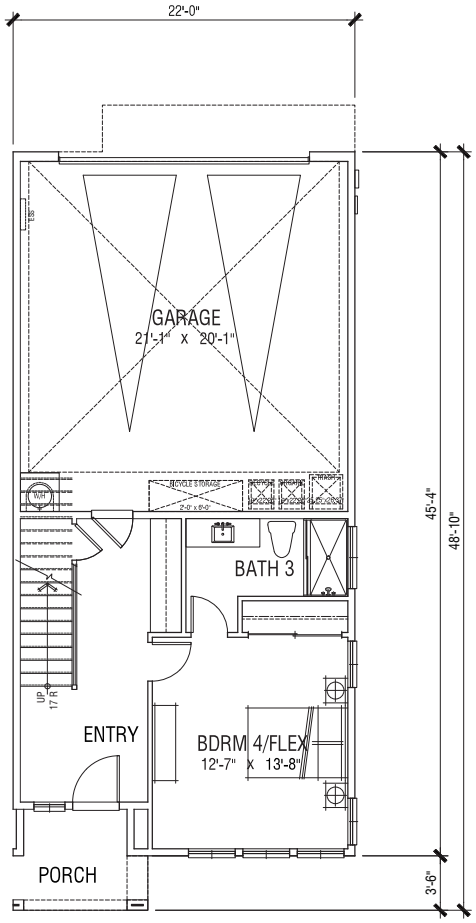
EXHIBIT C



Third Floor



Second Floor



First Floor

PLAN 3

4 Bedroom | 3.5 Bath
2- Bay Garage
2,402 S.F.

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
PLAN 3 FLOOR PLAN

A1-10

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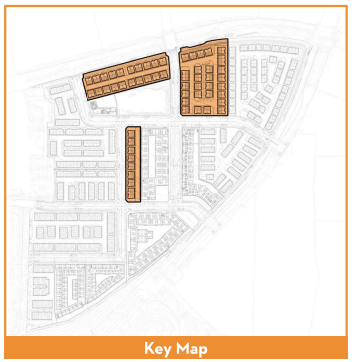
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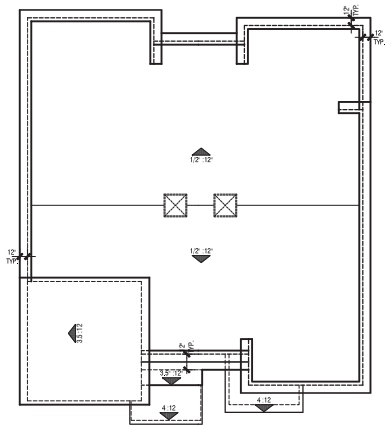
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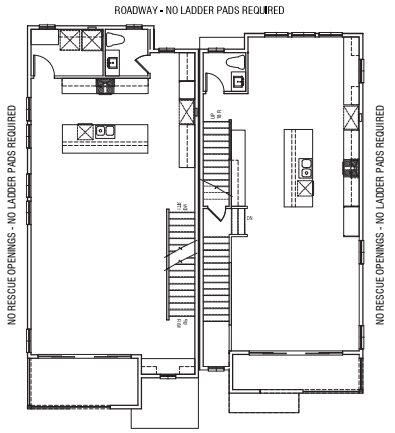
EXHIBIT C





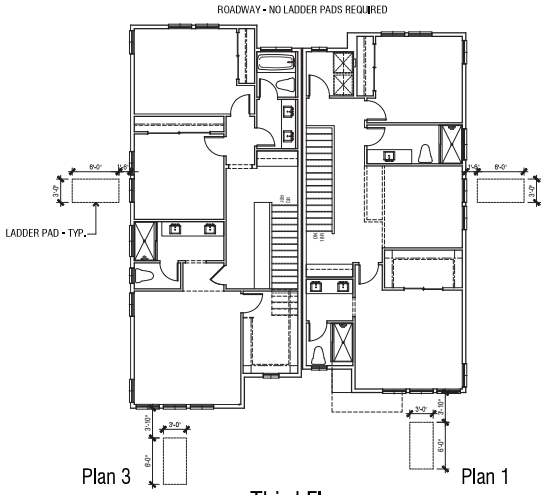
Plan 3 Plan 1

Roof Plan



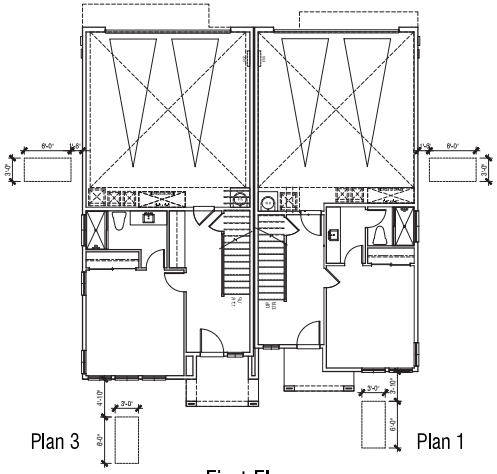
Plan 3 Plan 1

Second Floor



Plan 3 Plan 1

Third Floor



Plan 3 Plan 1

First Floor

Duplex 1-3

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 | BUILDING & ROOF PLANS

A1-11

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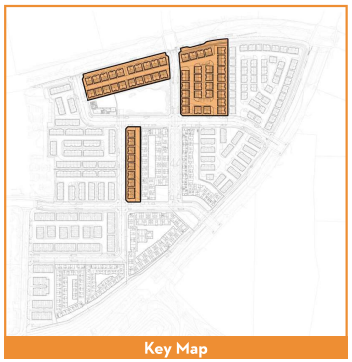
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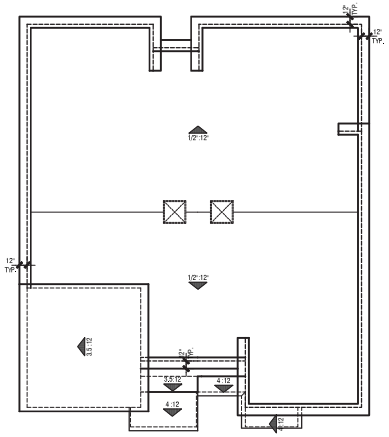
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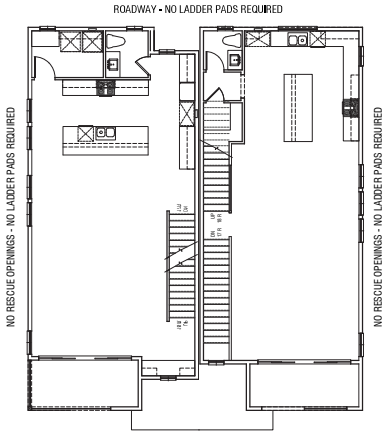
EXHIBIT C





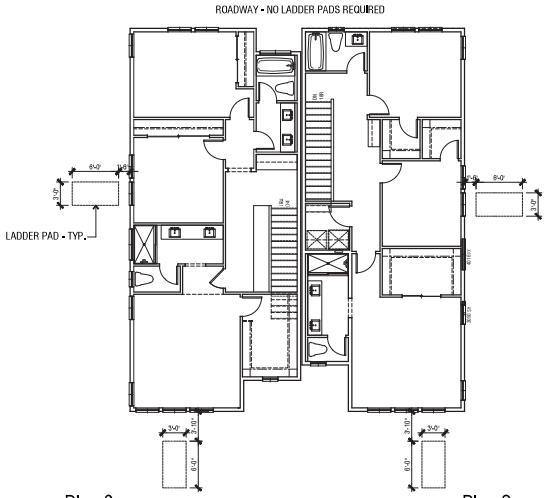
Plan 3 Plan 2

Roof Plan



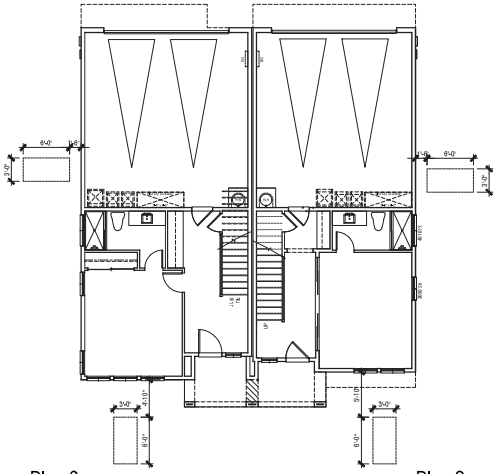
Plan 3 Plan 2

Second Floor



Plan 3 Plan 2

Third Floor



Plan 3 Plan 2

First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM

Duplex 2-3

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
DUPLEX 2-3 | BUILDING & ROOF PLANS

A1-12

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

WHA.

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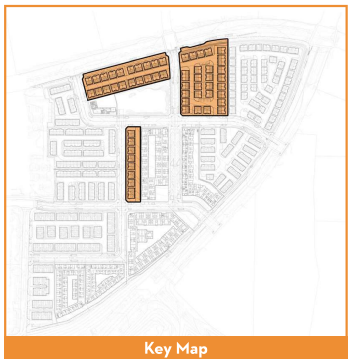
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

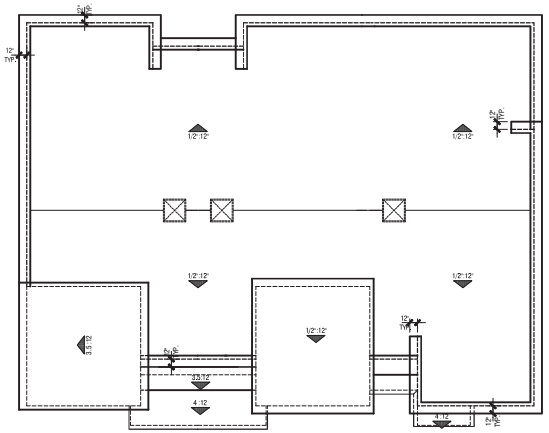
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1241

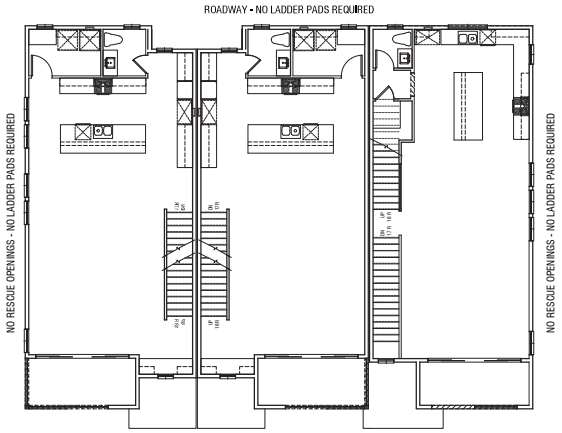
EXHIBIT C





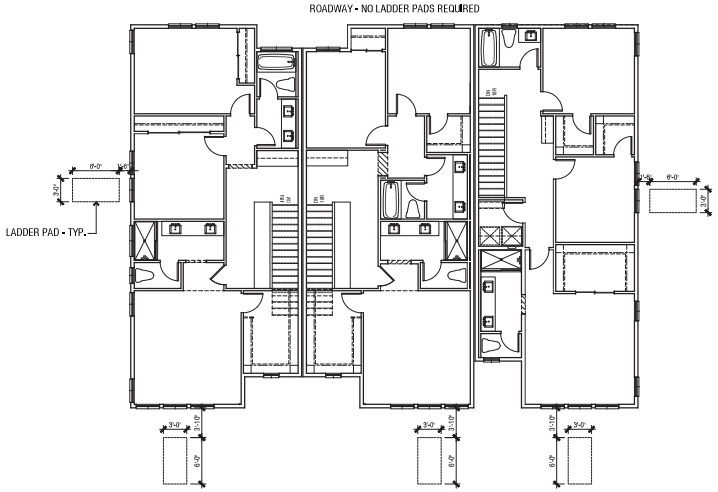
Plan 3 Plan 3X Plan 2

Roof Plan



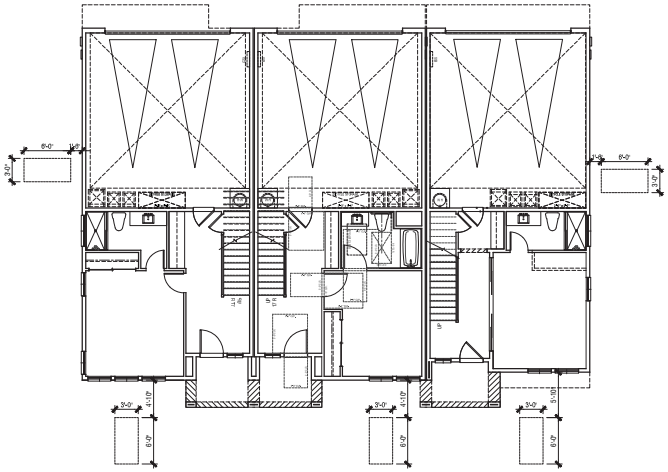
Plan 3 Plan 3X Plan 2

Second Floor



Plan 3 Plan 3X Plan 2

Third Floor



Plan 3 Plan 3X Plan 2

First Floor

Triplex 3-3X-2

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY TRIPLEX
TRIPLEX BUILDING & ROOF PLANS

A1-13

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LEFT



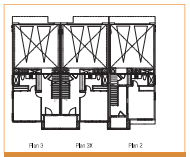
FRONT



RIGHT



REAR



Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - TRIPLEX
TRIPLEX 3-3-2 ELEVATIONS A

A1-14

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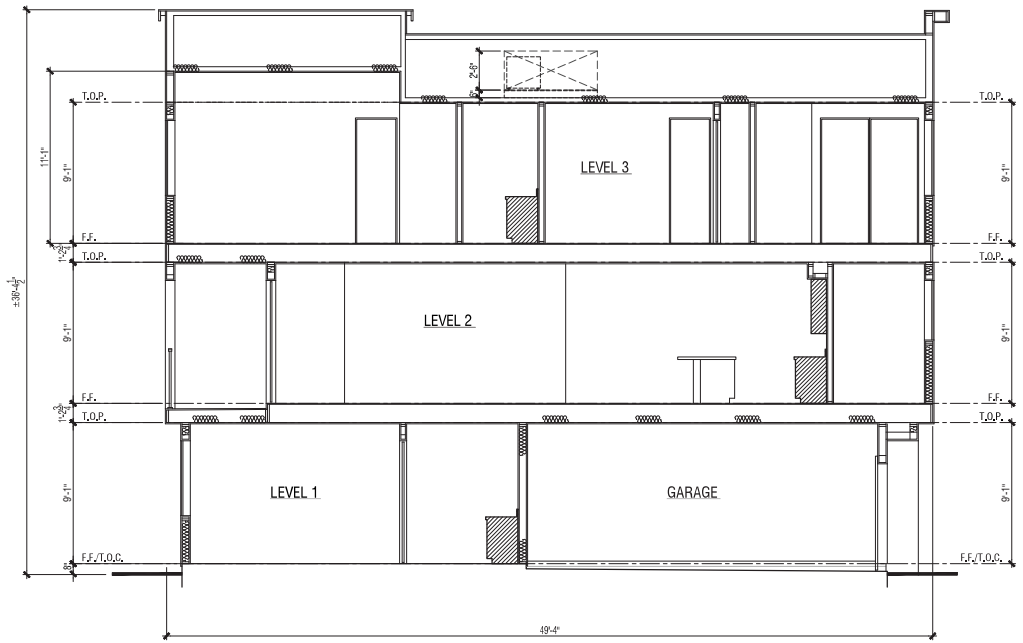
WHA.

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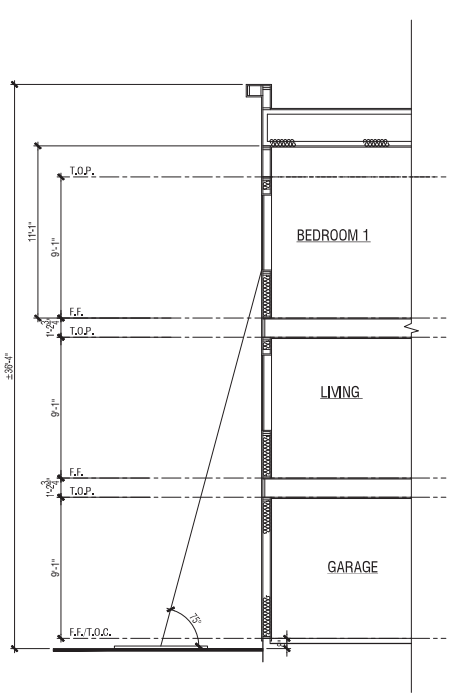
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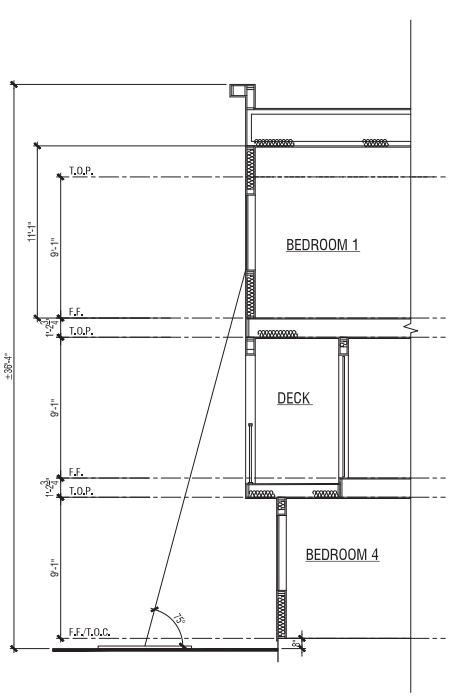
Building Sections
Duplex 2-3

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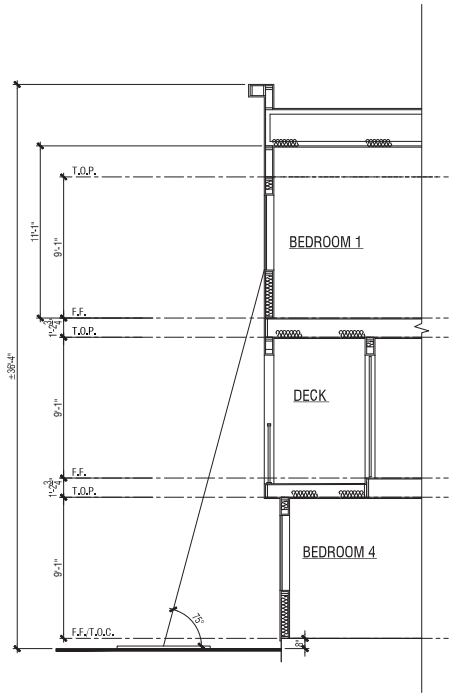
EXHIBIT C



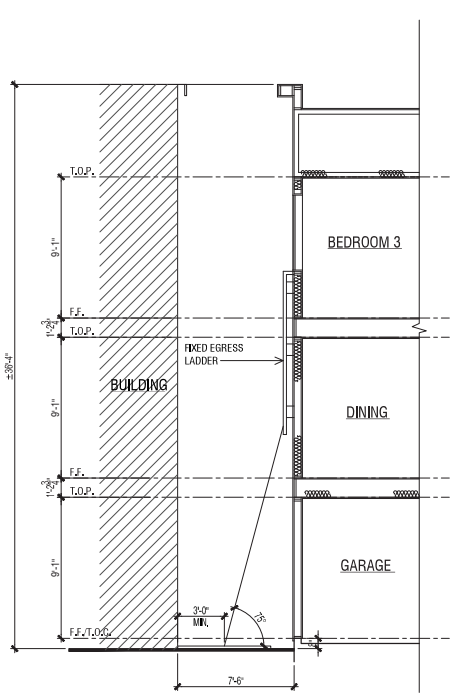
Unit 1



Unit 2



Unit 3



Unit 3-Side

Ladder Pad Sections

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
LADDER PAD SECTIONS

A1-16

CONCEPT DESIGN

ISABEL PORTOLA
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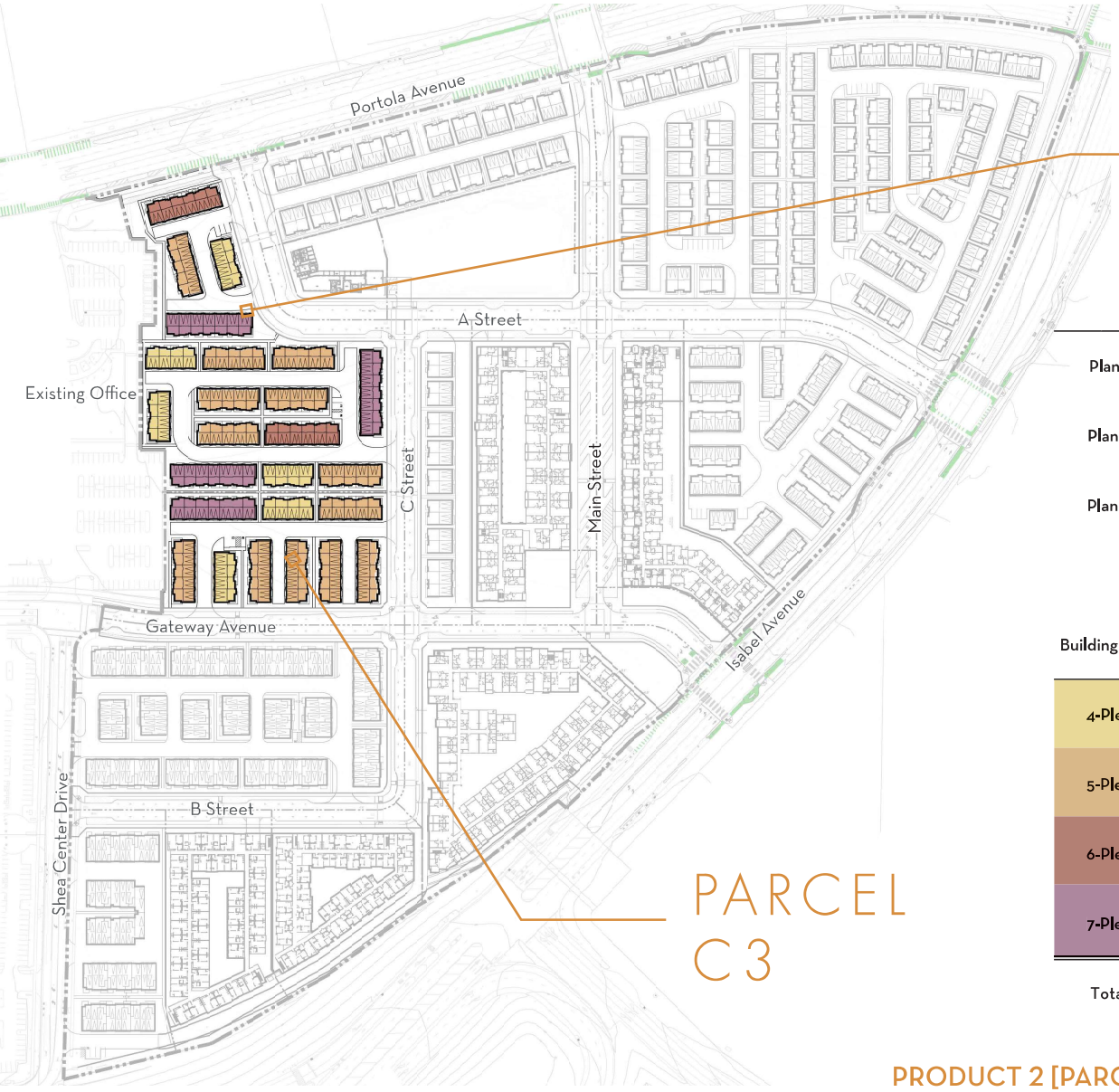
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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	1,827	3	2.5
Plan 2	1,873	4	3.5
Plan 3	2,054	4	3.0

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
4-Plex	6	12	6	24	45,762
5-Plex	13	39	13	65	123,500
6-Plex	2	8	2	12	22,746
7-Plex	4	20	4	28	52,984
Total	**25**	**79**	**25**	**129**	**244,992**

Height Limit C3: **495'-500'***
Max. Height: 469.3 MSL

Height Limit C5: **455'-485'****
Max. Height: 478.3 MSL

Building Height: **± 38'-3"**

Stories: **3**

*Height above MSL

**Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A2-1

CONCEPT DESIGN

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WHA.

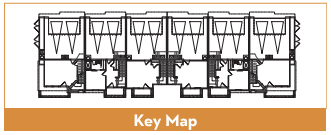
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Key Map

A - CONTEMPORARY

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PERSPECTIVE

A2-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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12477



LEFT



FRONT



ENHANCED RIGHT



REAR

A - CONTEMPORARY)

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) ELEVATIONS A

A2-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

WHA.

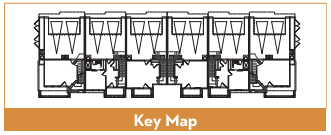
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Key Map

B - TRADITIONAL

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PERSPECTIVE

A2-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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OWNER, LLC

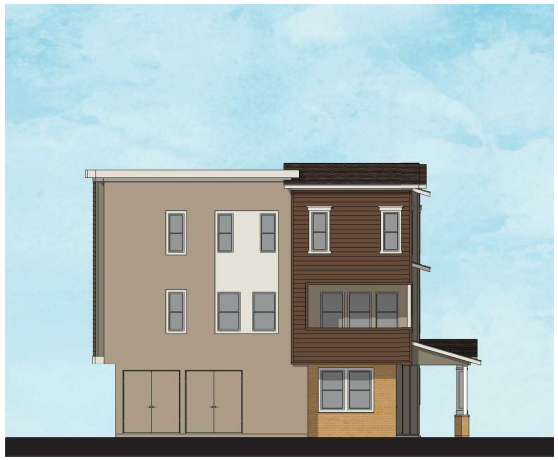
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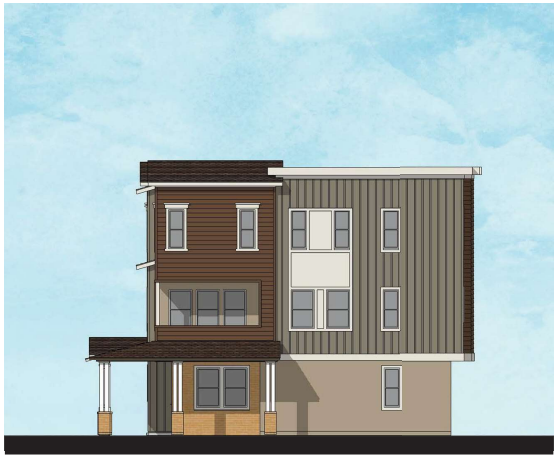
EXHIBIT C



LEFT



FRONT



ENHANCED RIGHT



REAR

B - TRADITIONAL

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) ELEVATIONS B

A2-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA OWNER, LLC

WHA

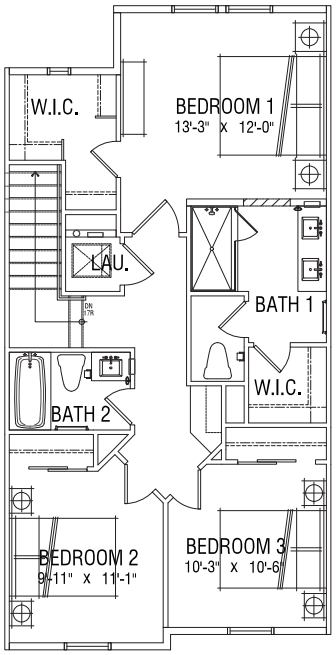
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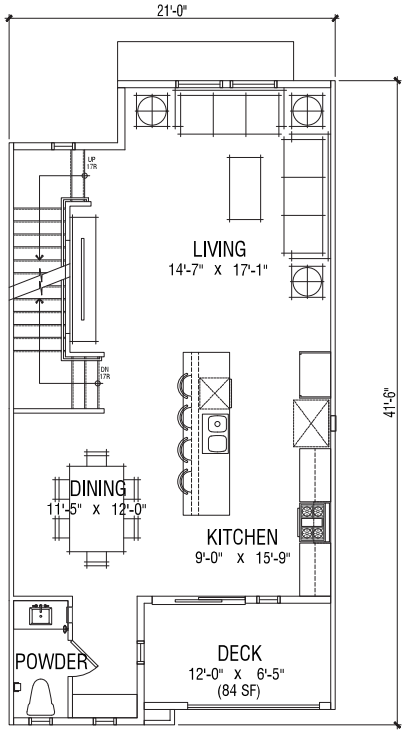
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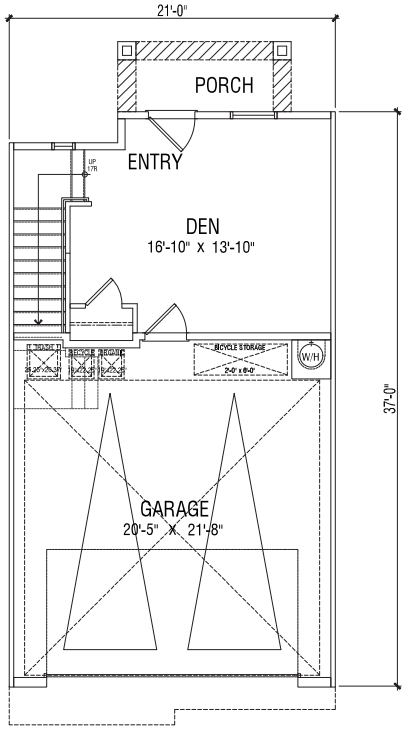
1250



Third Floor



Second Floor



First Floor

PLAN 1

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,827 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A2-6

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

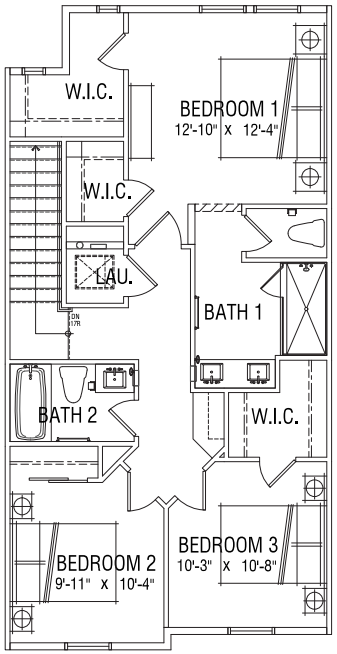
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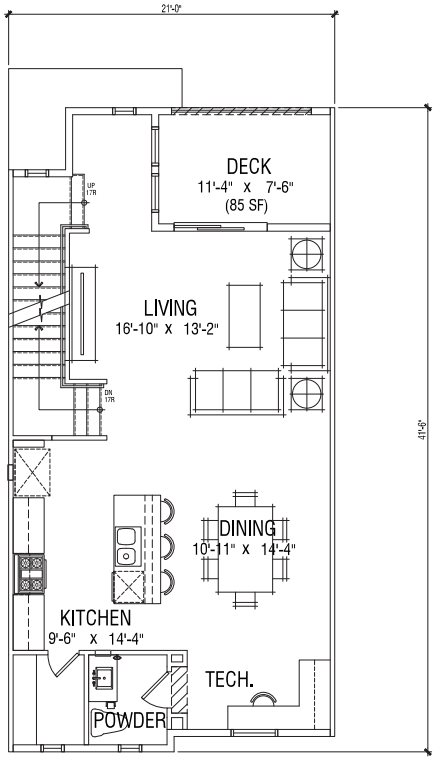
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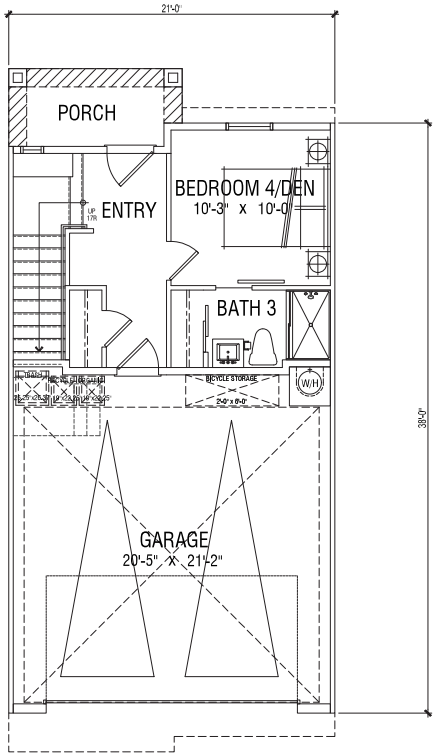
1251



Third Floor



Second Floor



First Floor

PLAN 2

4 Bdrm | 3.5 Bath |
2- Bay Garage
1,873 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A2-7

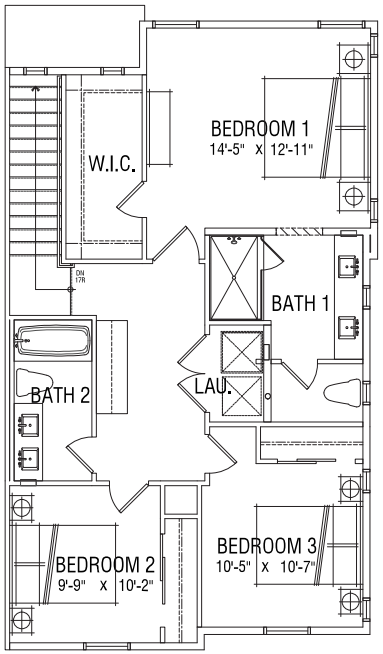
ISABEL PORTOLA
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WHA.

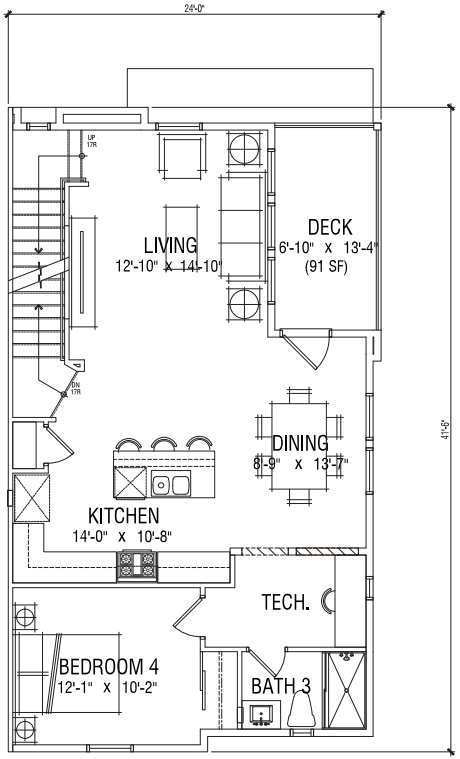
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0 2 4 8

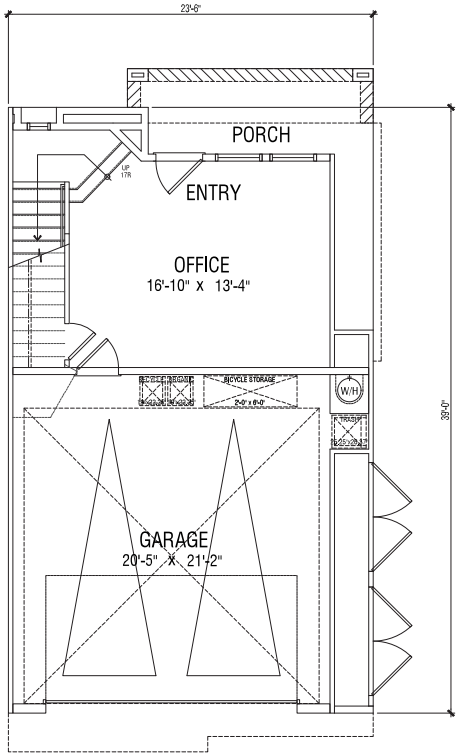
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Third Floor



Second Floor



First Floor

PLAN 3

4 Bdrm | 3 Bath | Office |
2- Bay Garage
2,054 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 3 FLOOR PLAN

A2-8

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

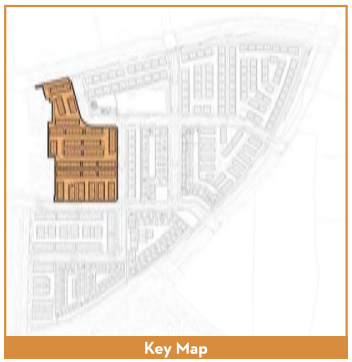
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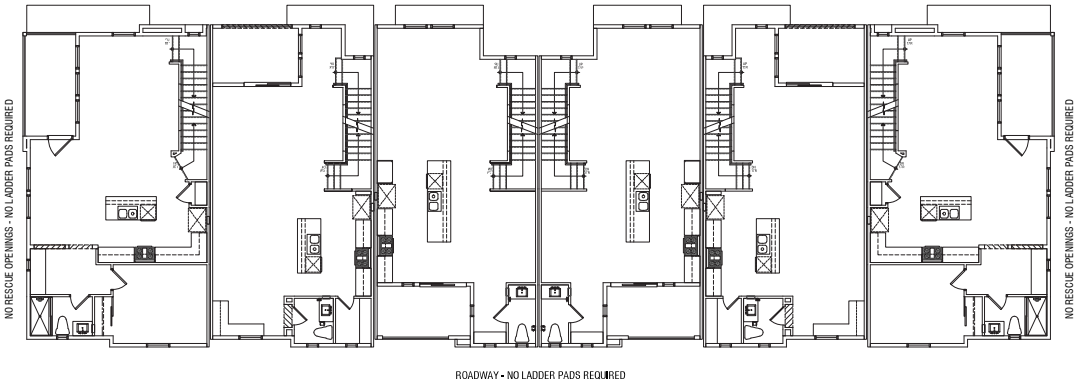
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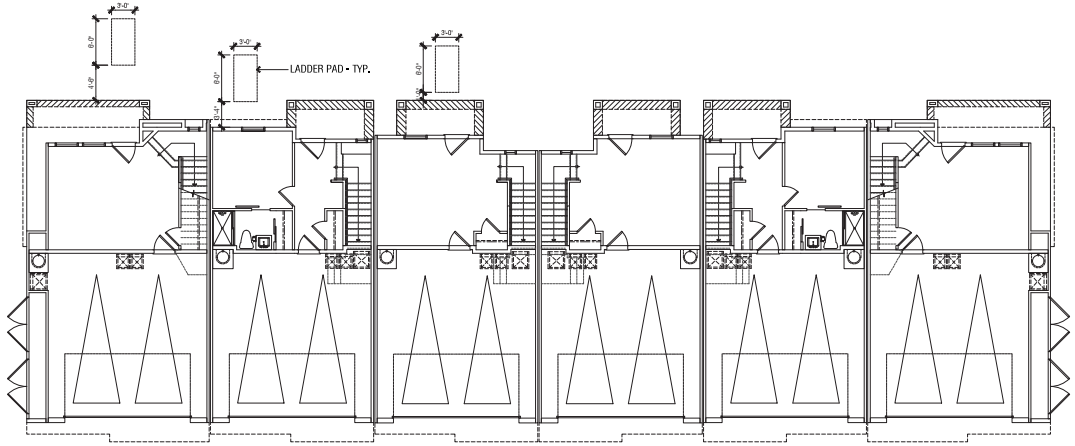
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Second Floor — Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3



First Floor — Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) 6-PLEX | FIRST & SECOND FLOOR PLAN

A2-9

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WHA.

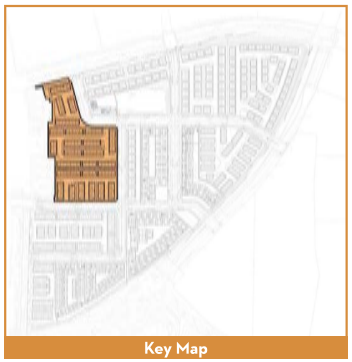
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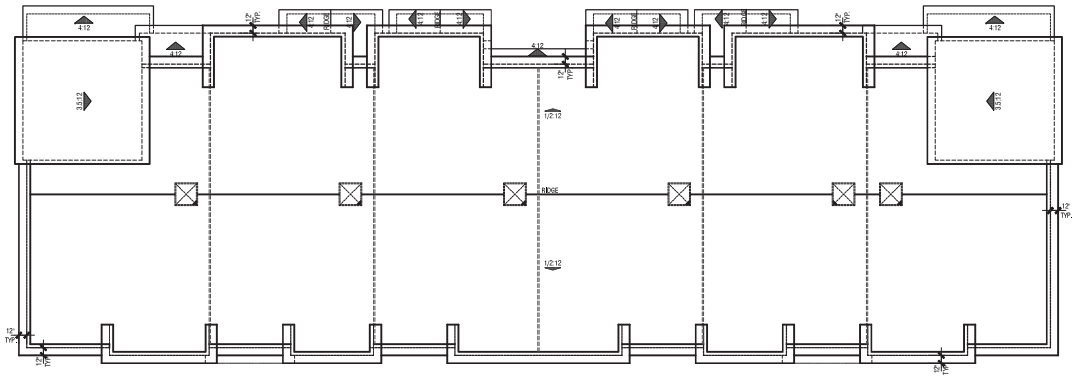
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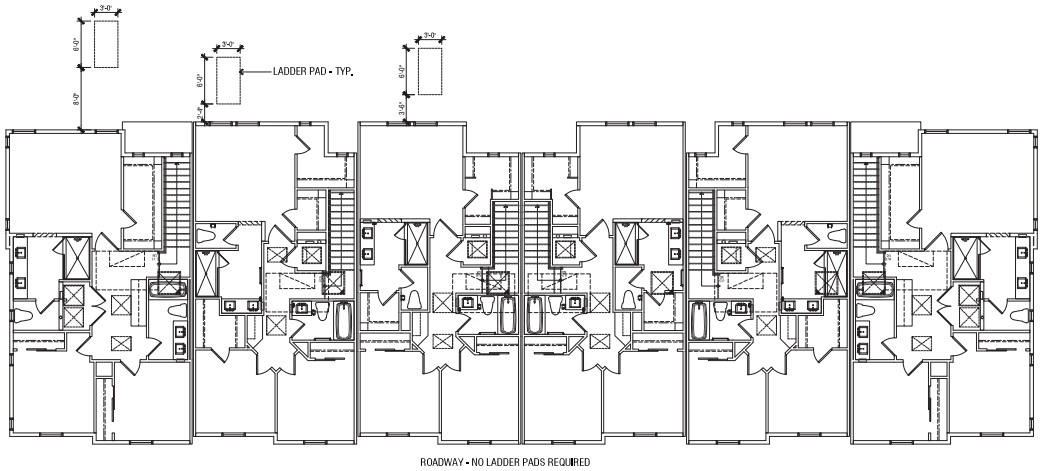
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EXHIBIT C





Roof Plan



Third Floor

Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3

CONCEPT DESIGN

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
6-PLEX | THIRD FLOOR & ROOF PLAN

A2-10

ISABEL PORTOLA
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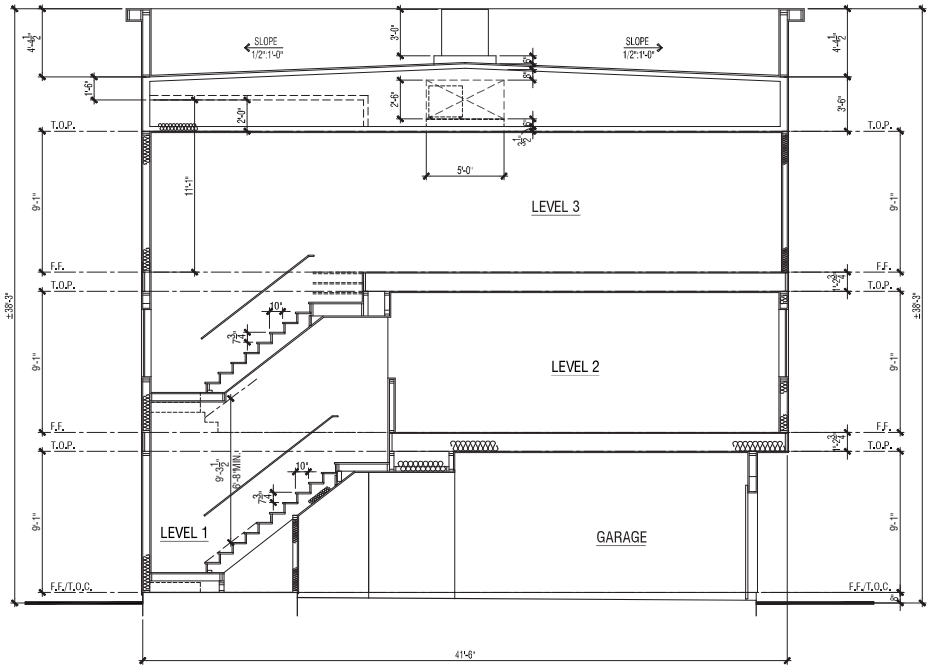
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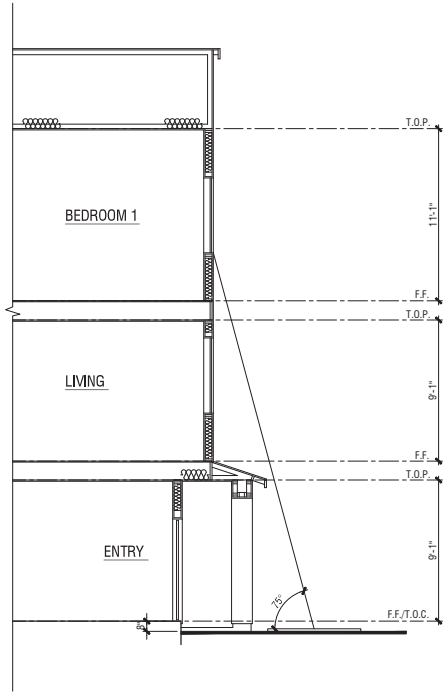
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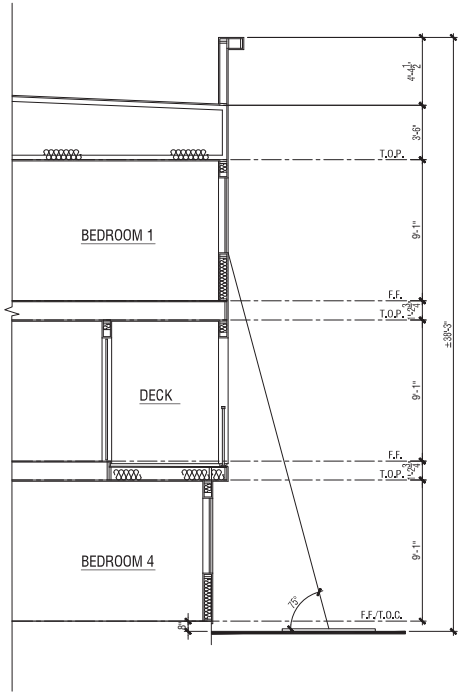
Building Section

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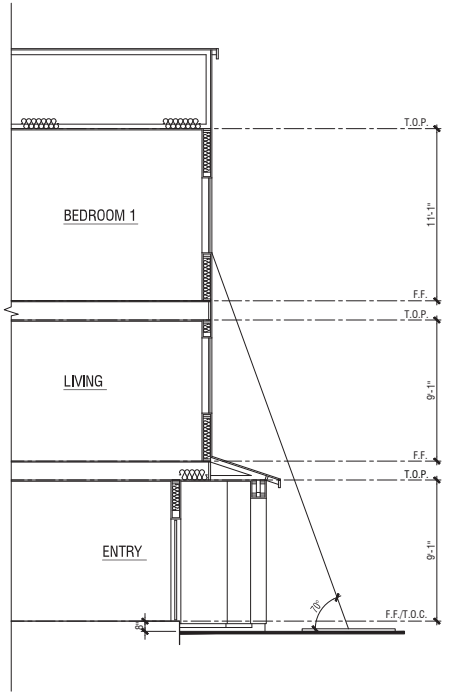
EXHIBIT C



Unit 1



Units 2



Unit 3

Ladder Pad Sections

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EXHIBIT C



PARCEL N1

	Unit Size (SQFT)	Bed	Bath
Plan 1C	1,851	3	2.5
Plan 2C	1,895	4	3.5
Plan 3C	2,054	4	3.0

Height Limit N1: **490'- 495' - 505'***
Max. Height: 490.25 MSL

Building Height: ± 36.9'

Stories: 3

*Height above MSL

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
Duplex A	17	0	17	34	66,385
Duplex B	9	9	0	18	33,714
Duplex C	0	17	17	34	67,133
Triplex	4	4	4	12	23,200
Total	**30**	**30**	**38**	**98**	**188,825**

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED PRODUCT ALLOCATION

A2C-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

WHA.

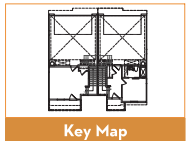
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LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

0 50 100 200

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Key Map

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 PERSPECTIVE A

A2C-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LIVERMORE
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LIVERMORE, CALIFORNIA

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LEFT



FRONT



RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 ELEVATIONS A

A2C-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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OWNER, LLC

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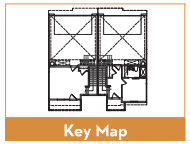
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Key Map

B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 PERSPECTIVE B

A2C-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



FRONT



RIGHT



REAR

B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 ELEVATIONS B

A2C-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

WHA.

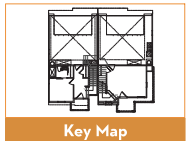
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A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 PERSPECTIVE A

A2C-6

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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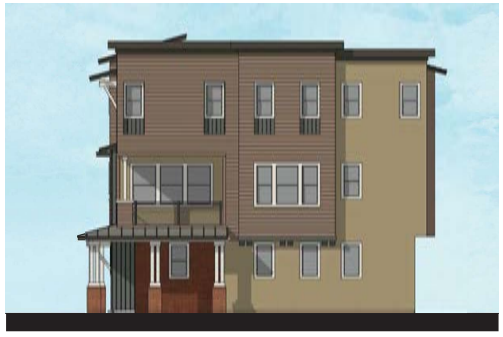
LEFT



FRONT



RIGHT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 ELEVATIONS A

A2C-7

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

WHA.

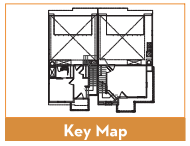
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B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 PERSPECTIVE B

A2C-8

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



FRONT



RIGHT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 ELEVATIONS B

A2C-9

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

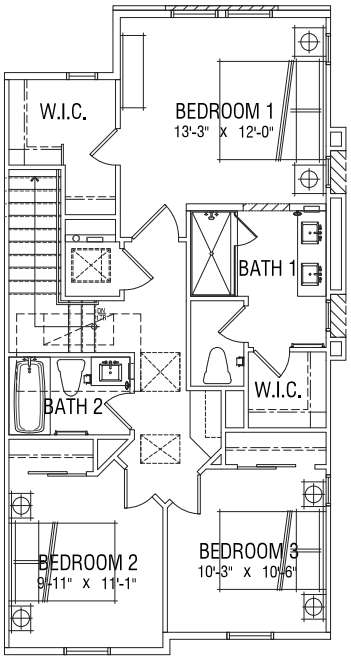
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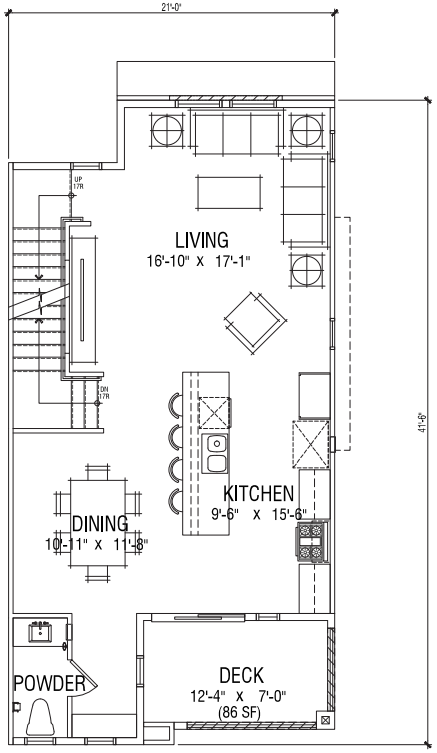
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

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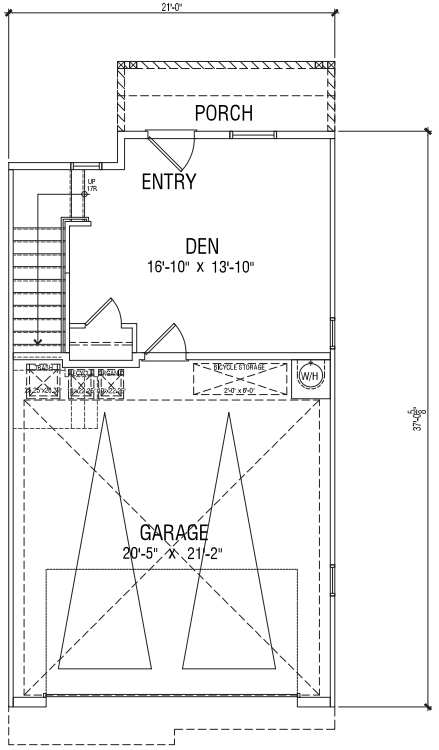
06-07-24 | 2022236



Third Floor



Second Floor



First Floor

PLAN 1C

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,851 S.F.

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 1C FLOOR PLAN

A2C-10

ISABEL PORTOLA
OWNER, LLC

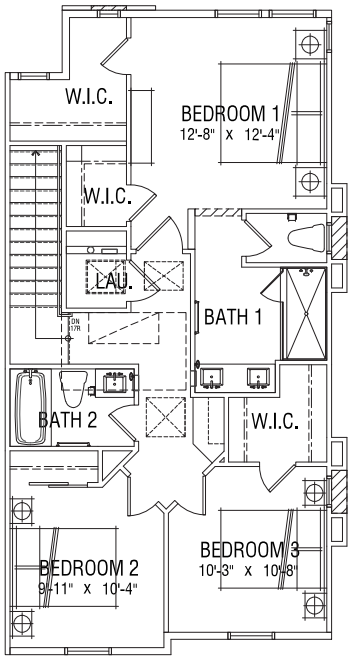
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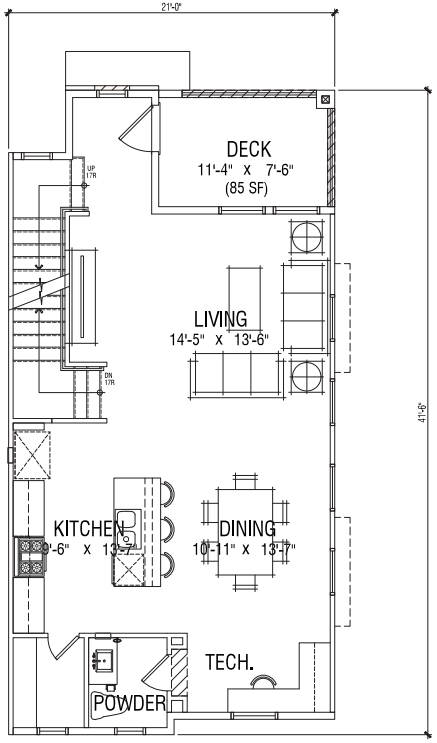
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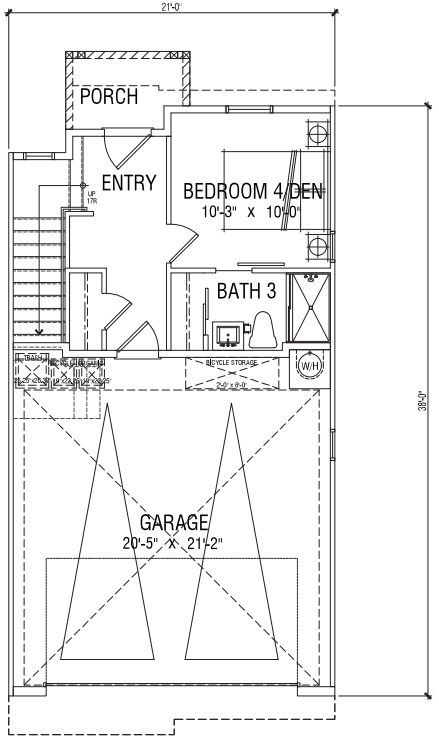
06-07-24 | 2022236



Third Floor



Second Floor



First Floor

PLAN 2C

4 Bdrm | 3.5 Bath |
2- Bay Garage
1,895 S.F.

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 2C FLOOR PLAN

A2C-11

CONCEPT DESIGN

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OWNER, LLC

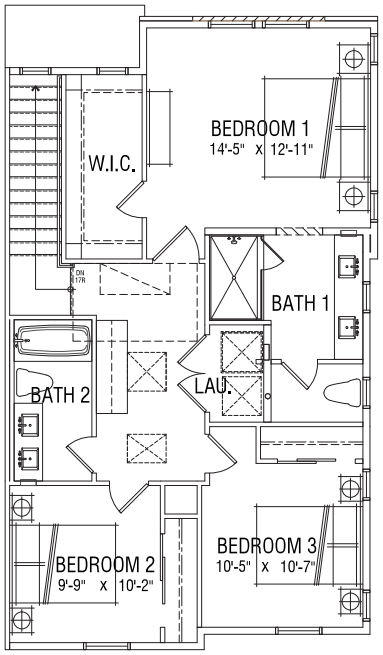
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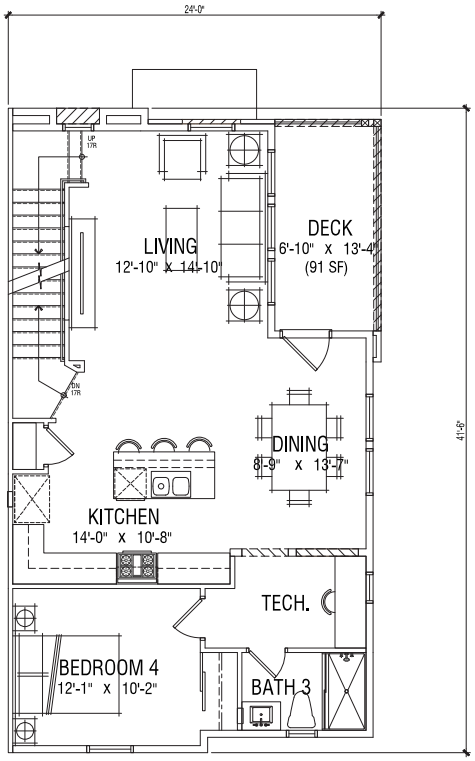
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LIVERMORE, CALIFORNIA

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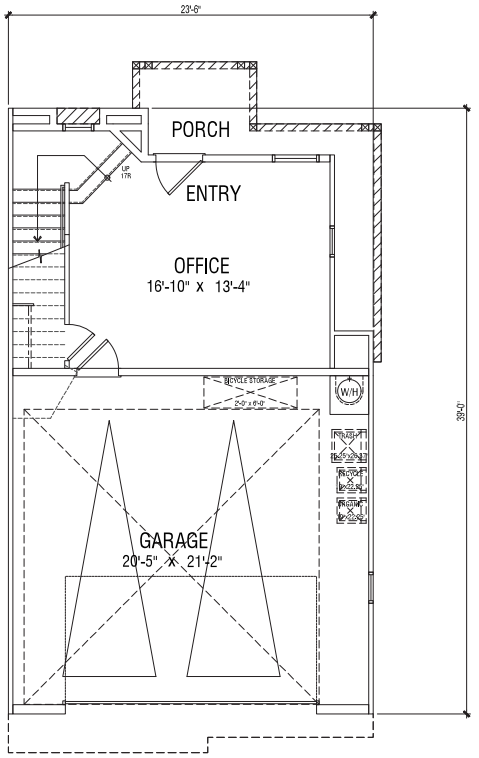
06-07-24 | 2022236



Third Floor



Second Floor



First Floor

PLAN 3C

4 Bdrm | 3 Bath | Office |
2- Bay Garage
2,054 S.F.

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 3C FLOOR PLAN

A2C-12

CONCEPT DESIGN

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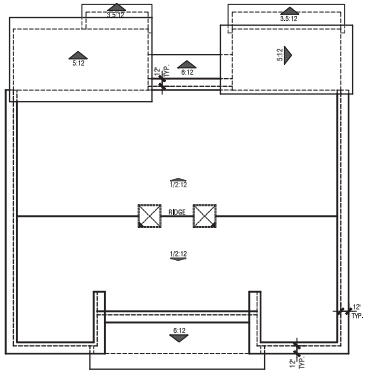
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LIVERMORE, CALIFORNIA

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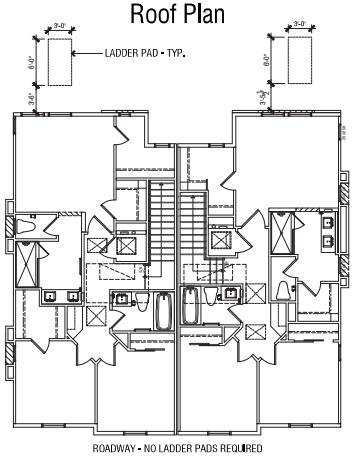
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EXHIBIT C



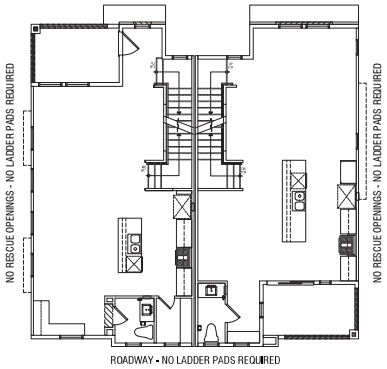


Roof Plan



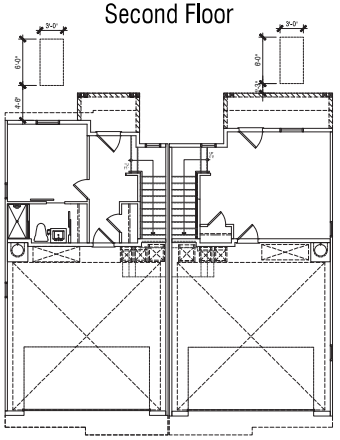
Plan 2R Plan 1

Third Floor



Plan 2R Plan 1

Second Floor



Plan 2R Plan 1

First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 1-2

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 BUILDING & ROOF PLAN

A2C-13

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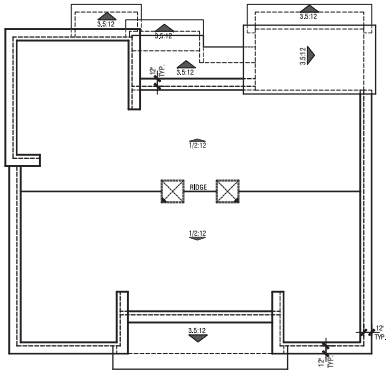
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

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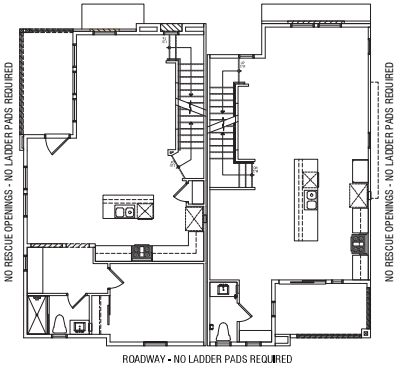
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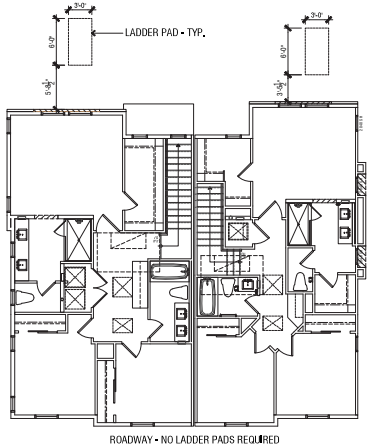


Roof Plan



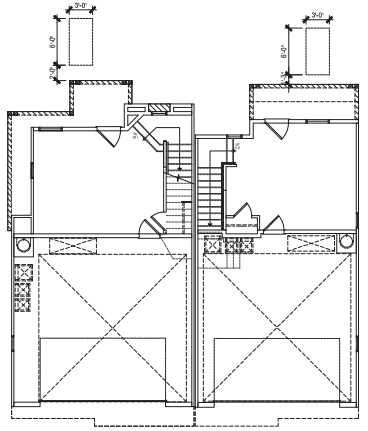
Plan 3R Plan 1

Second Floor



Plan 3R Plan 1

Third Floor



Plan 3R Plan 1

First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 1-3

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-1 BUILDING & ROOF PLAN

A2C-14

CONCEPT DESIGN

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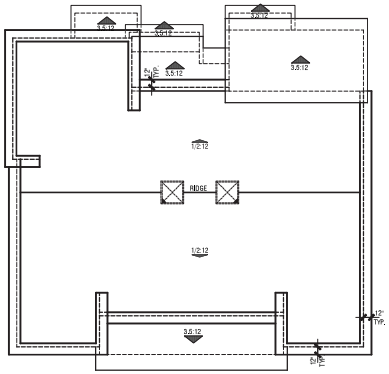
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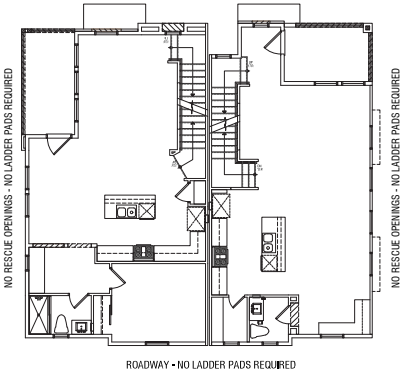
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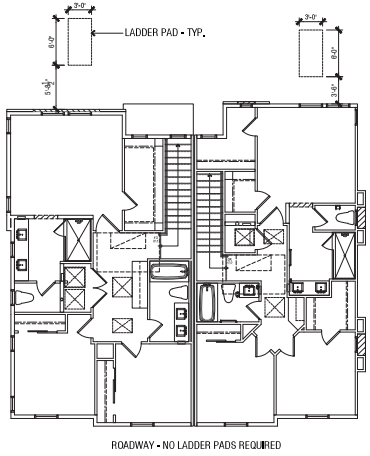




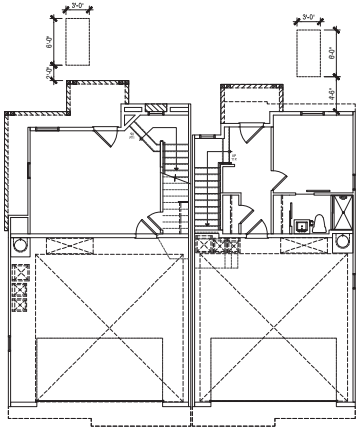
Roof Plan



Plan 3R Plan 2
Second Floor



Plan 3R Plan 2
Third Floor



Plan 3R Plan 2
First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 2-3

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 BUILDING & ROOF PLAN

A2C-15

ISABEL PORTOLA OWNER, LLC

WHA.

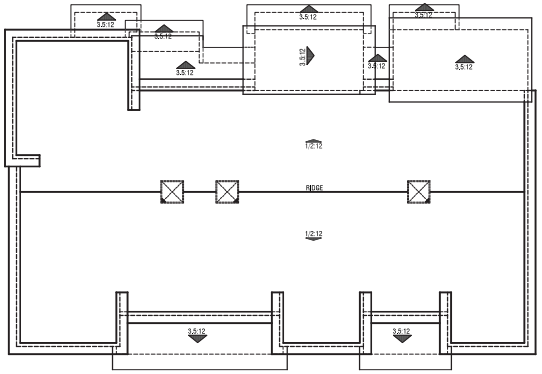
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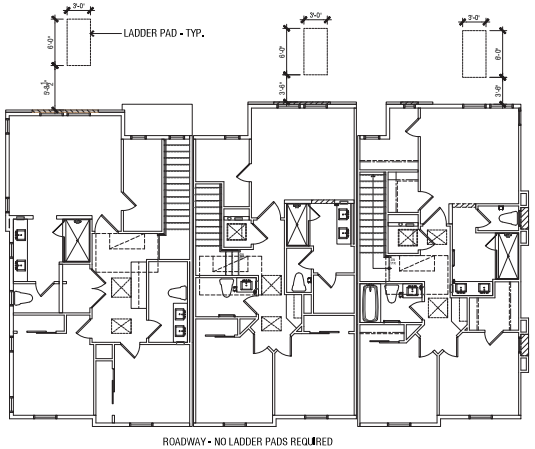
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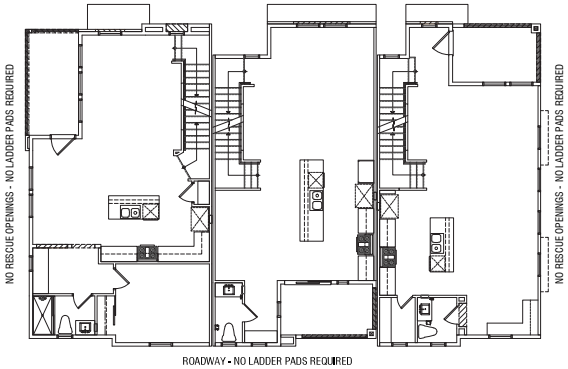


Roof Plan



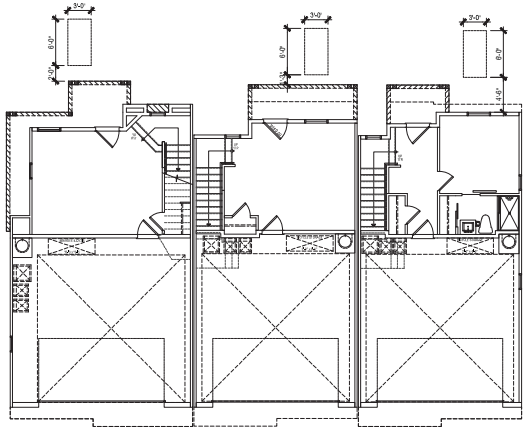
Plan 3R Plan 1 Plan 2

Third Floor



Plan 3R Plan 1 Plan 2

Second Floor



Plan 3R Plan 1 Plan 2

First Floor

Triplex 1-3

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
TRIPLEX BUILDING & ROOF PLAN

A2C-16

CONCEPT DESIGN

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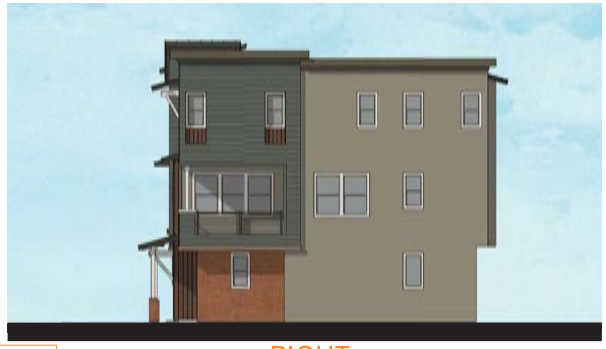
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LEFT



FRONT



RIGHT



REAR



Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED TRIPLEX ELEVATIONS

A2C-17

ISABEL PORTOLA OWNER, LLC

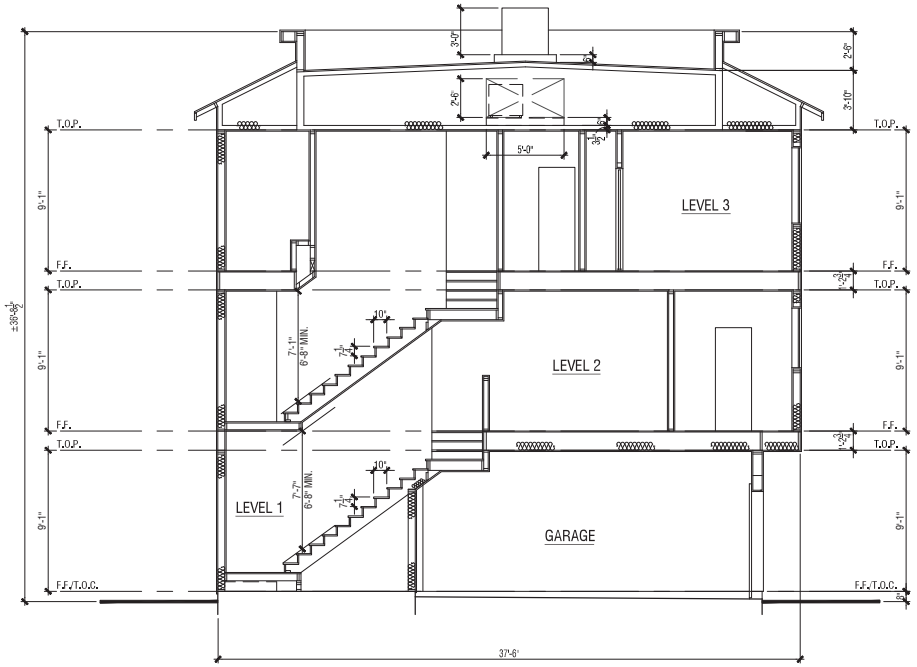
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LIVERMORE, CALIFORNIA

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Building Section

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
BUILDING SECTION

A2C-18

ISABEL PORTOLA
OWNER, LLC

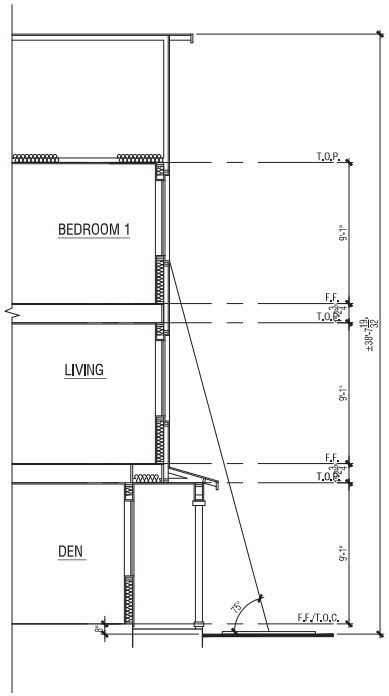
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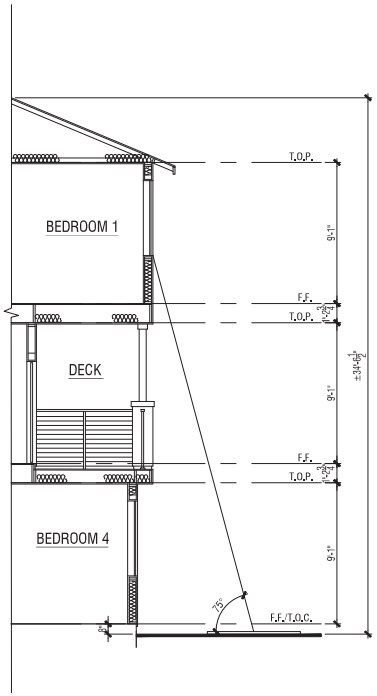
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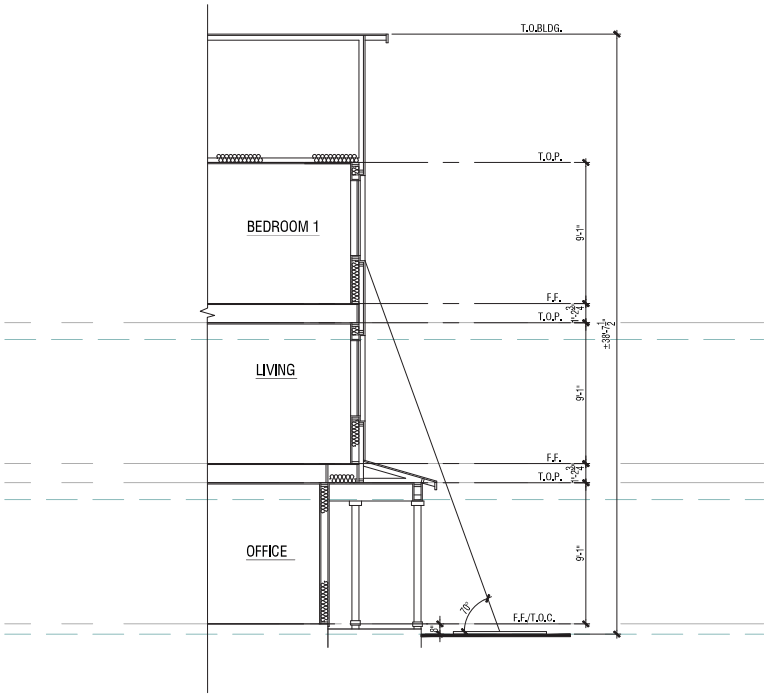
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Unit 1



Unit 2

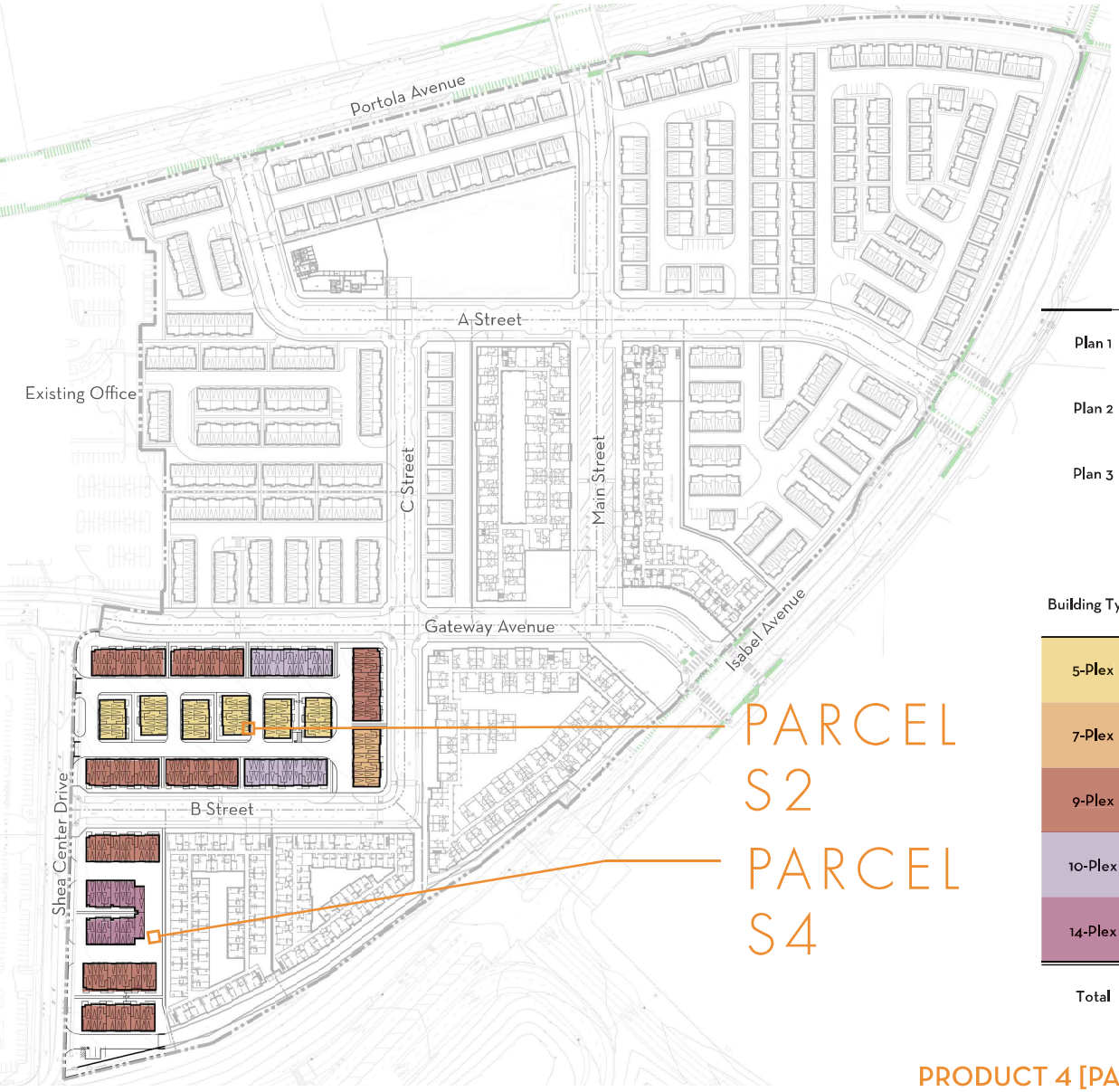


Unit 3

Ladder Pad Sections

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	1,177	2	2.5
Plan 2	1,315	2	2.5
Plan 3	1,502	3	3.0

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
5-Plex	12	12	6	30	38,916
7-Plex	2	2	3	7	9,490
9-Plex	24	24	24	72	95,856
10-Plex	6	6	8	20	26,968
14-Plex	4	4	6	14	18,980
Total	48	48	47	143	191,380

Height Limit:	S2	485'-490'*
Max. Height:		463.5 MSL
	S4	475'*
Max. Height:		457.8 MSL
Building Height:		± 37'- 8"
Stories:		3

*Height above MSL

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A4-1

CONCEPT DESIGN

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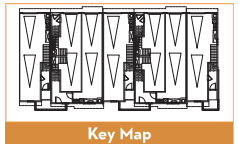
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Key Map

A - CONTEMPORARY

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | PERSPECTIVES A

A4-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



FRONT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
7-PLEX BUILDING | ELEVATIONS A

A4-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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OWNER, LLC

WHA.

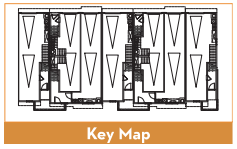
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Key Map

B - TRADITIONAL

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | PERSPECTIVES B

A4-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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1280



LEFT



FRONT



ENHANCED RIGHT



REAR

B - TRADITIONAL

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
7-PLEX BUILDING | ELEVATIONS B

A4-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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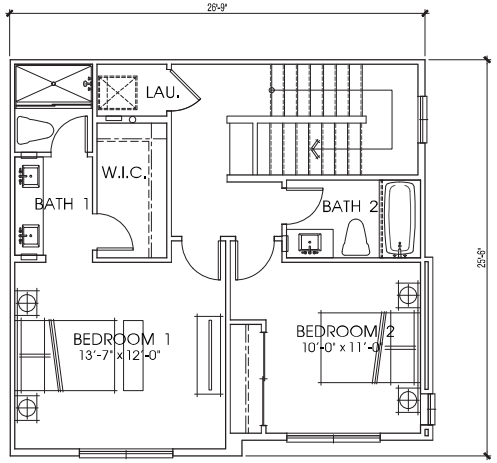
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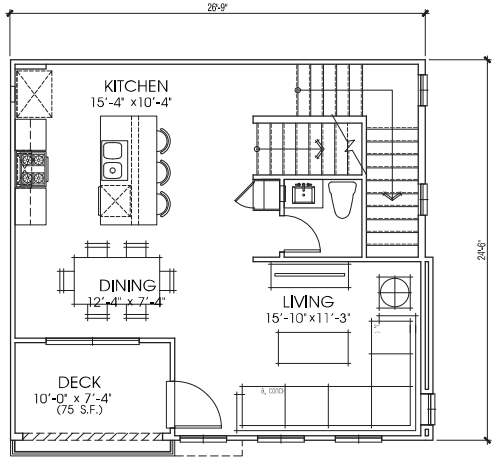
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LIVERMORE, CALIFORNIA

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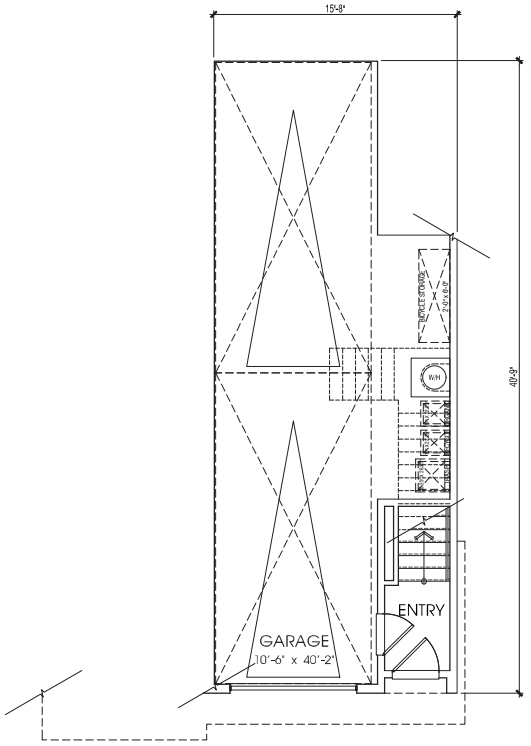
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Third Floor



Second Floor



First Floor

Plan 1

2 Bdrm | 2.5 Bath |
Tandem Garage |
1,177 S.F.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A4-6

CONCEPT DESIGN

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OWNER, LLC

WHA.

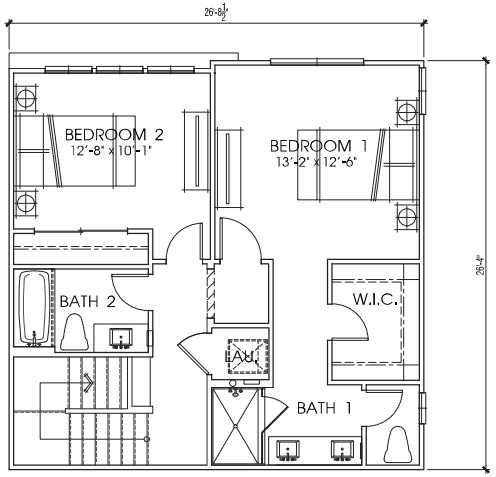
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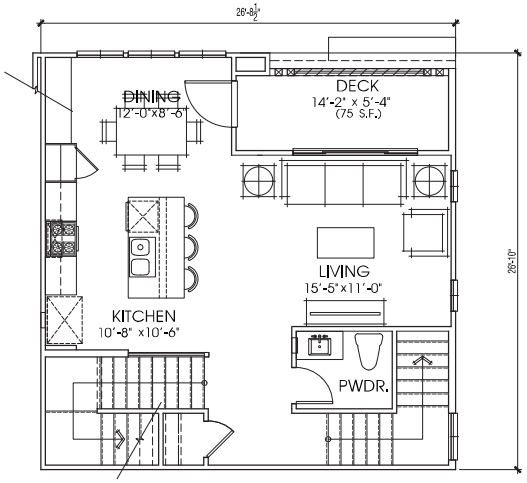
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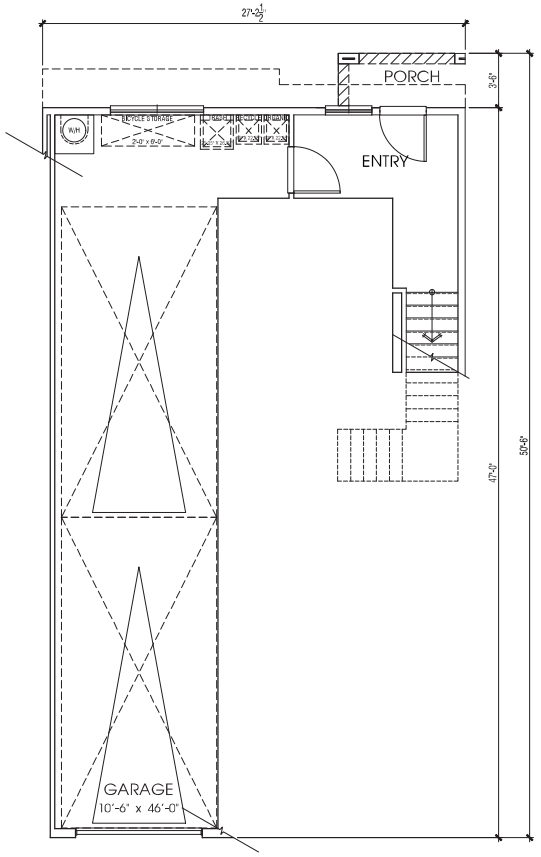
1282



Third Floor



Second Floor



First Floor

Plan 2

2 Bdrm | 2.5 Bath |
Tandem Garage |
1,315 S.F.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A4-7

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

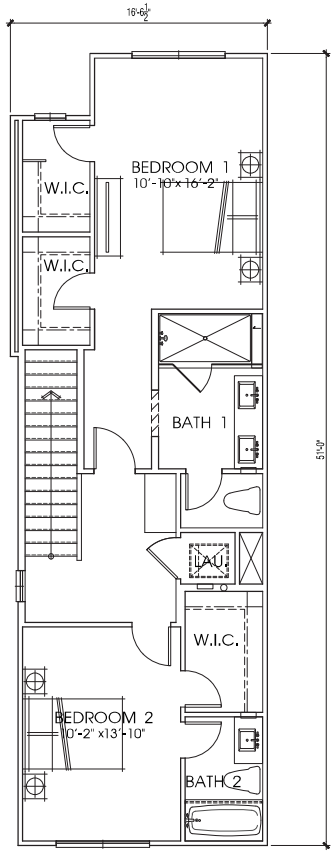
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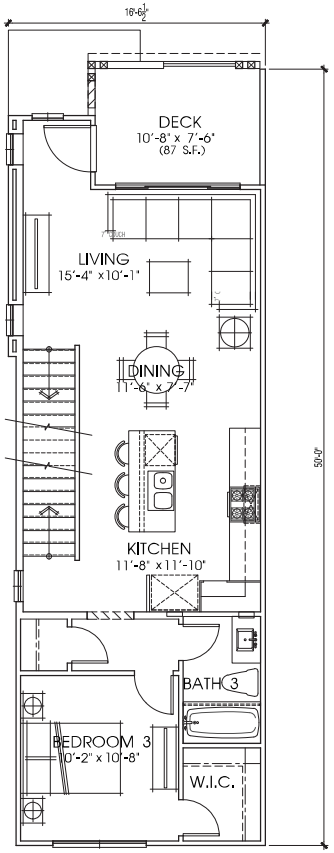
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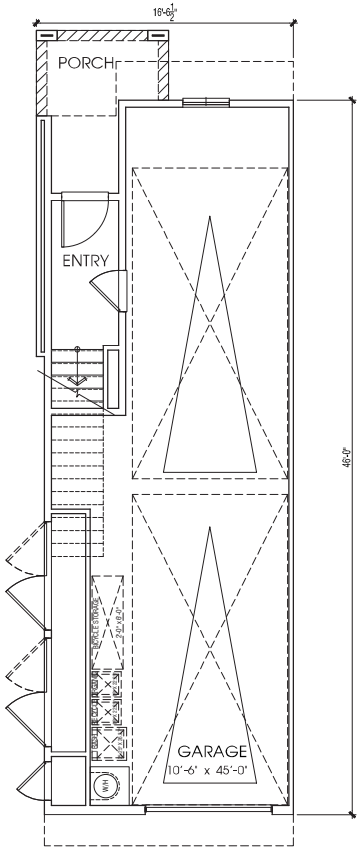
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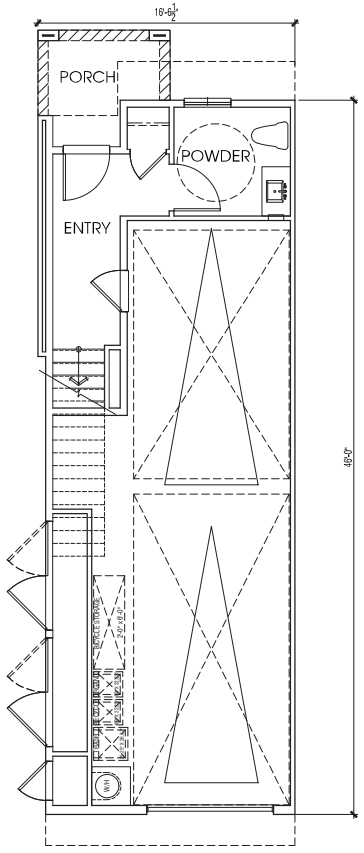
Third Floor



Second Floor



First Floor



First Floor +97 S.F.
@Accessible unit

Plan 3

3 Bdrm | 3 Bath |
Tandem Garage |
1,502 S.F.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 3 FLOOR PLAN

A4-8

CONCEPT DESIGN

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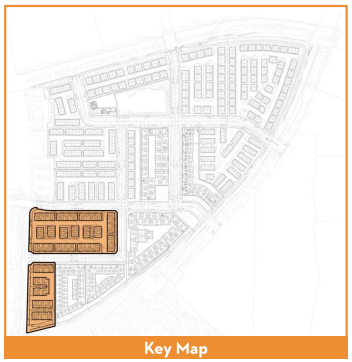
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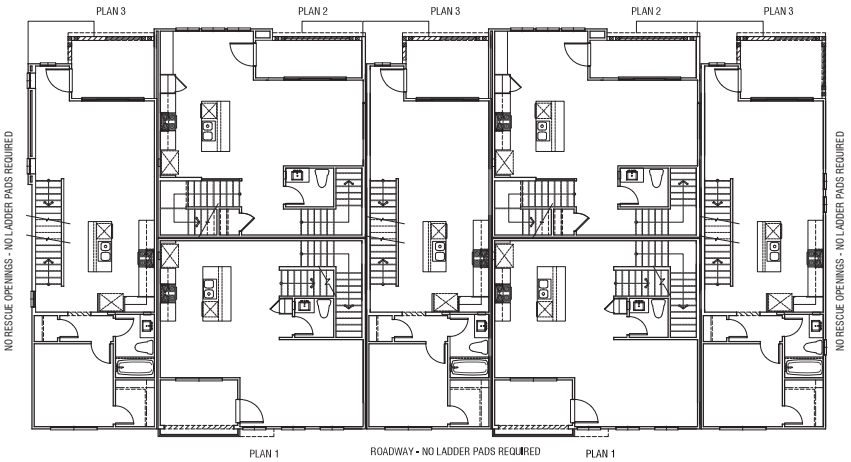
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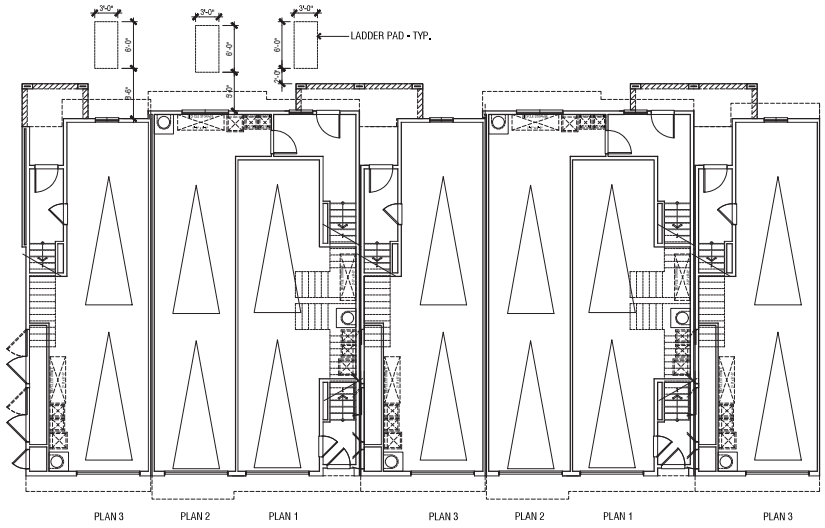
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EXHIBIT C





SECOND FLOOR



FIRST FLOOR

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U – CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | FIRST & SECOND FLOOR

A4-9

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

WHA

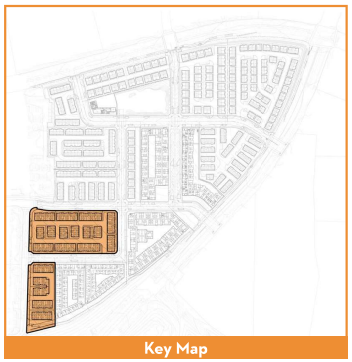
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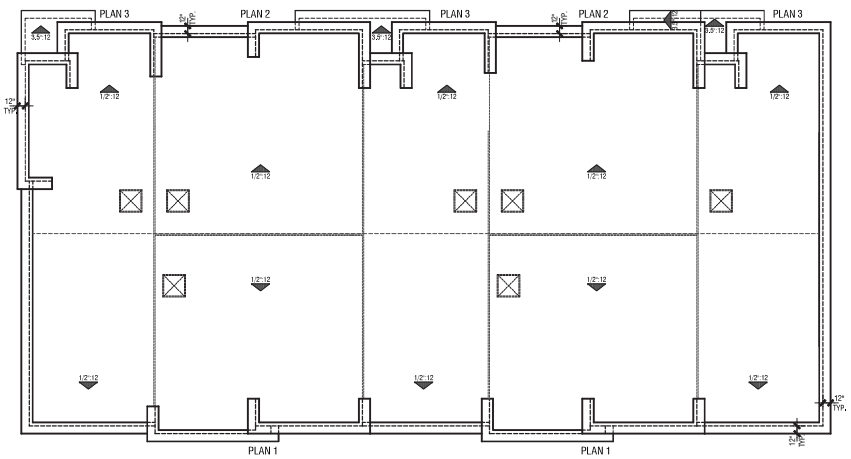
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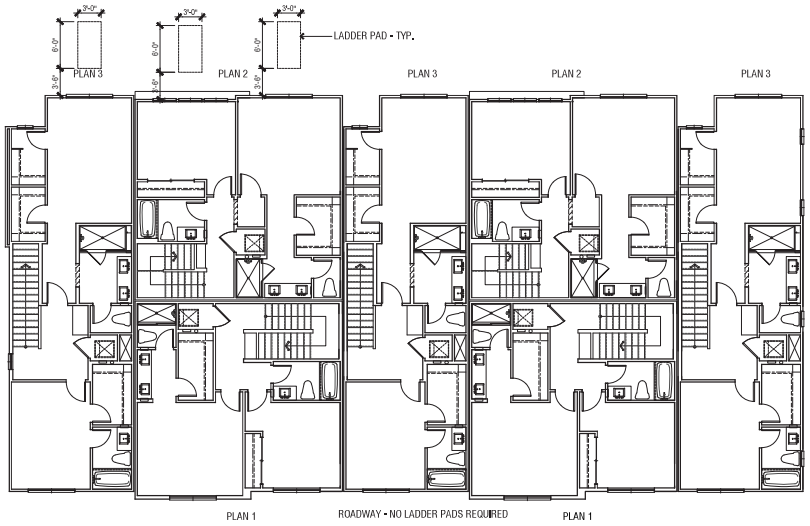
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EXHIBIT C





ROOF PLAN



THIRD FLOOR

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U – CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | THIRD FLOOR & ROOF PLAN

A4-10

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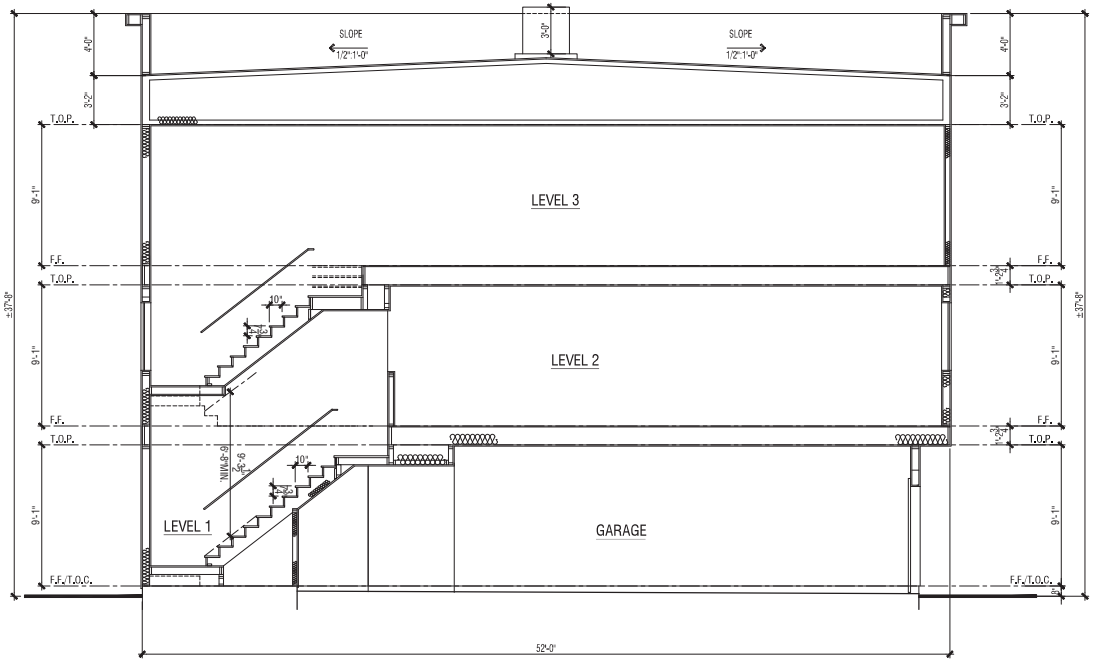
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1286



Building Section

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
BUILDING SECTION

A4-11

CONCEPT DESIGN

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OWNER, LLC

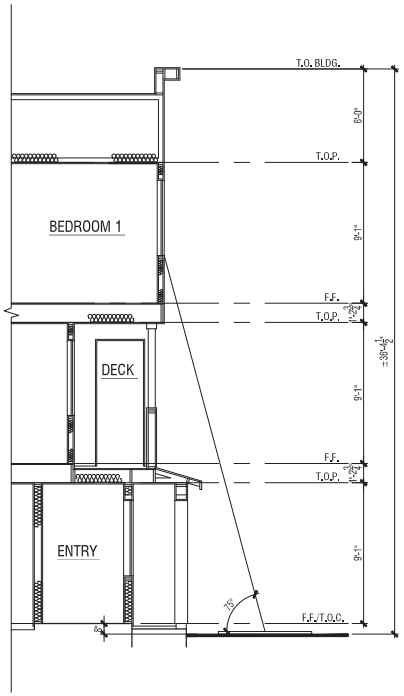
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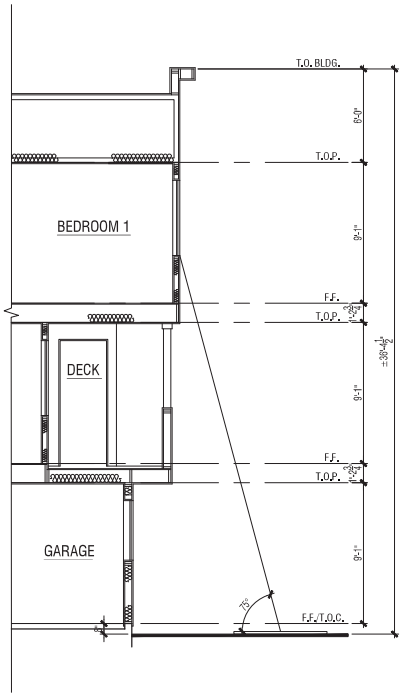
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Unit 2

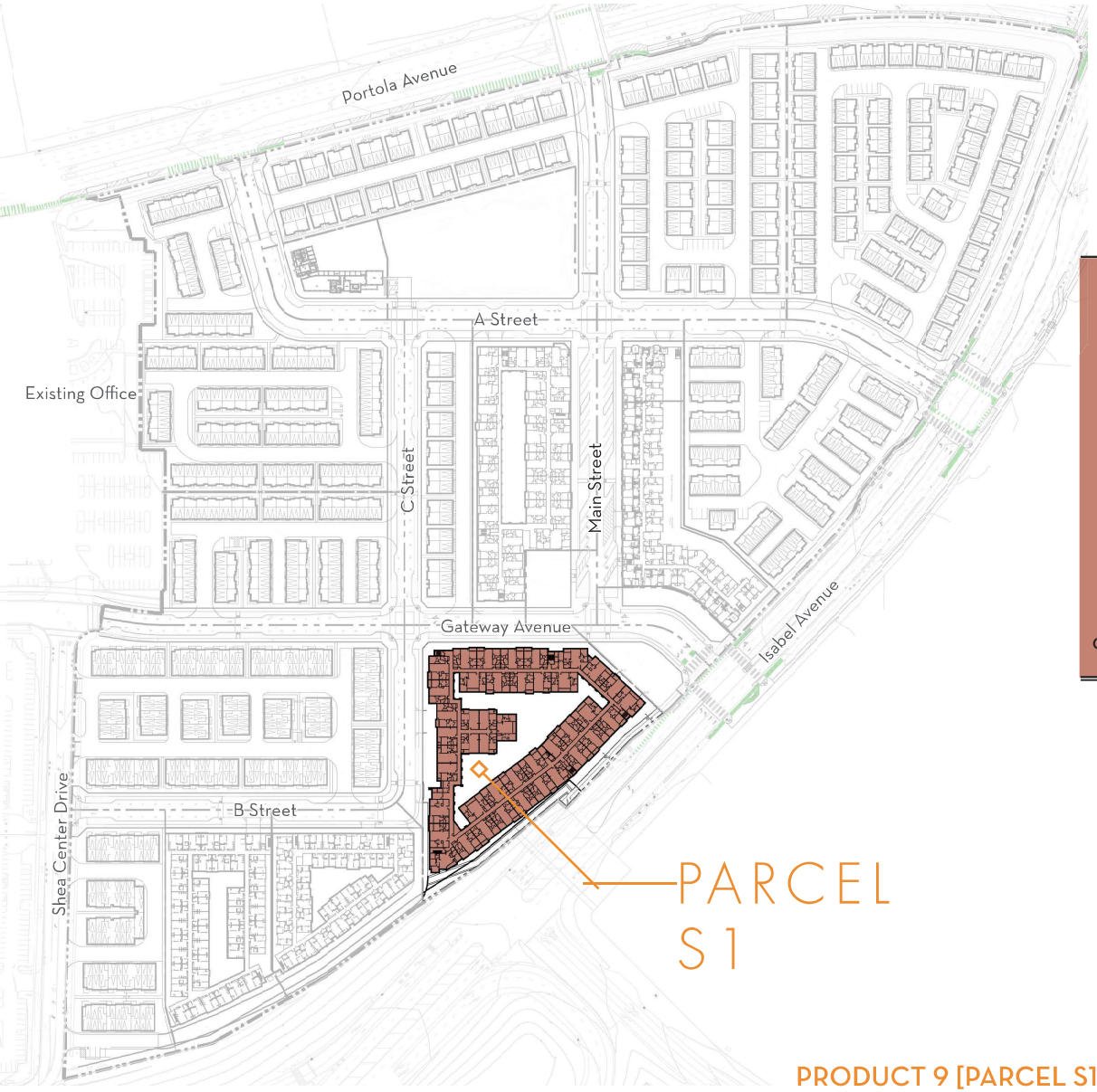


Unit 3

Ladder Pad Sections

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	949	1	1	44	41,756
Unit B-1	1,373	2	2.0	84	115,332
Unit C-1	1,418	3	2.0	24	34,032
Unit D-1	1,338	2	2	16	21,408
Unit E-1	1,336	3	2.0	4	5,344
Commercial					21,924
Total				**172**	**239,796**

Height Limit: 485'*

Building Height: 496.5 MSL

± 69' to ± 72'-8"

Stories: 4 Stories over 3 Levels Parking (1 Basement)

Notes:

- 22' Floor Plate for Grocery

*Height above MSL

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PRODUCT ALLOCATION

A9-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

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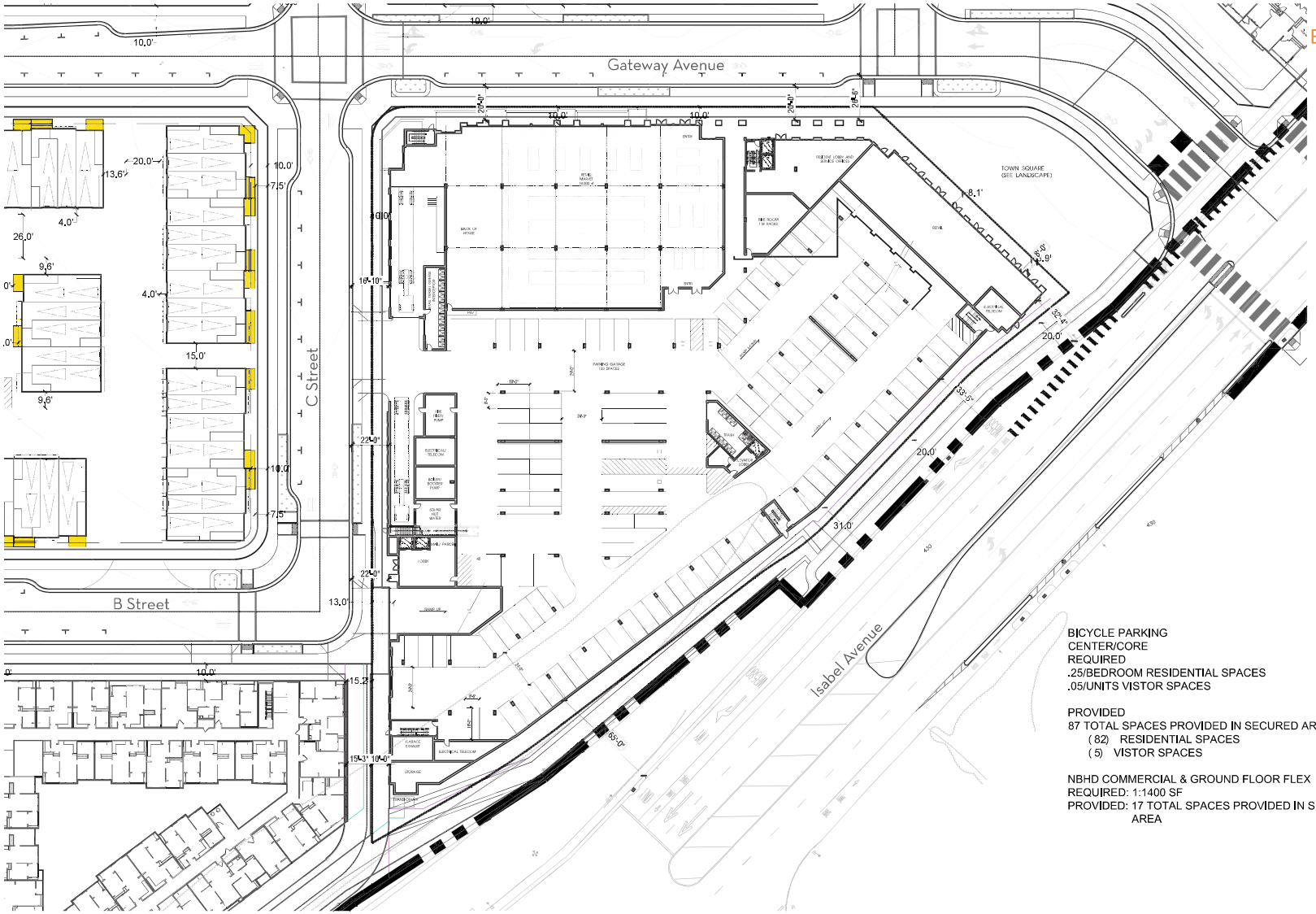
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 2.55 ACRES (NET)
DENSITY: 67.5

5 STORIES OVER 3 LEVELS OF PARKING (1 BASEMENT)

LEVEL B, 1, 2 : TYPE 1A
LEVEL 3-6: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

172 TOTAL UNITS
- 44 ONE-BEDROOM; ONE-BATH
- 16 TWO-BEDROOM; TWO-BATH; DEN
- 84 TWO-BEDROOM; TWO-BATH
- 28 THREE-BEDROOM; TWO BATH

AVERAGE UNIT SIZE: 1,271 S.F.

BUILDING AREA
- 164,022 SF PARKING
- 21,651 COMMERCIAL
- 2,273 AMENITY
- 296,184 RESIDENTIAL
- 484,130 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: N/A
- REQUIRED PRIVATE: N/A
- PROVIDED COMMON: 43,761 SF = 254 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVG.

PARKING
MIN. REQUIRED:
- 204 RESIDENTIAL SPACES
- 21 GUEST SPACES
- 40 COMMERCIAL

265 TOTAL REQUIRED SPACES (MIN.)

PROVIDED:
253 RESIDENTAL SPACES
- (6) ADA SPACES
- (1) ADA VAN SPACE

21 GUEST PARKING
- (2) ADA SPACES
- (1) ADA VAN SPACE

40 COMMERCIAL PARKING
- (8) ON STREET SPACES
- (2) ADA SPACES
- (1) ADA VAN SPACE

306 TOTAL PROVIDED SPACES
- (8) EV COMMERCIAL CAPABLE
  - (2) EVSE
  - (1) ADA VAN
  - (1) ADA SPACE
- (110) EV RESIDENTIAL - 40% LP LEV 2
- (27) EV RESIDENTIAL - 10% LEV2
- (6) VAN ACCESS

BICYCLE PARKING
CENTER/CORE
REQUIRED
.25/BEDROOM RESIDENTIAL SPACES
.05/UNITS VISTOR SPACES

PROVIDED
87 TOTAL SPACES PROVIDED IN SECURED AREA
- (82) RESIDENTIAL SPACES
- (5) VISTOR SPACES

NBHD COMMERCIAL & GROUND FLOOR FLEX
REQUIRED: 1:1400 SF
PROVIDED: 17 TOTAL SPACES PROVIDED IN SECURED AREA

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
SITE PLAN

A9-2

CONCEPT DESIGN

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WHA.

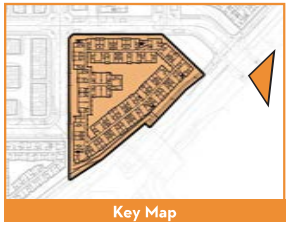
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Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | LOOKING NORTH WEST

A9-3

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Key Map

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | MAIN ENTRY VIEW

A9-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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Key Map

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | LOADING DOCK VIEW

A9-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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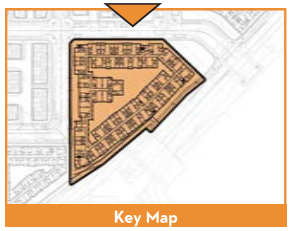
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EXHIBIT C





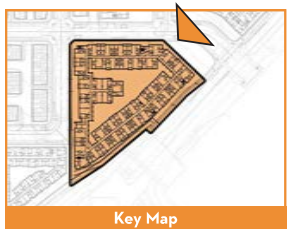
NORTH ELEVATION



BRICK COURSEWORK DETAILING



EAST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
NORTH & EAST ELEVATIONS

A9-6

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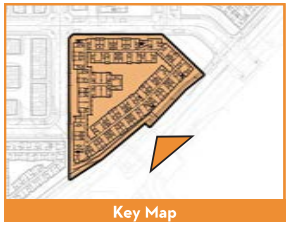
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EXHIBIT C





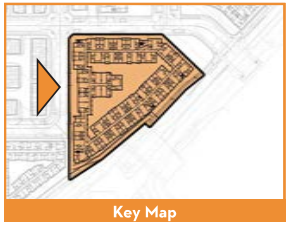
SOUTH ELEVATION



PARKING GARAGE
VENTILATION SCREENING



WEST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
SOUTH & WEST ELEVATIONS

A9-7

ISABEL PORTOLA
OWNER, LLC

WHA.

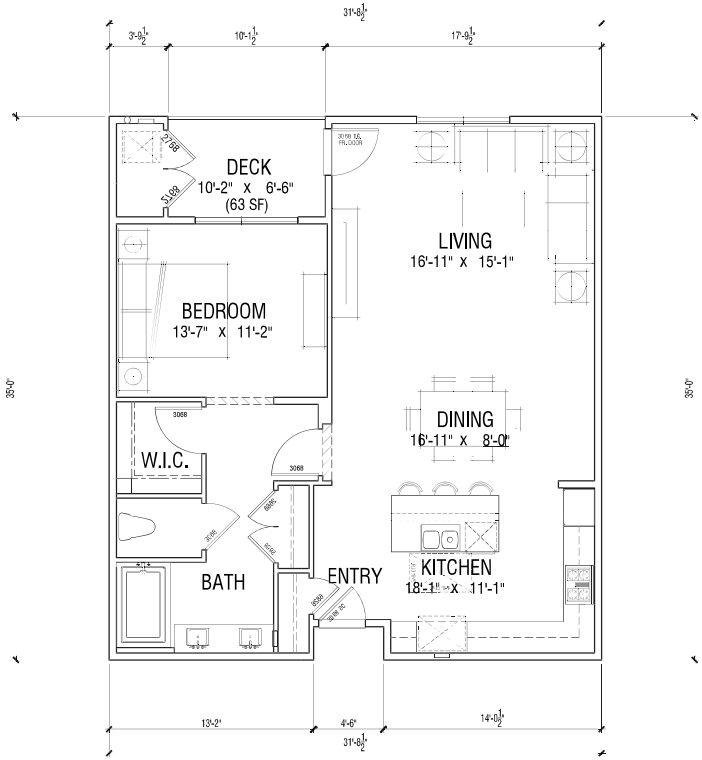
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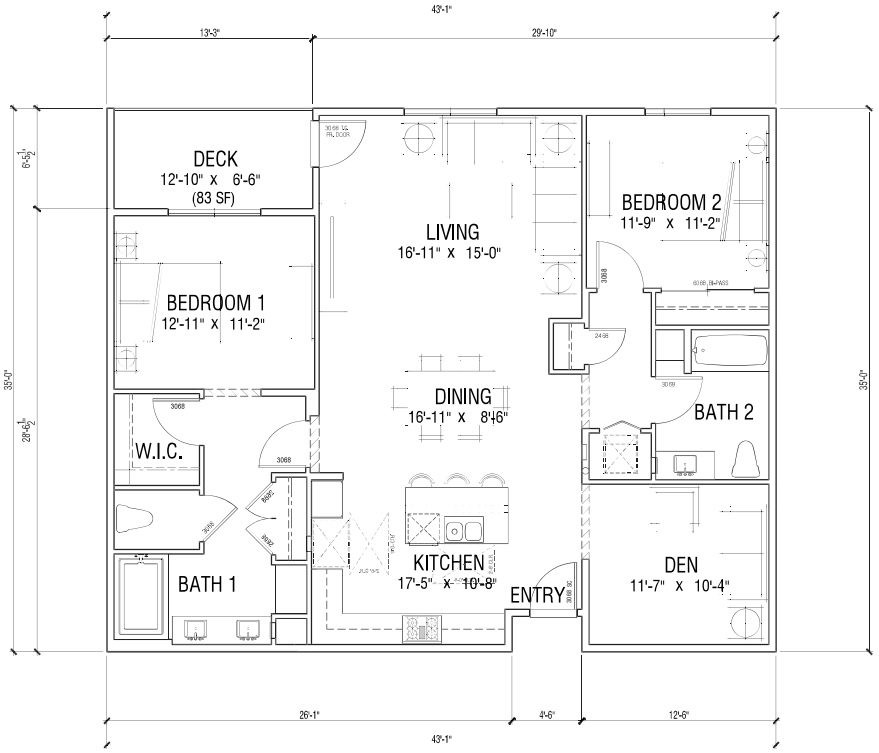
UNIT B-1

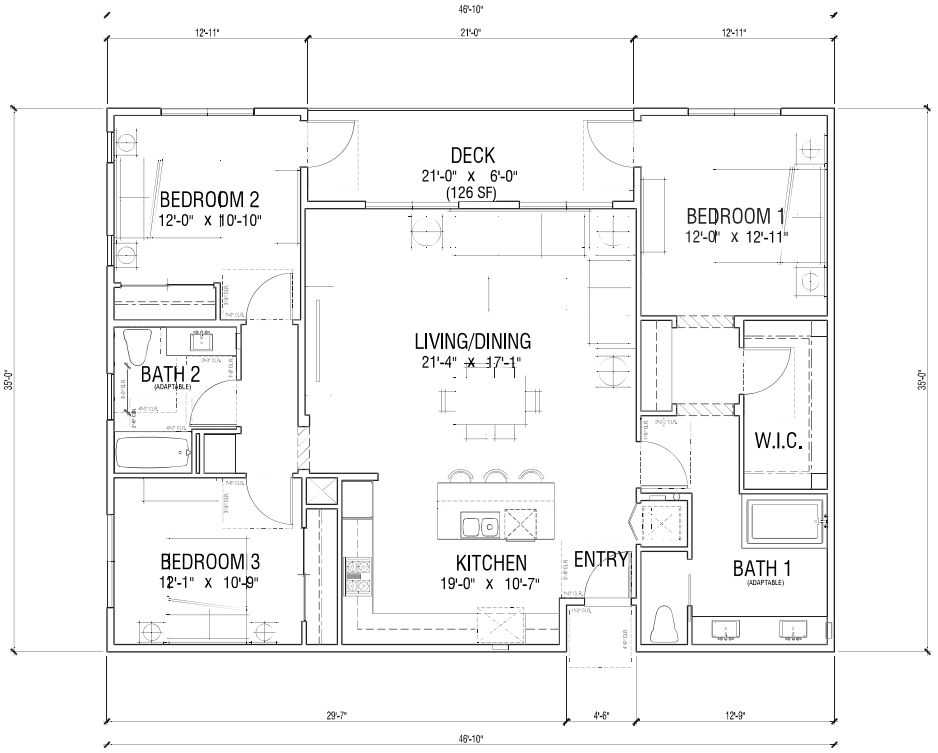
2 Bdrm | 2 Bath |
Unit: 1,373 sf
Deck: 79 sf

UNIT A-1

1 Bdrm | 1 Bath |
Unit: 949 sf
Deck: 63 sf

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UNIT D-1

2 Bdrm | 2 Bath | Den |
Unit: 1,338 sf
Deck: 83 sf

UNIT C-1

3 Bdrm | 2 Bath |
Unit: 1,418 sf
Deck: 126 sf

CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
C-1, D-2 UNIT FLOOR PLANS

A9-9

ISABEL PORTOLA
OWNER, LLC

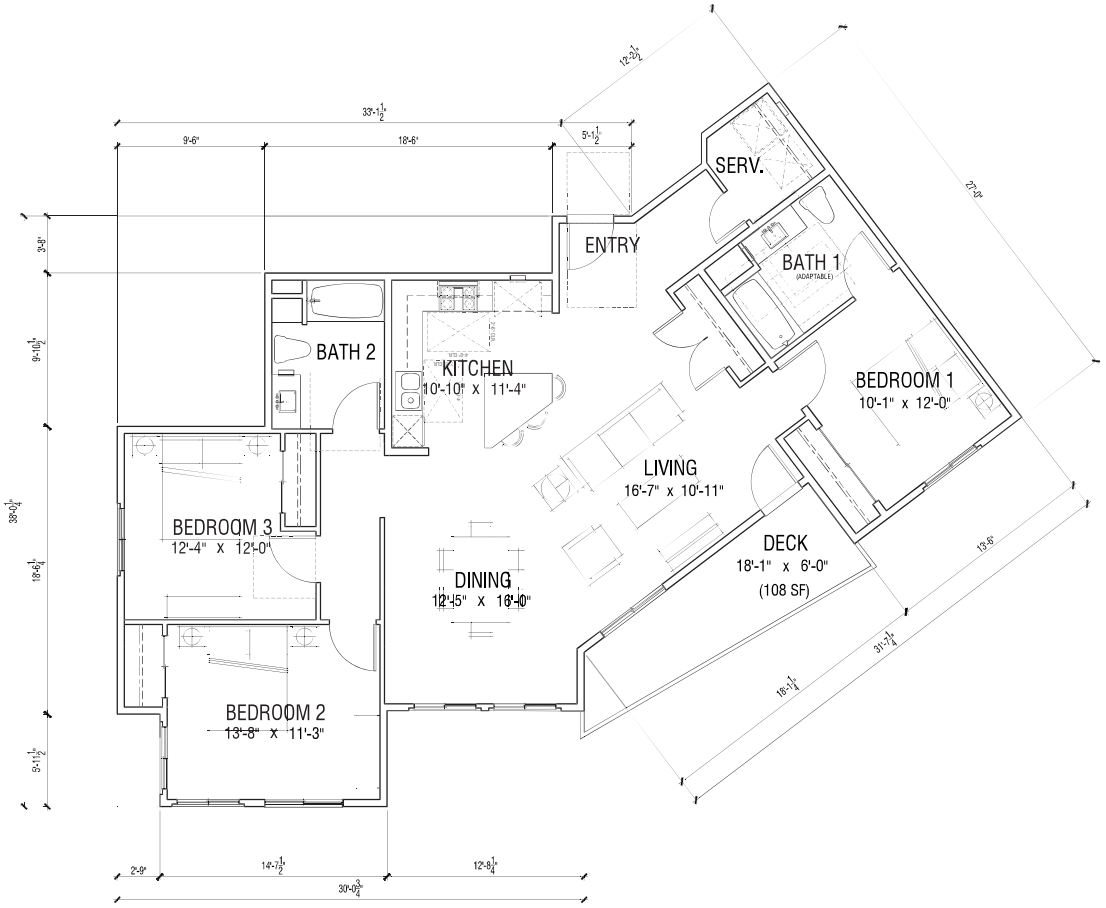
WHA.

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UNIT E-1

3 Bdrm | 2 Bath
Unit: 1,336 sf
Deck: 108 sf

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
E-1 UNIT FLOOR PLAN

A9-10

CONCEPT DESIGN

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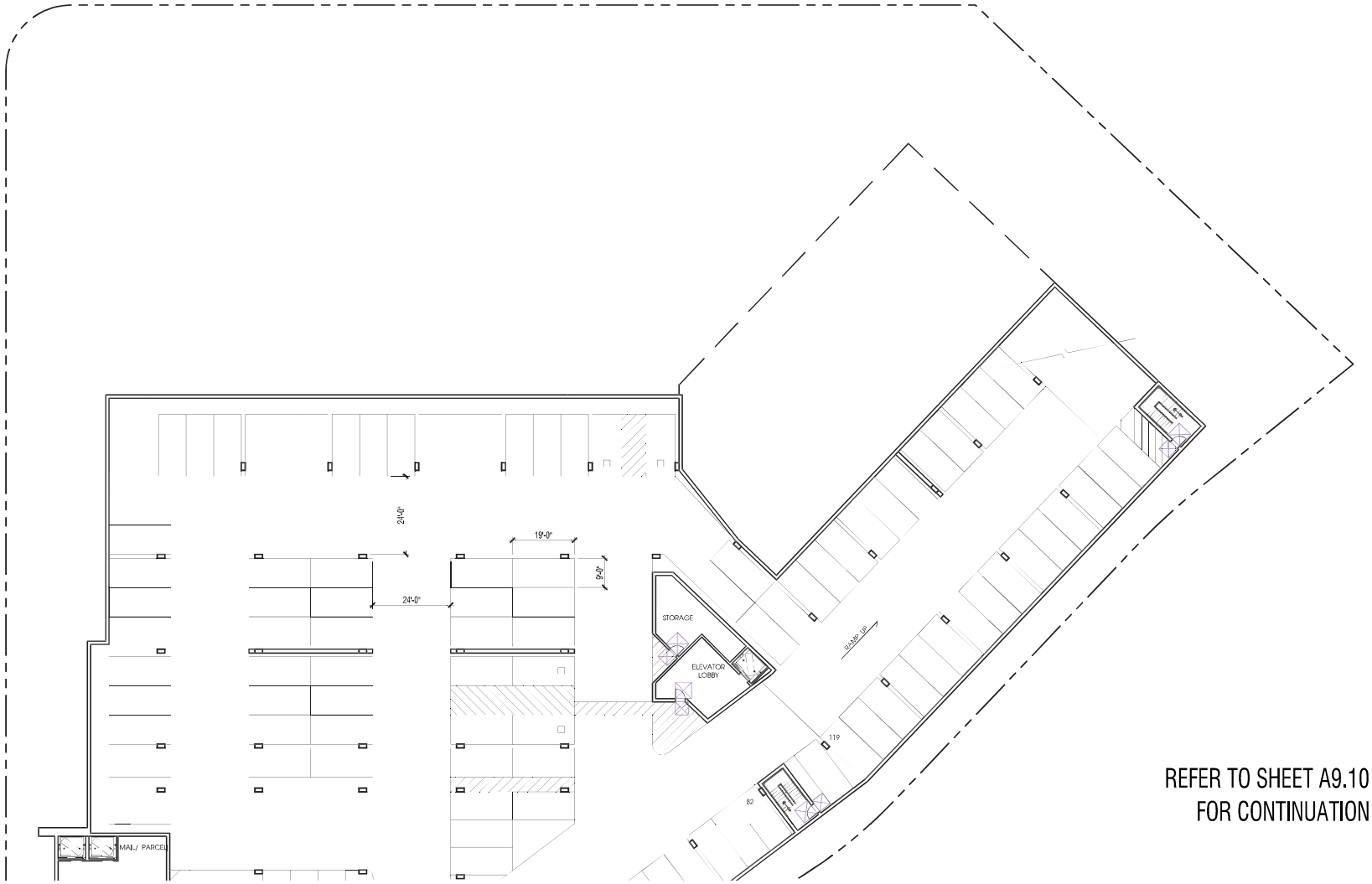
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1298

EXHIBIT C



MATCH LINE

REFER TO SHEET A9.10
FOR CONTINUATION

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
BASEMENT PARKING LEVEL - NORTH

A9-11

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

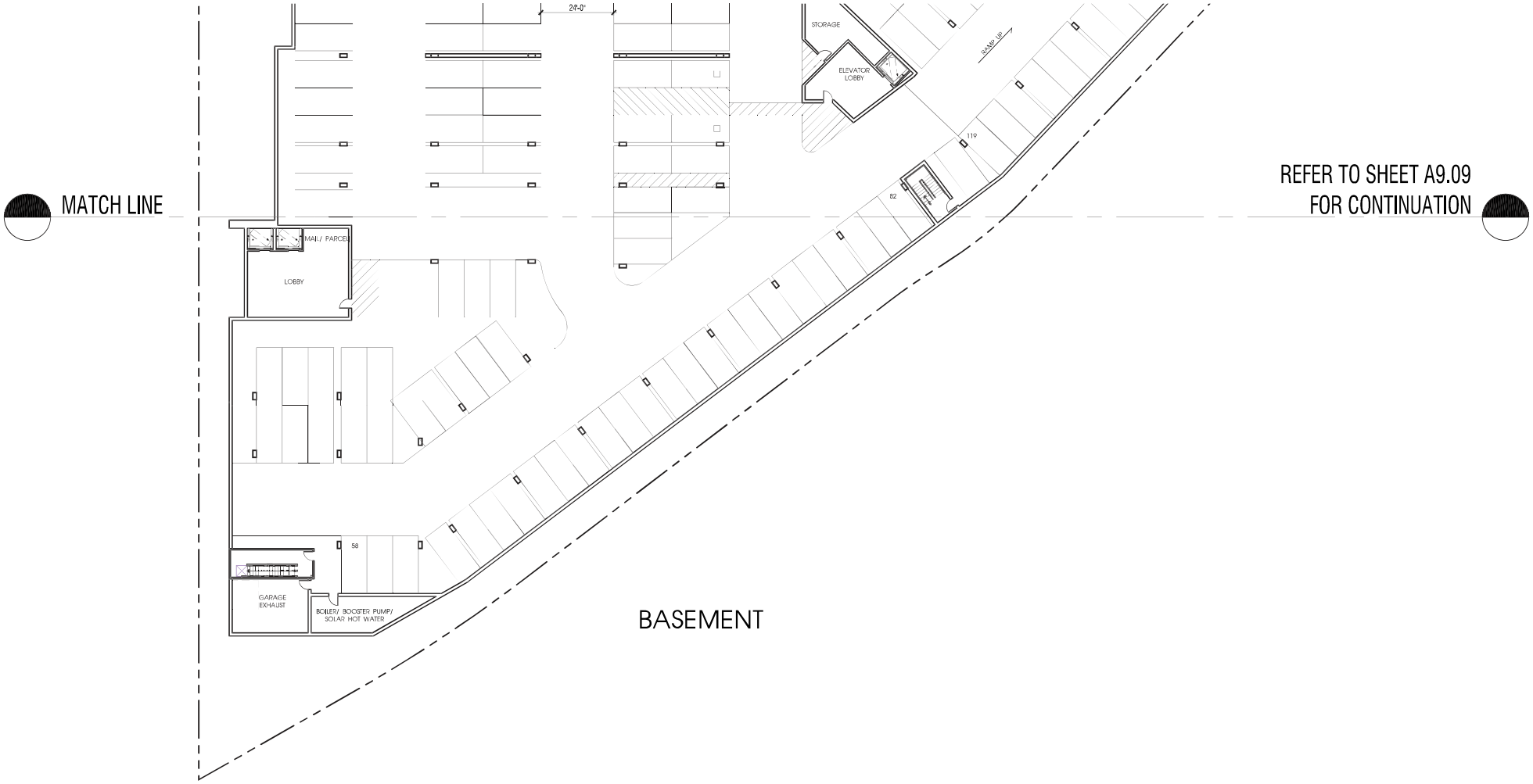
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EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
BASEMENT PARKING LEVEL - SOUTH

A9-12

CONCEPT DESIGN

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OWNER, LLC

WHA.

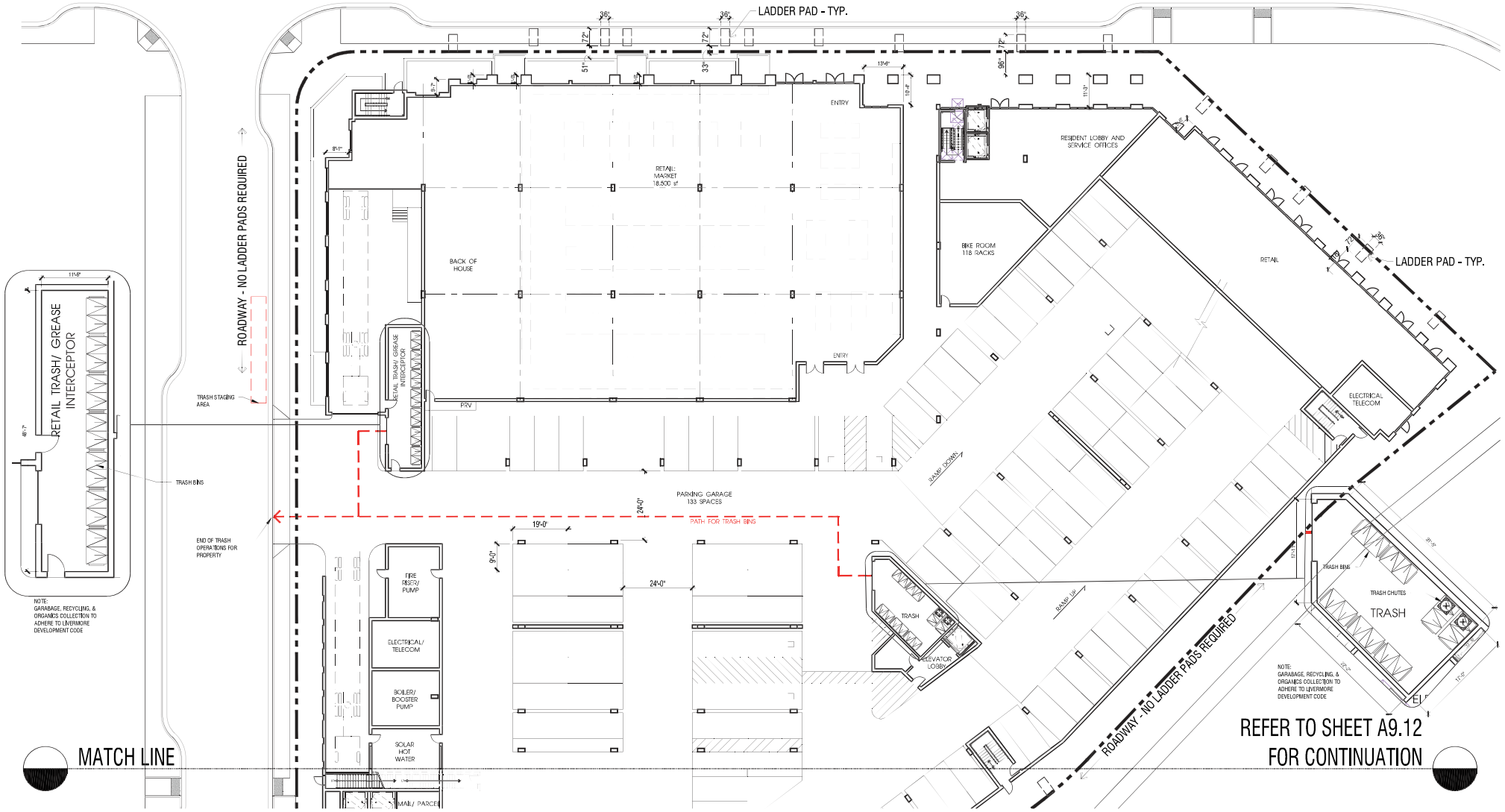
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EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
FIRST LEVEL - NORTH

A9-13

CONCEPT DESIGN

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WHA.

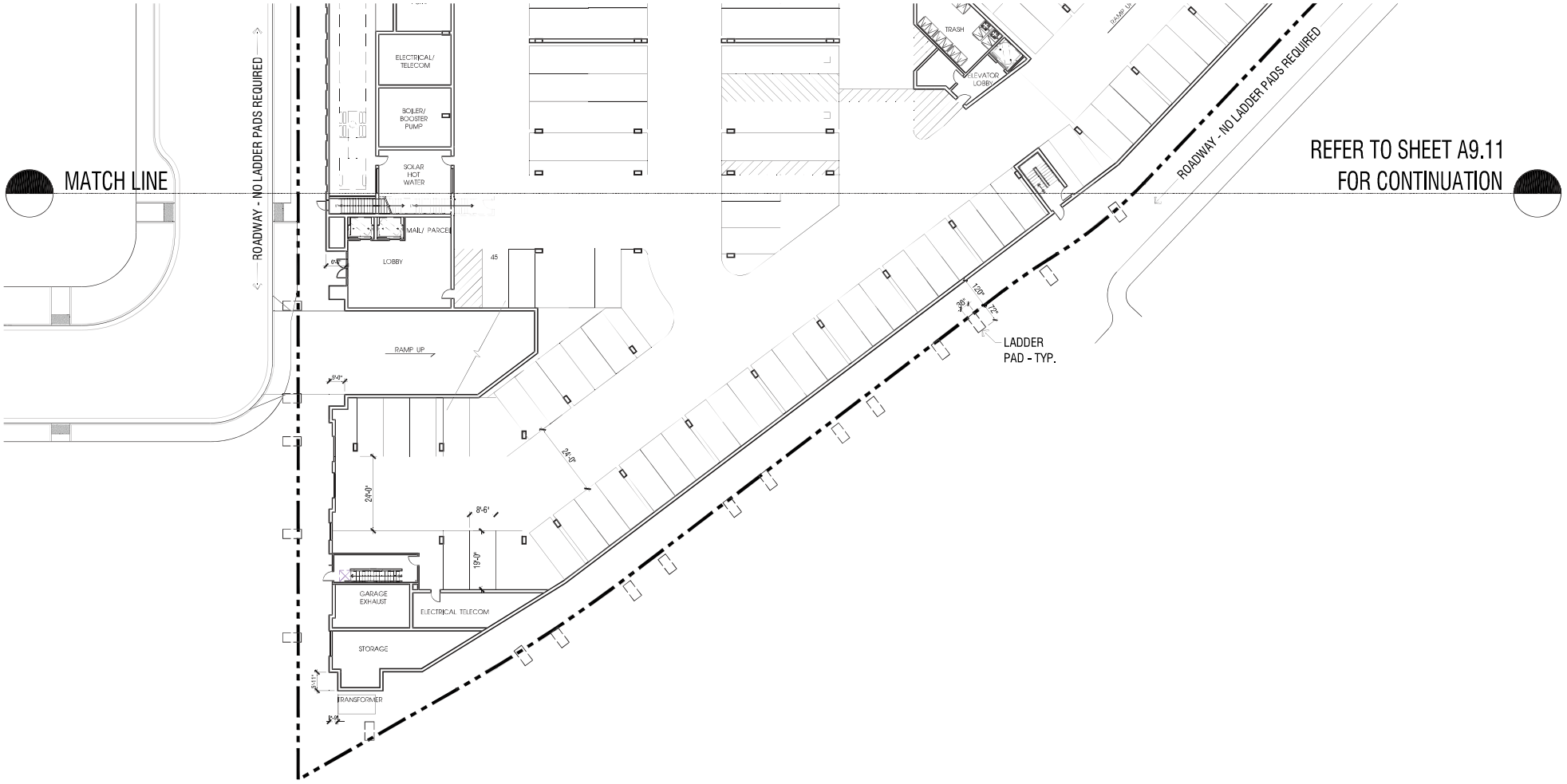
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EXHIBIT C



CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
FIRST LEVEL - SOUTH

A9-14

ISABEL PORTOLA
OWNER, LLC

WHA.

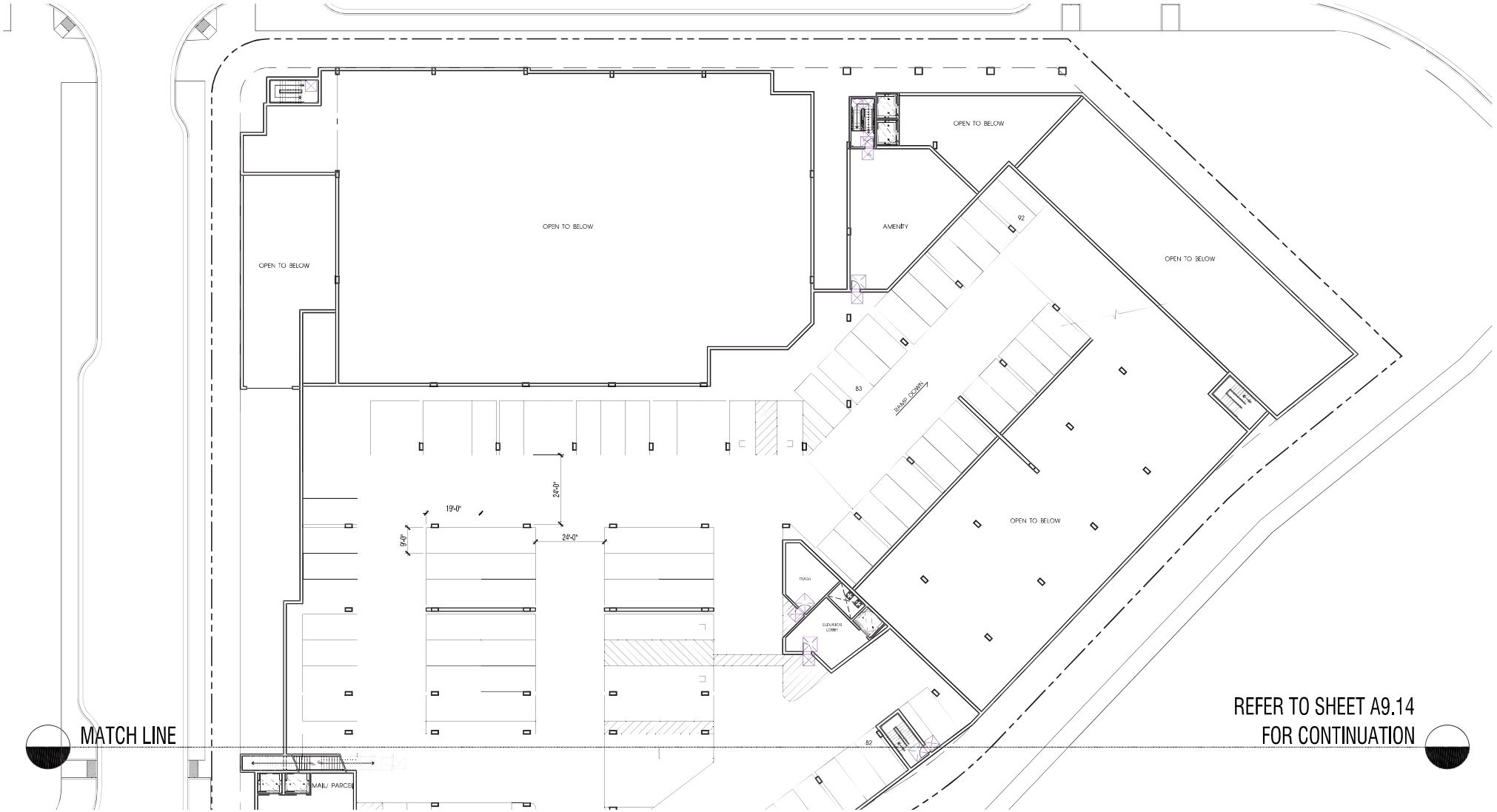
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EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
MEZZANINE PARKING LEVEL - NORTH

A9-15

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

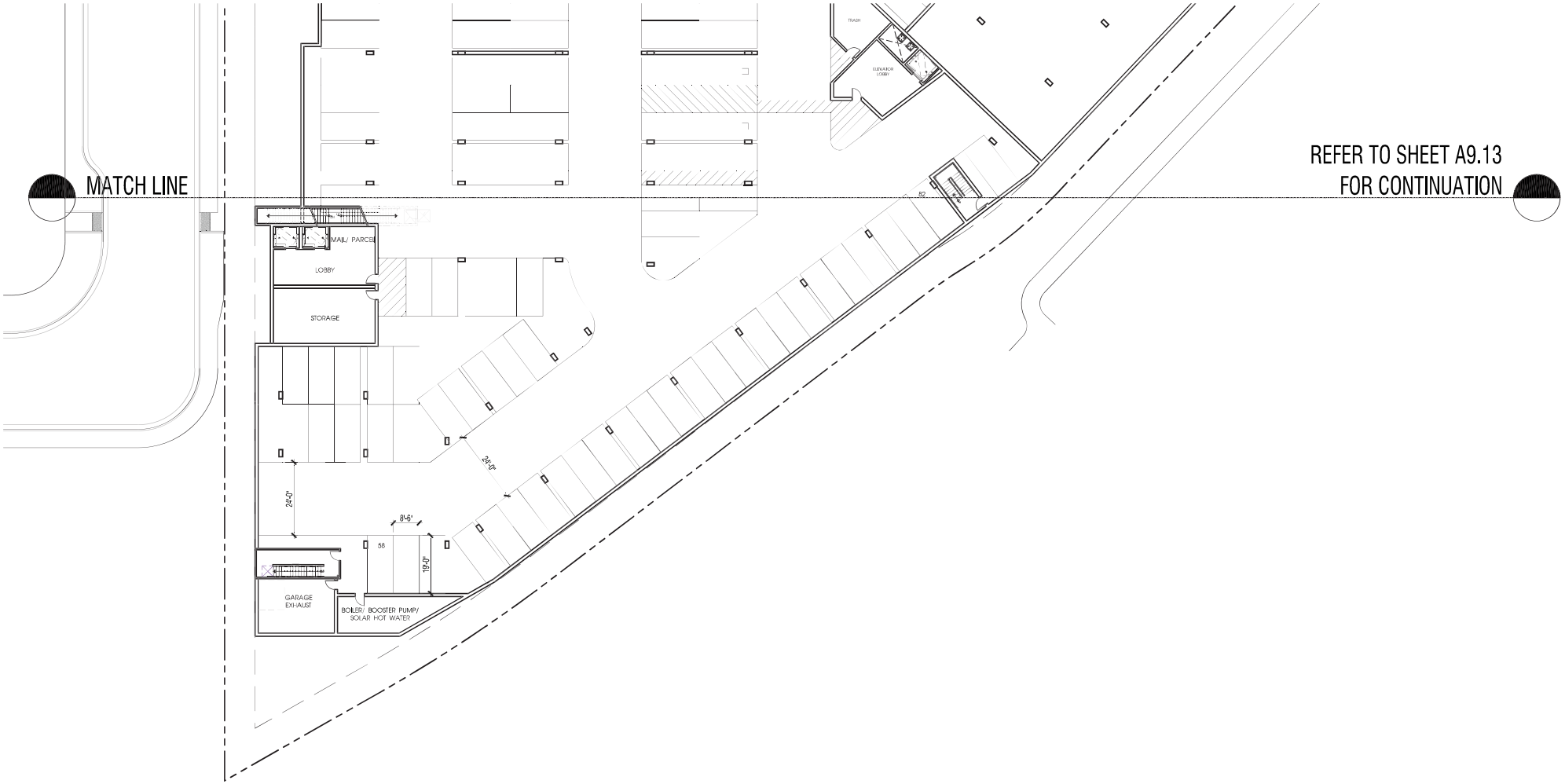
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EXHIBIT C



CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
MEZZANINE PARKING LEVEL - SOUTH

A9-16

ISABEL PORTOLA
OWNER, LLC

WHA.

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1304

EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PODIUM FLOOR PLAN - NORTH

A9-17

CONCEPT DESIGN

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EXHIBIT C



CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PODIUM FLOOR PLAN - SOUTH

A9-18

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WHA.

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EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
LEVELS 3-6 PLAN - NORTH

A9-19

CONCEPT DESIGN

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WHA.

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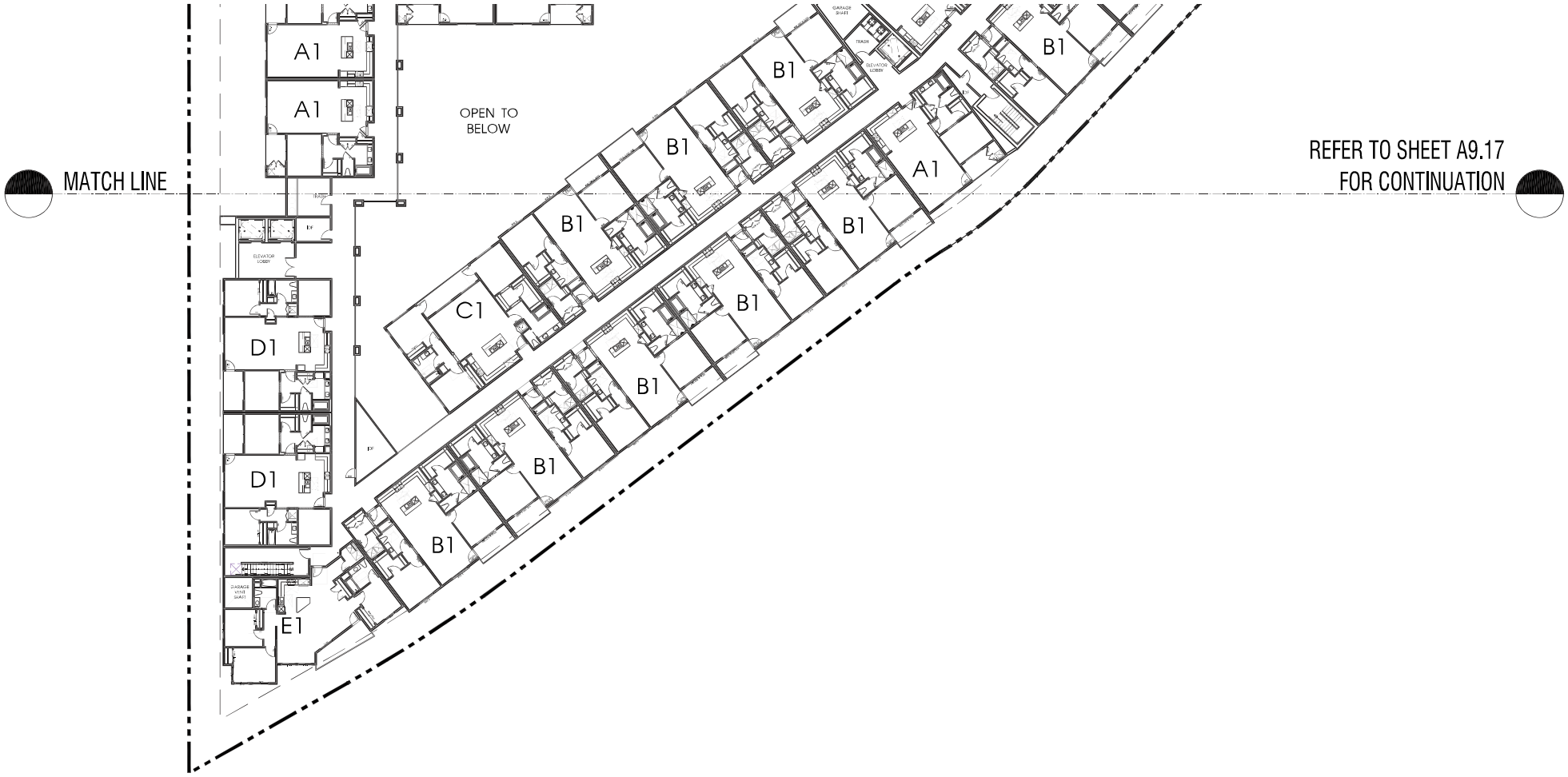
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1307

EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
LEVELS 3-6 PLAN - SOUTH

A9-20

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

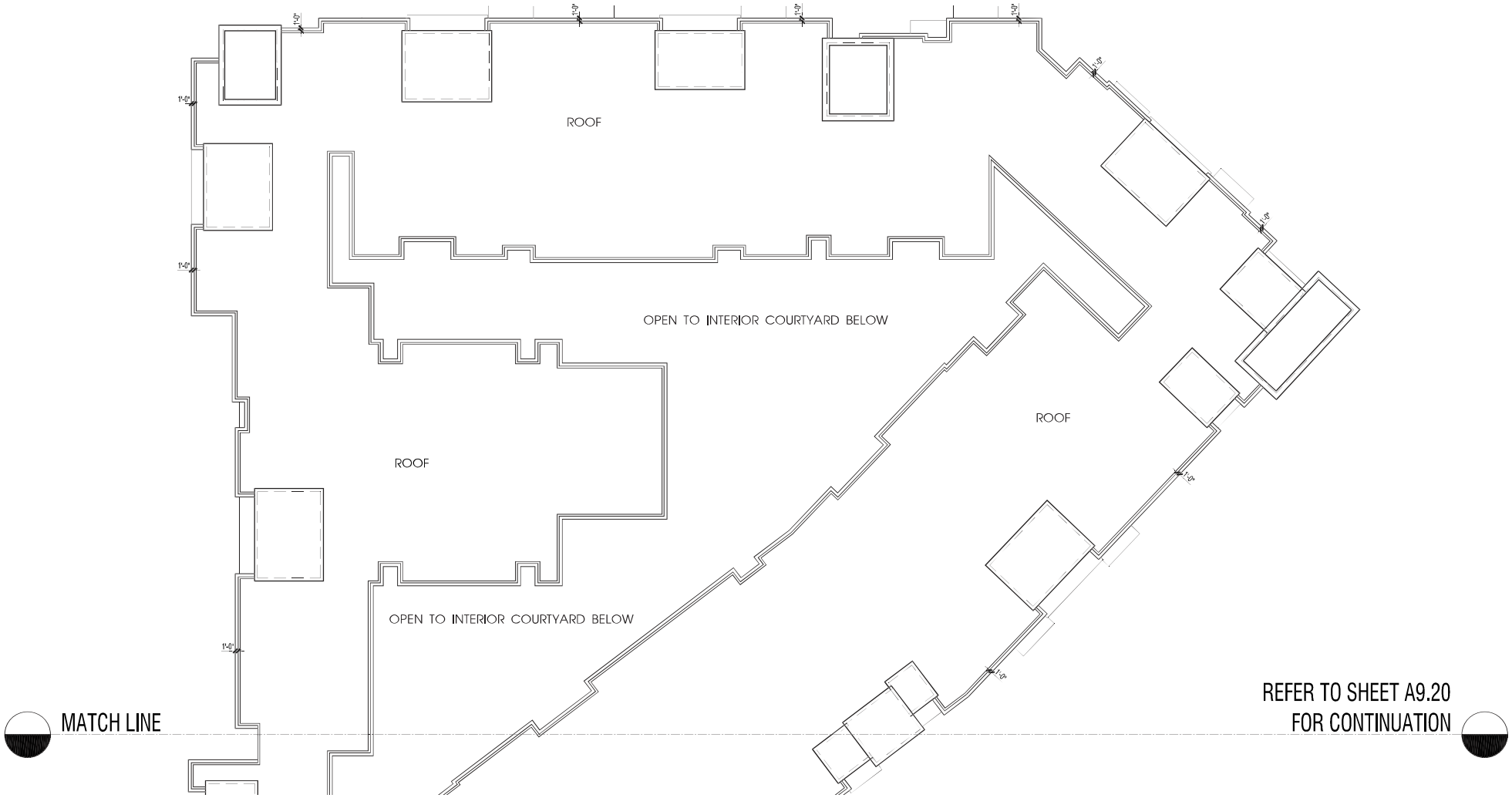
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CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
ROOF PLAN - NORTH

A9-21

ISABEL PORTOLA
OWNER, LLC

WHA.

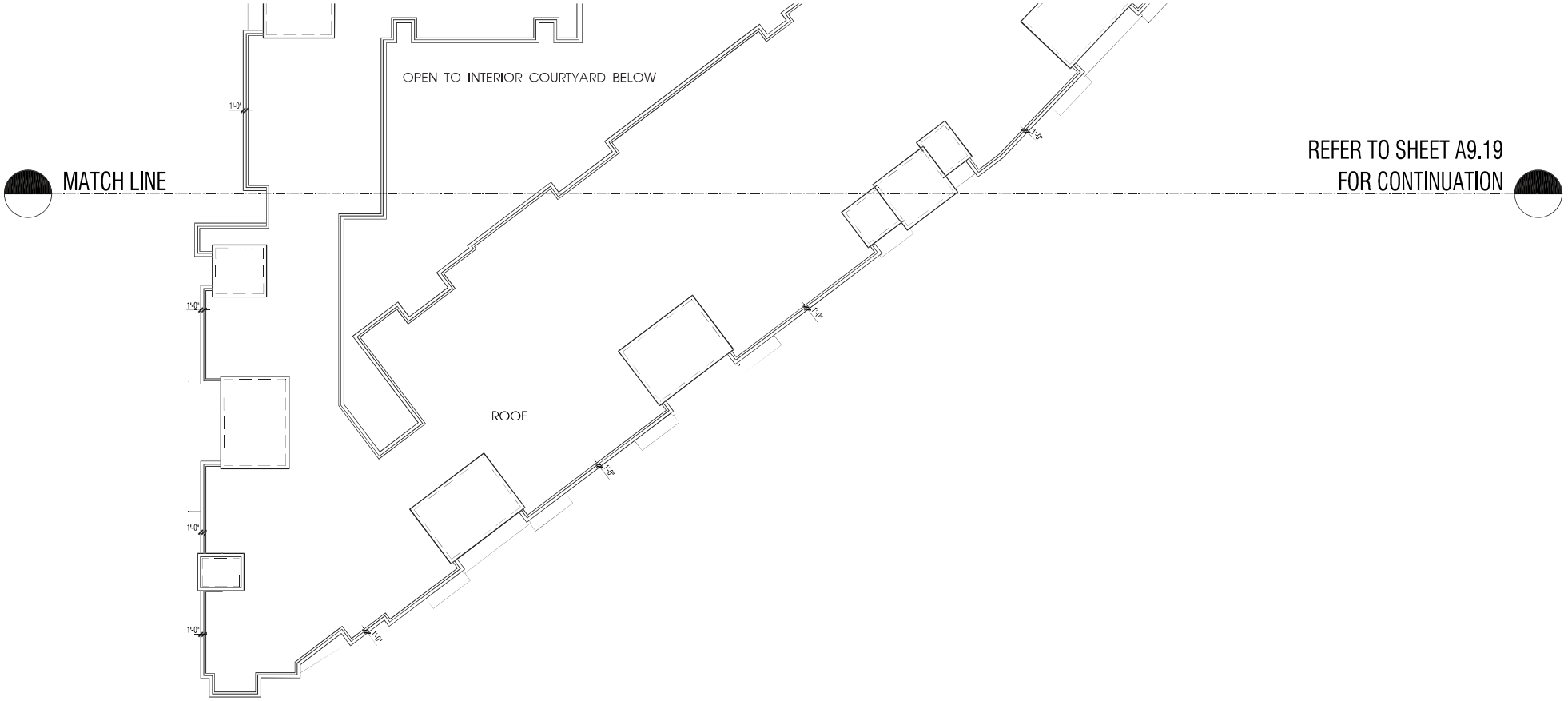
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CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
ROOF PLAN - SOUTH

A9-22

ISABEL PORTOLA
OWNER, LLC

WHA.

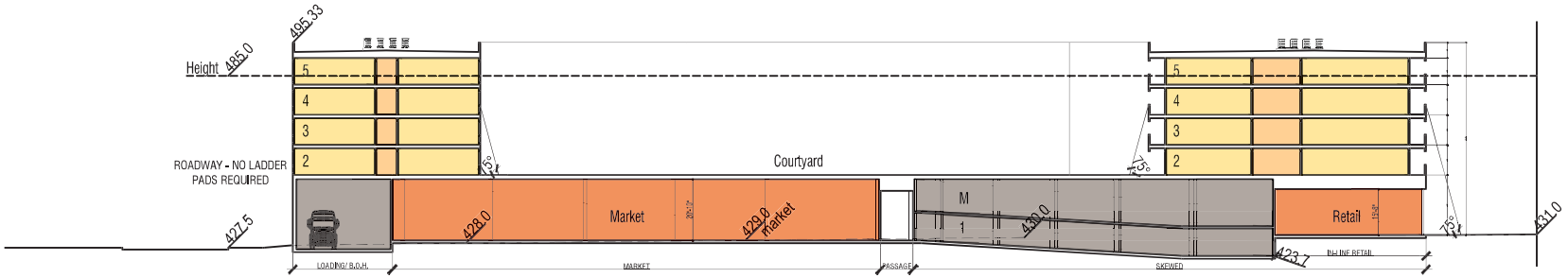
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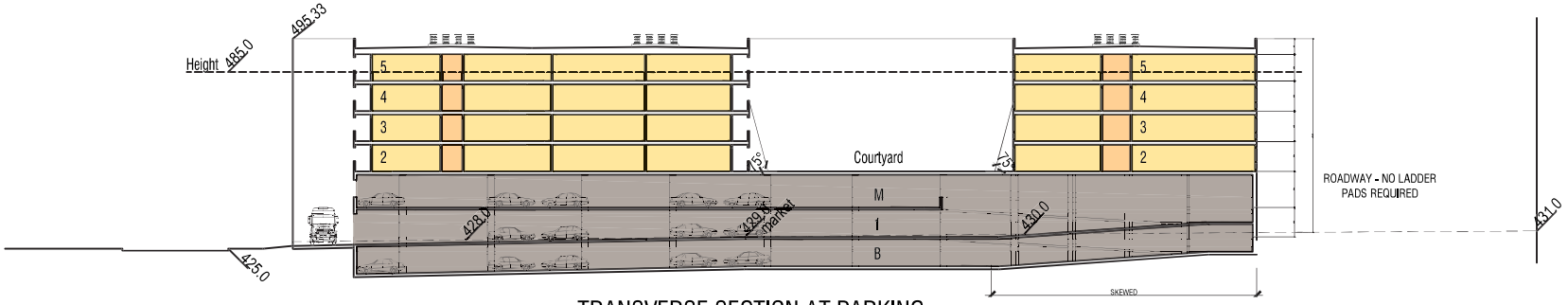
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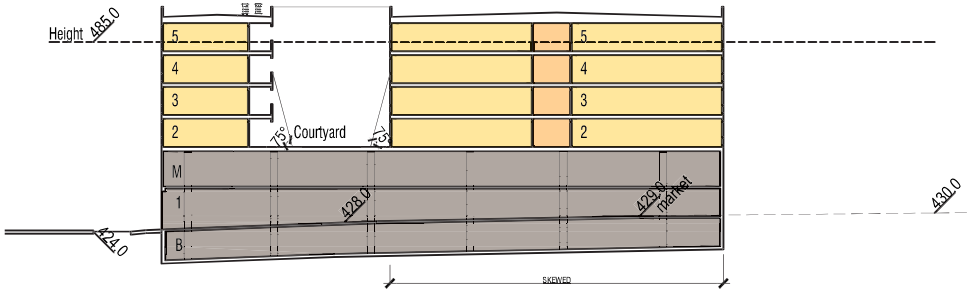
1310



TRANSVERSE SECTION AT RETAIL



TRANSVERSE SECTION AT PARKING



CROSS SECTION AT BASEMENT

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
CROSS SECTIONS

A9-23

CONCEPT DESIGN

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OWNER, LLC

WHA.

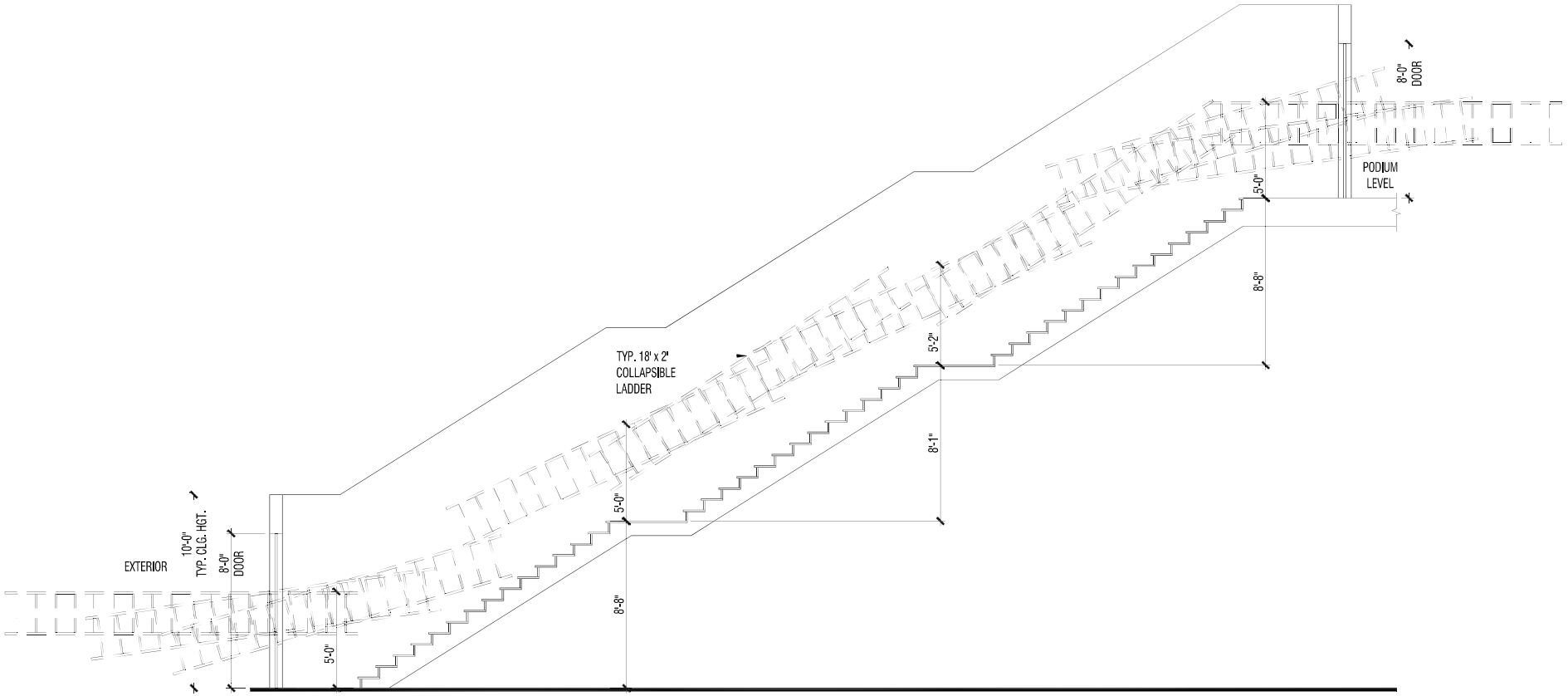
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EXHIBIT C



FIREMAN'S STAIR SECTION

CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
FIRE LADDER PATH STUDY - SECTION

A9-24

ISABEL PORTOLA
OWNER, LLC

WHA.

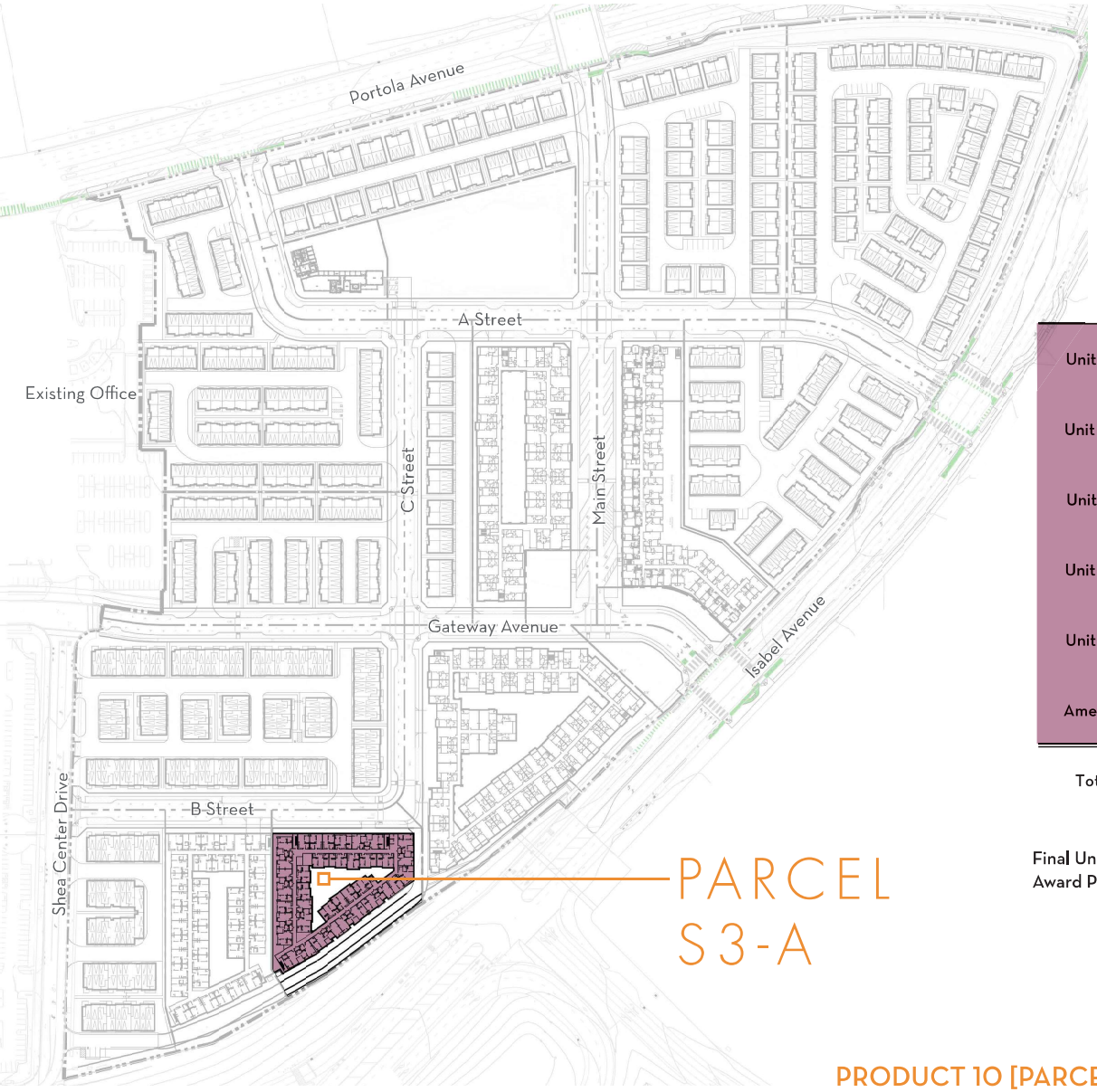
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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	453	Studio	1.0	40	18,120
Unit A-2	533	1	1.0	32	17,056
Unit B-1	710	2	1.0	27	19,170
Unit B-2	786	2	1.0	13	10,218
Unit C-1	1,007	3	2.0	40	40,280
Amenity					2,442
Total				152	107,286

Final Unit Mix To Be Determined With TCAC Application and Award Process.

Height Limit: 485'*

Building Height: 491.0 MSL

min ± 47'-8"- max ± 54'-8"

Stories: 4 Stories over 2 Above Grade Levels of Parking.

See section for more information.

*Height above MSL

CONCEPT DESIGN

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW) PRODUCT ALLOCATION

A10-1

ISABEL PORTOLA OWNER, LLC

WHA.

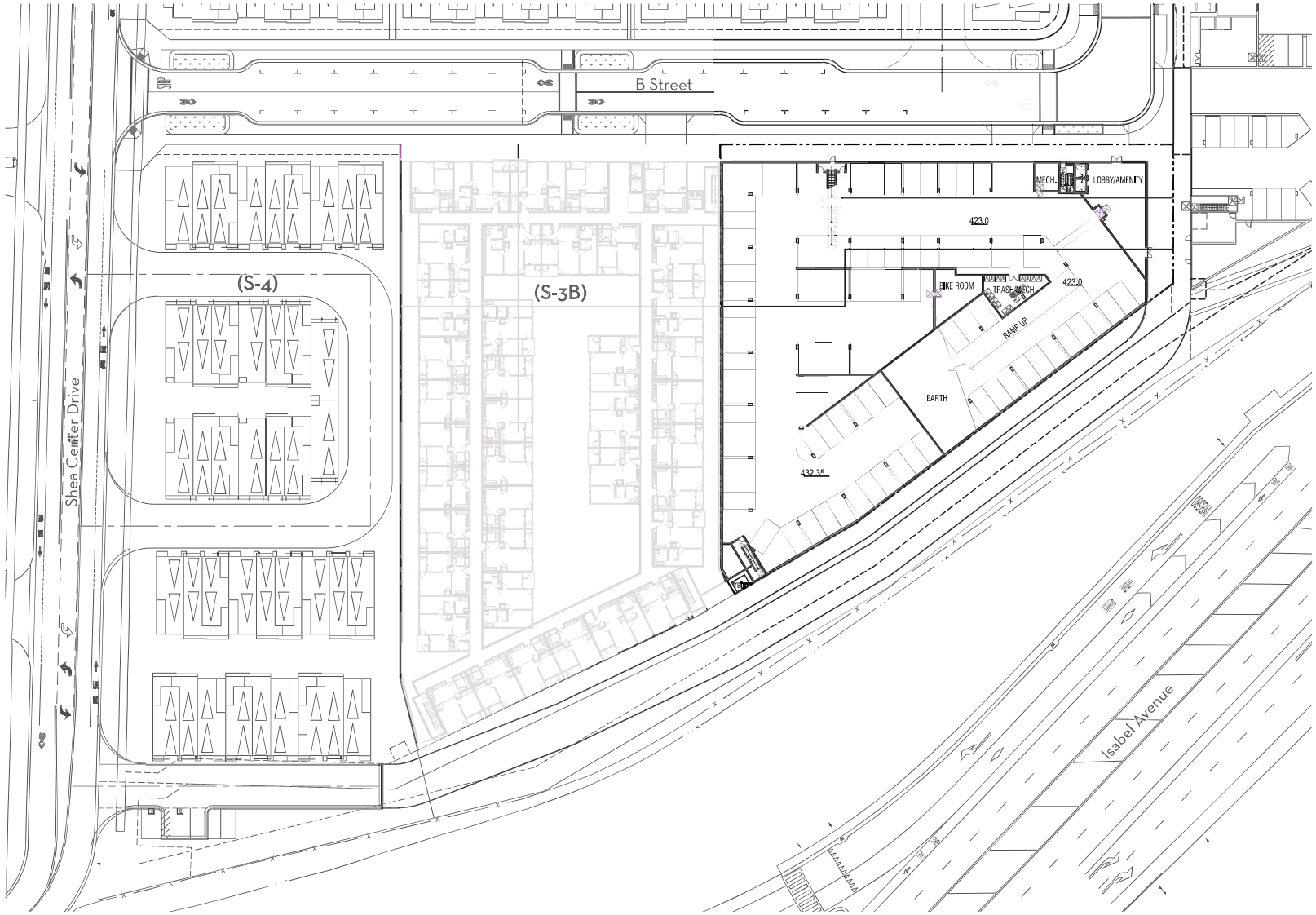
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.12 ACRES (NET)
TOTAL UNITS: 152
DENSITY: 136.3 UNITS/ ACRE

PRODUCT 10 - SITE S3-A

4 STORIES OVER TWO LEVELS OF PARKING
LEVEL 1: TYPE I-A PODIUM
LEVEL 2-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM
MIXED USE OCCUPANCY: R-2, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

152 TOTAL UNITS
- 40 STUDIO; ONE BATH
- 32 ONE-BEDROOM; ONE BATH
- 40 TWO-BEDROOM; ONE-BATH
- 40 THREE-BEDROOM; TWO BATH

AVERAGE UNIT SIZE: 691 S.F.

BUILDING AREA
- 79,879 SF PARKING
- 2,442 AMENTIY
- 135,124 RESIDENTIAL
- 217,445 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 11,400
- REQUIRED PRIVATE: 7,600
- PROVIDED COMMON: 13,714 SF = 134 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING
- REQUIRED: 192 MIN. AB2345; 306 MAX.
- 182 TOTAL SPACES PROVIDED

BICYCLE PARKING
- REQUIRED RESIDENTIAL: 4 UNIT
- PROVIDED RESIDENTIAL: 68 SPACES PROVIDED IN SECURED AREAS
- REQUIRED VISITOR: 1:20
- PROVIDED VISITOR: 8

178 TOTAL PROVIDED SPACES
- (73) EV RESIDENTIAL - 40% LP LEV 2
- (18) EV RESIDENTIAL - 10% LEV 2
- (4) VAN ACCESS

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
SITE PLAN

A10-2

CONCEPT DESIGN

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WHA.

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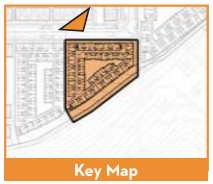
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1314




Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
PERSPECTIVE

A10-3

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OWNER, LLC

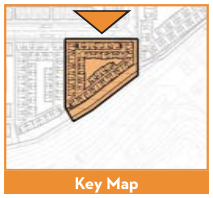
WHA.

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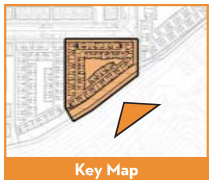




NORTH ELEVATION



PARKING GARAGE VENTILATION SCREENING





SOUTH ELEVATION

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
NORTH & SOUTH ELEVATIONS

A10-4

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OWNER, LLC

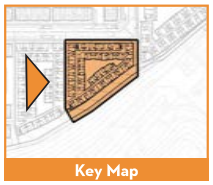
WHA.

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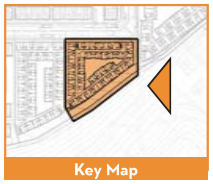
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WEST ELEVATION





EAST ELEVATION

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
EAST & WEST ELEVATIONS

A10-5

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OWNER, LLC

WHA.

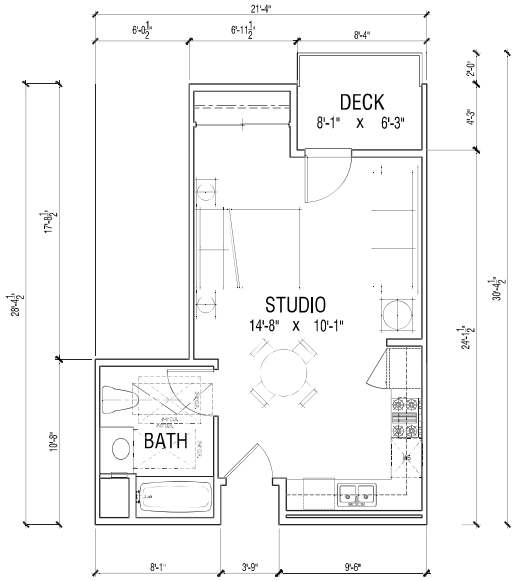
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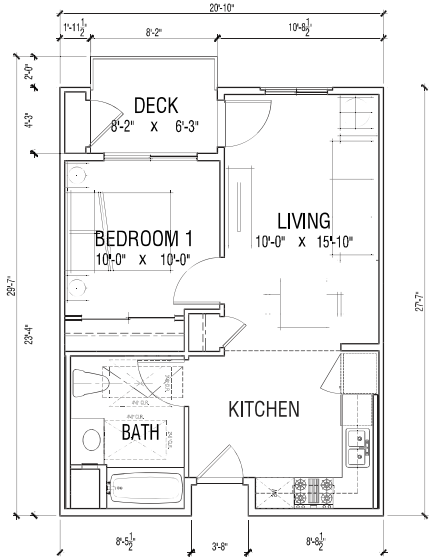
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UNIT A-1

Studio
Unit: 453 sf
Deck: 50 sf



UNIT A-2

1 Bdrm | 1 Bath
Unit: 533 sf
Deck: 50 sf

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UNIT B-1

2 Bdrm | 1 Bath
Unit: 710 sf
Deck: 50 sf



UNIT B-2

2 Bdrm | 1 Bath
Unit: 786 sf
Deck: 50 sf

CONCEPT DESIGN

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
B-1, B-2 UNIT PLANS

A10-7

ISABEL PORTOLA
OWNER, LLC

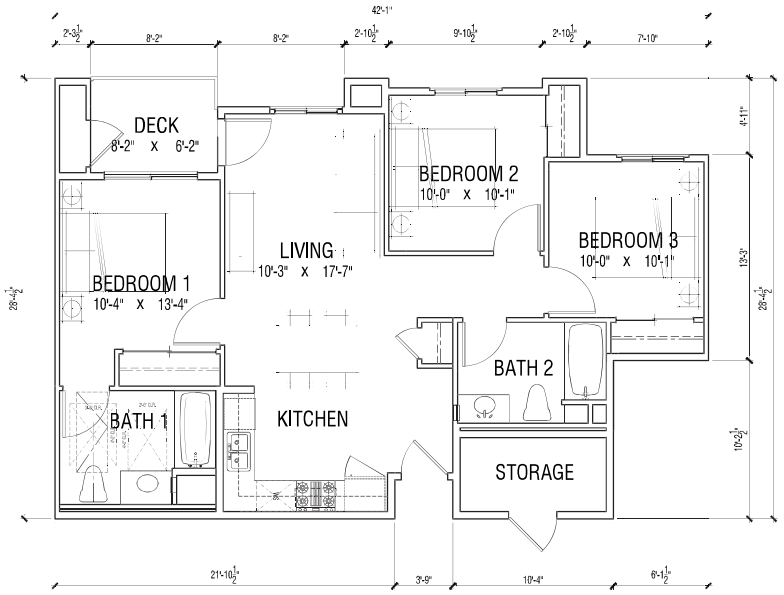
WHA.

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UNIT C-1

3 Bdrm | 2 Bath
Unit: 1007 sf
Deck: 50 sf

CONCEPT DESIGN

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
C-1 UNIT PLAN

A10-8

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WHA.

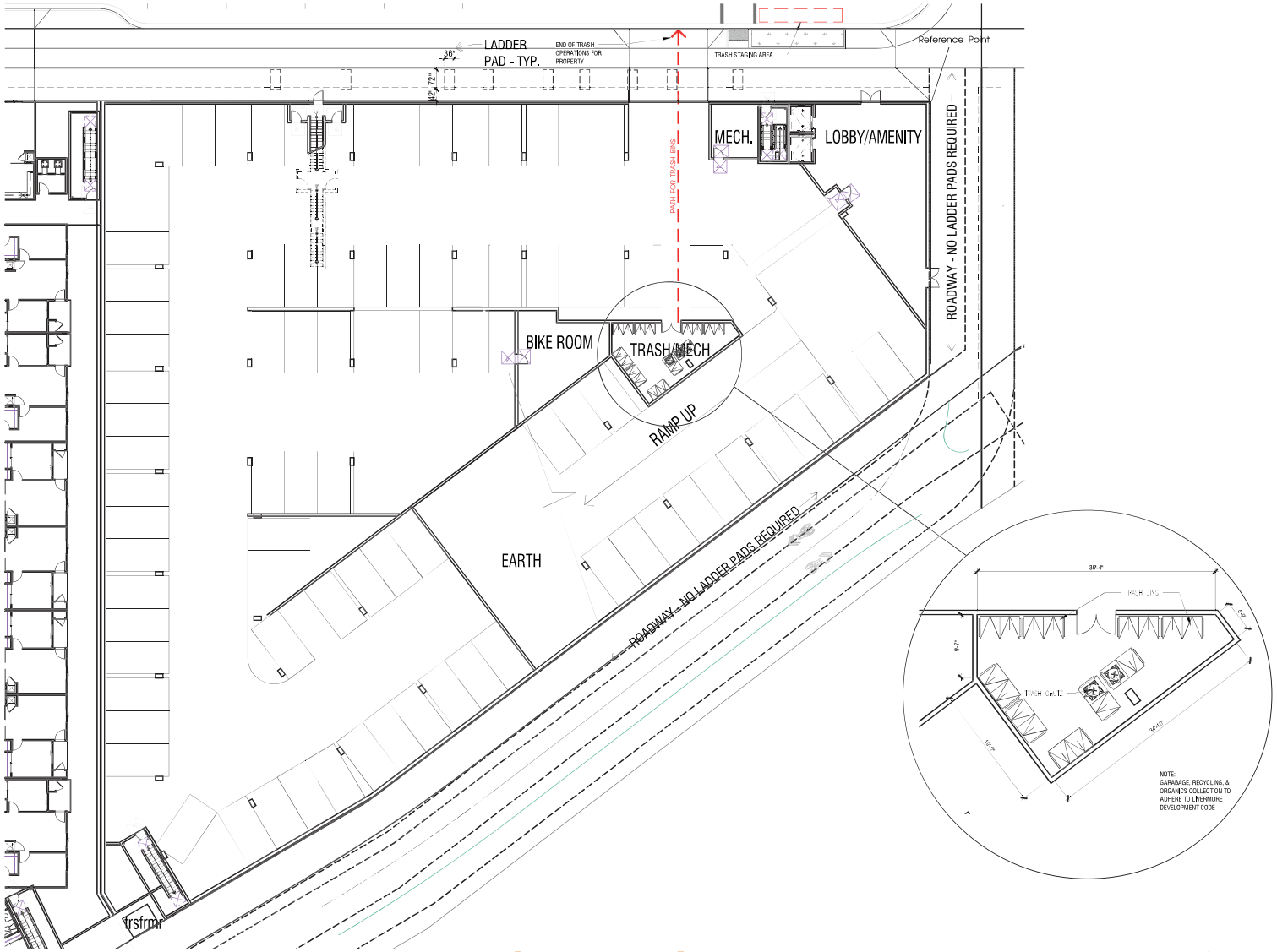
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EXHIBIT C



PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
GROUND LEVEL PLAN

A10-9

CONCEPT DESIGN

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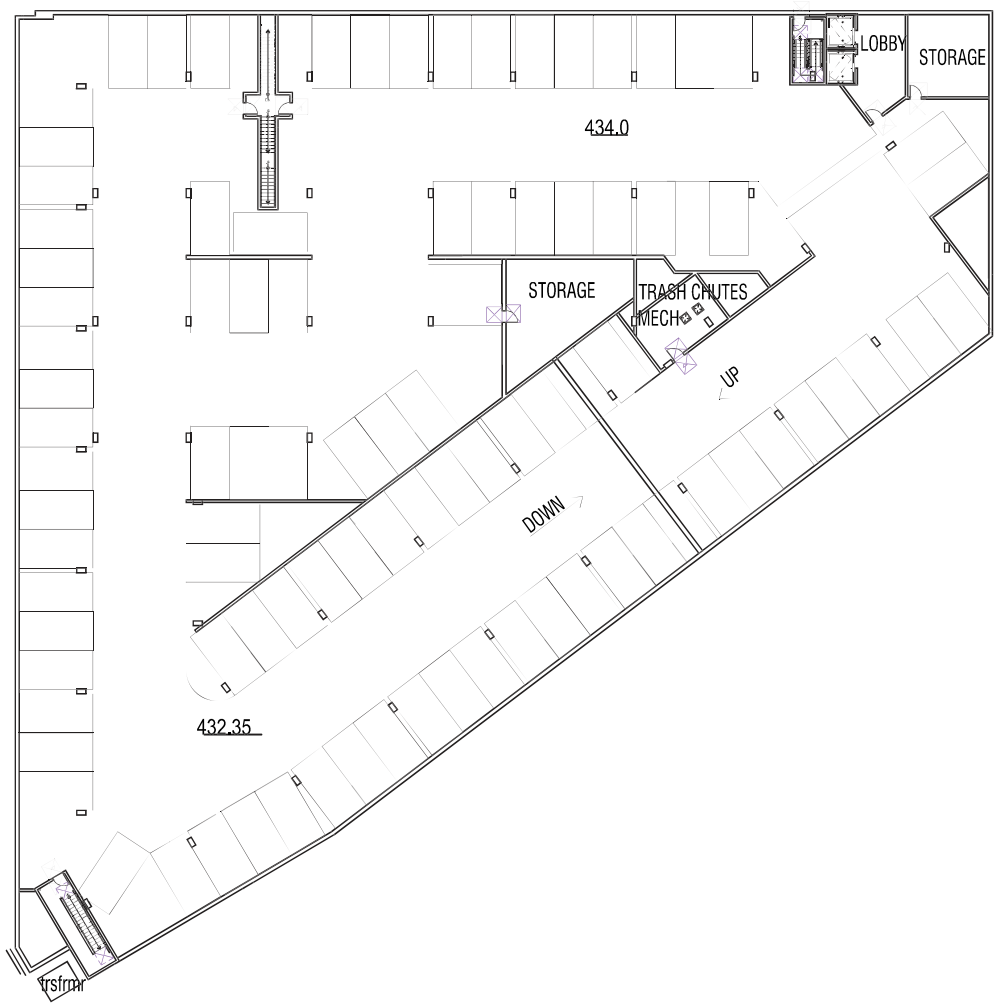
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EXHIBIT C



PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
UPPER PARKING LEVEL

A10-10

CONCEPT DESIGN

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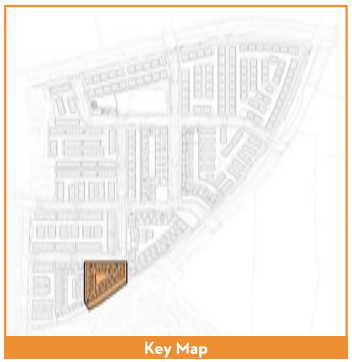
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EXHIBIT C





PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
PODIUM LEVEL PLAN

A10-11

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PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
LEVELS 3 - 5 FLOOR PLAN

A10-12

CONCEPT DESIGN

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EXHIBIT C



PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
ROOF PLAN

A10-13

CONCEPT DESIGN

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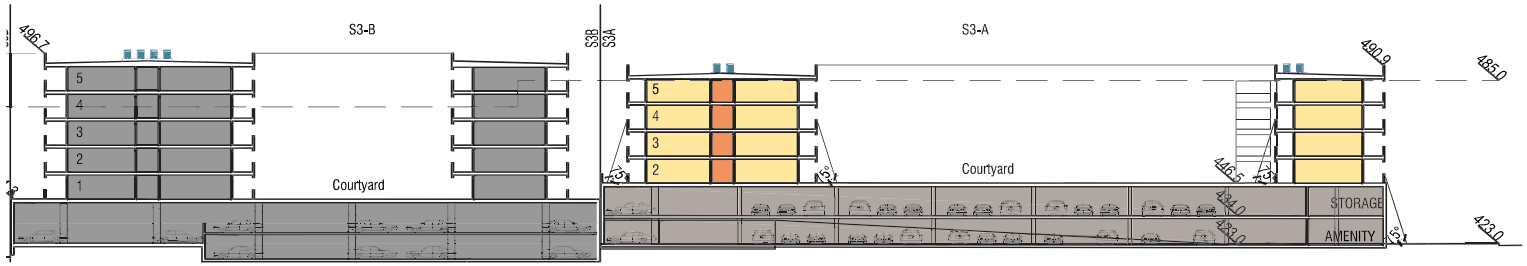
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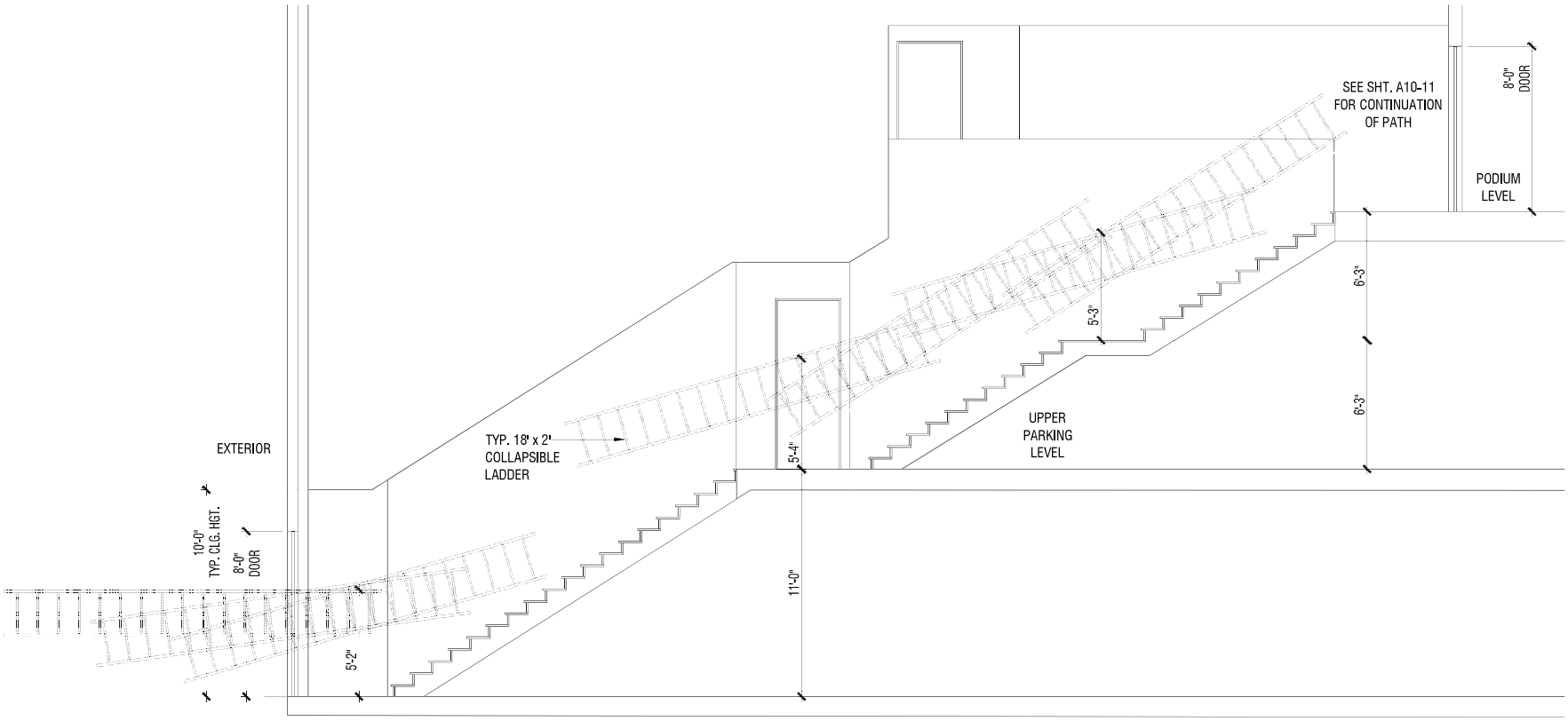
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SECTION A

CROSS SECTION AT COURTYARD

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FIREMAN'S STAIR SECTION

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	727	1	1.0	120	87,240
Unit B-1	950	2	2.0	80	76,000
Amenity					5,093
Total				200	168,333

Height Limit: 475' to 485'*

Building Height: 495.5 MSL
68'-5"to ± 83'

Stories: 5 Stories over 2' Levels of Parking

*Height above MSL

PRODUCT 12 [PARCEL S3-B] - TYPE III APARTMENTS
PRODUCT ALLOCATION

A12-1

CONCEPT DESIGN

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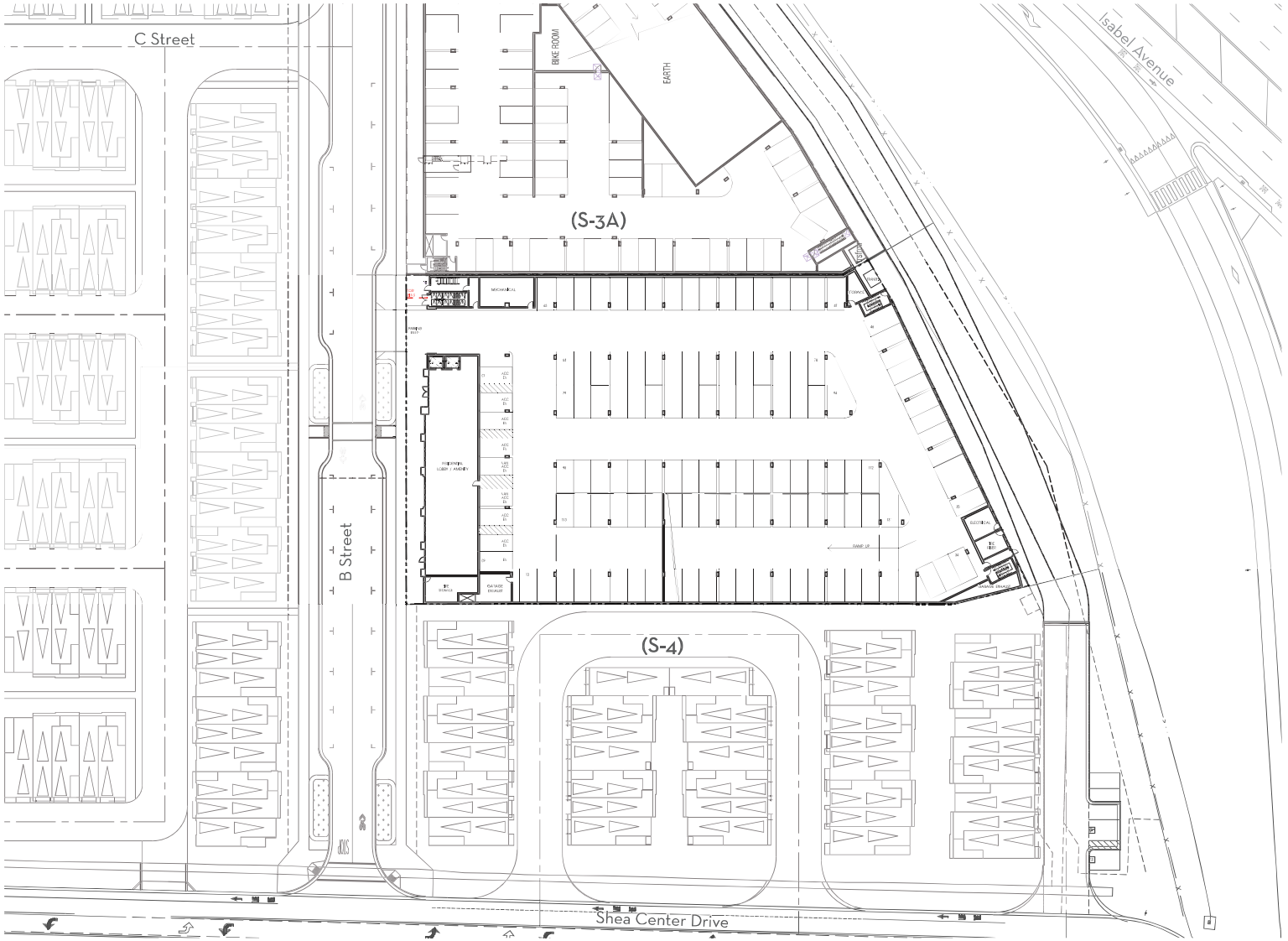
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.38 ACRES (NET)
TOTAL UNITS: 200
DENSITY: 144.9 UNITS/ ACRE

PRODUCT 12 - SITE S3-B

5 STORIES OVER 2 LEVELS OF PARKING
LEVEL 1-2: TYPE I-A PODIUM
LEVEL 3-7: TYPE III-A (NO FIRE LADDER STAIRS REQ'D)
NFPA 13 SPRINKLER SYSTEM
MIXED USE OCCUPANCY: R-2, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

200 TOTAL UNITS

- 120 ONE-BEDROOM; ONE BATH
- 80 TWO-BEDROOM; TWO-BATH

AVERAGE UNIT SIZE: 816 S.F.

BUILDING AREA
- 105,273 SF PARKING
- 5,093 AMENTIY
- 214,395 RESIDENTIAL
- 324,761 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: N/A
- REQUIRED PRIVATE: N/A
- PROVIDED COMMON: 23,075 SF = 115 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING
- REQUIRED:
- 220 RESIDENTIAL SPACES
- 25 GUEST SPACES

- 245 TOTAL REQUIRED SPACES

- PROVIDED:
- 220 RESIDENTAL SPACES
  - (5) ADA SPACES
  - (1) ADA VAN SPACE
- 25 GUEST PARKING
  - (2) ADA SPACES
  - (1) ADA VAN SPACE

- 245 TOTAL PROVIDED SPACES
  - (98) EV RESIDENTIAL - 40% LP LEV 2
  - (25) EV RESIDENTIAL - 10% LEV 2
  - (5) VAN ACCESS

BICYCLE PARKING
- REQUIRED:
- .25/BEDROOM RESIDENTIAL SPACES
- .05/UNITS VISTOR SPACES

- PROVIDED:
- 80 TOTAL SPACES PROVIDED IN SECURED AREA
  - (70) RESIDENTIAL SPACES
  - (10) VISTOR SPACES

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
SITE PLAN

A12-2

CONCEPT DESIGN

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WHA

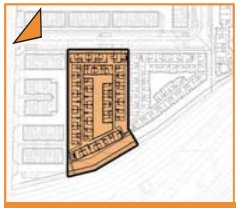
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Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
PERSPECTIVE LOOKING NORTH WEST

A12-3

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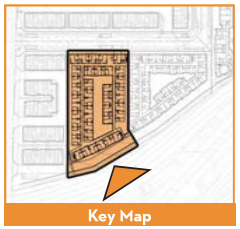
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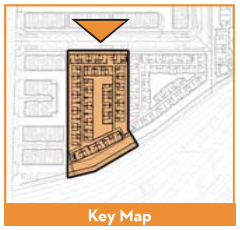
EXHIBIT C





SOUTH ELEVATION





NORTH ELEVATION



BRICK DETAILING

CONCEPT DESIGN

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PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
NORTH & SOUTH ELEVATIONS

A12-4

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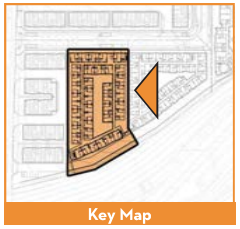
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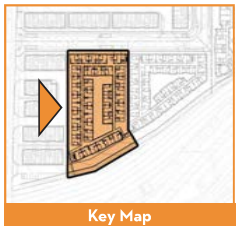


EAST ELEVATION



WEST ELEVATION


Key Map


Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
EAST & WEST ELEVATIONS

A12-5

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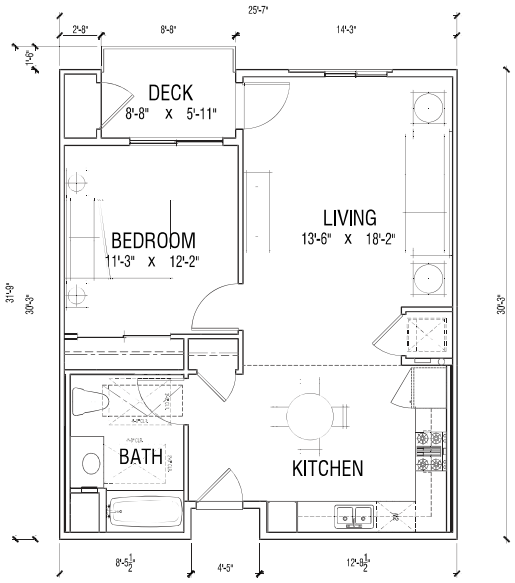
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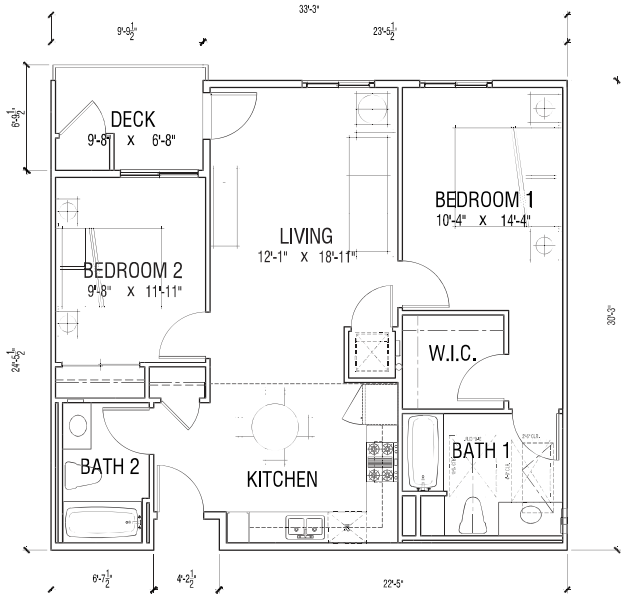
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UNIT A-1

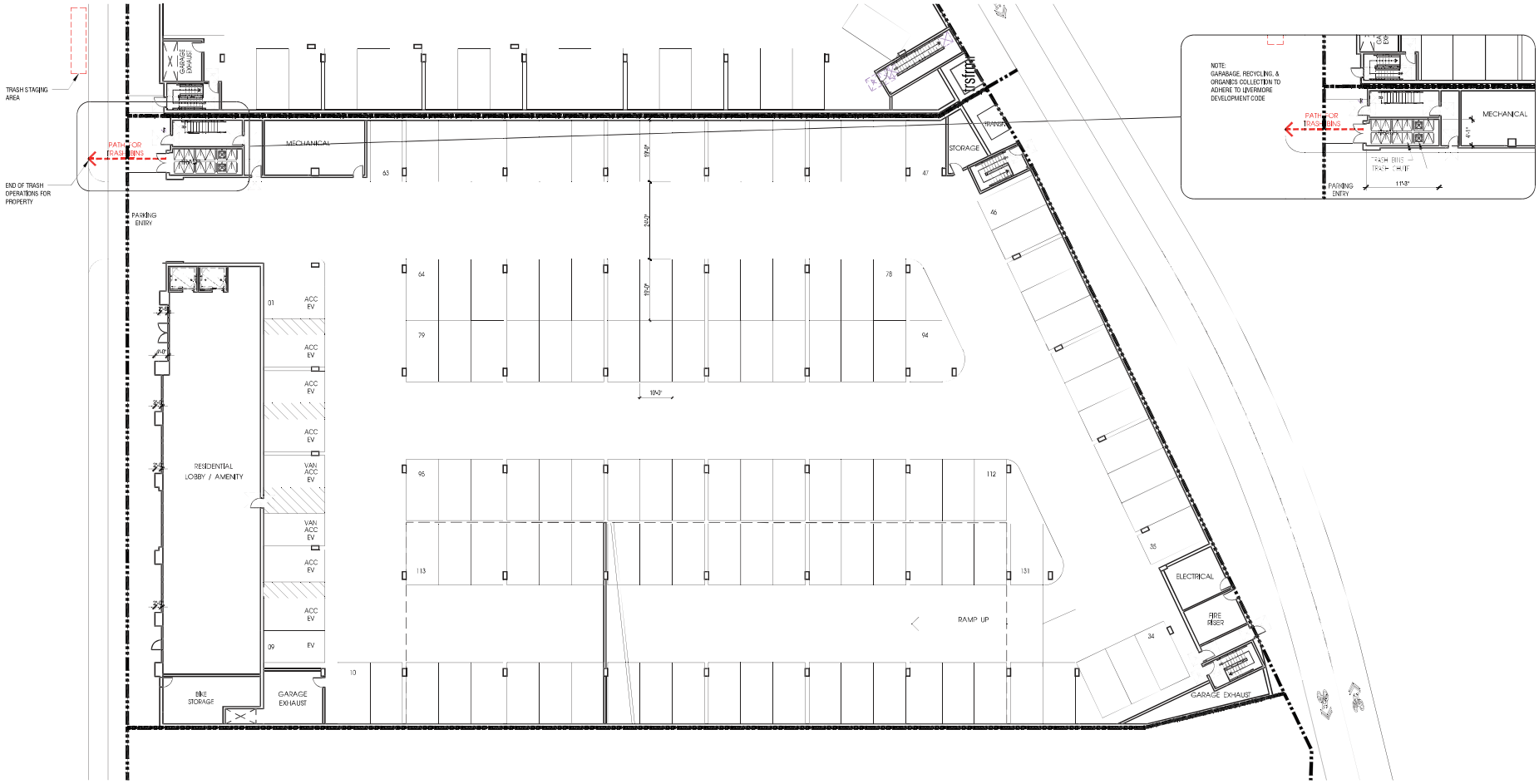
1 Bdrm | 1 Bath
Unit: 727 sf
Deck: 50 sf

UNIT B-1

2 Bdrm | 2 Bath
Unit: 950 sf
Deck: 56 sf

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EXHIBIT C



PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
GROUND FLOOR LEVEL

A12-7

CONCEPT DESIGN

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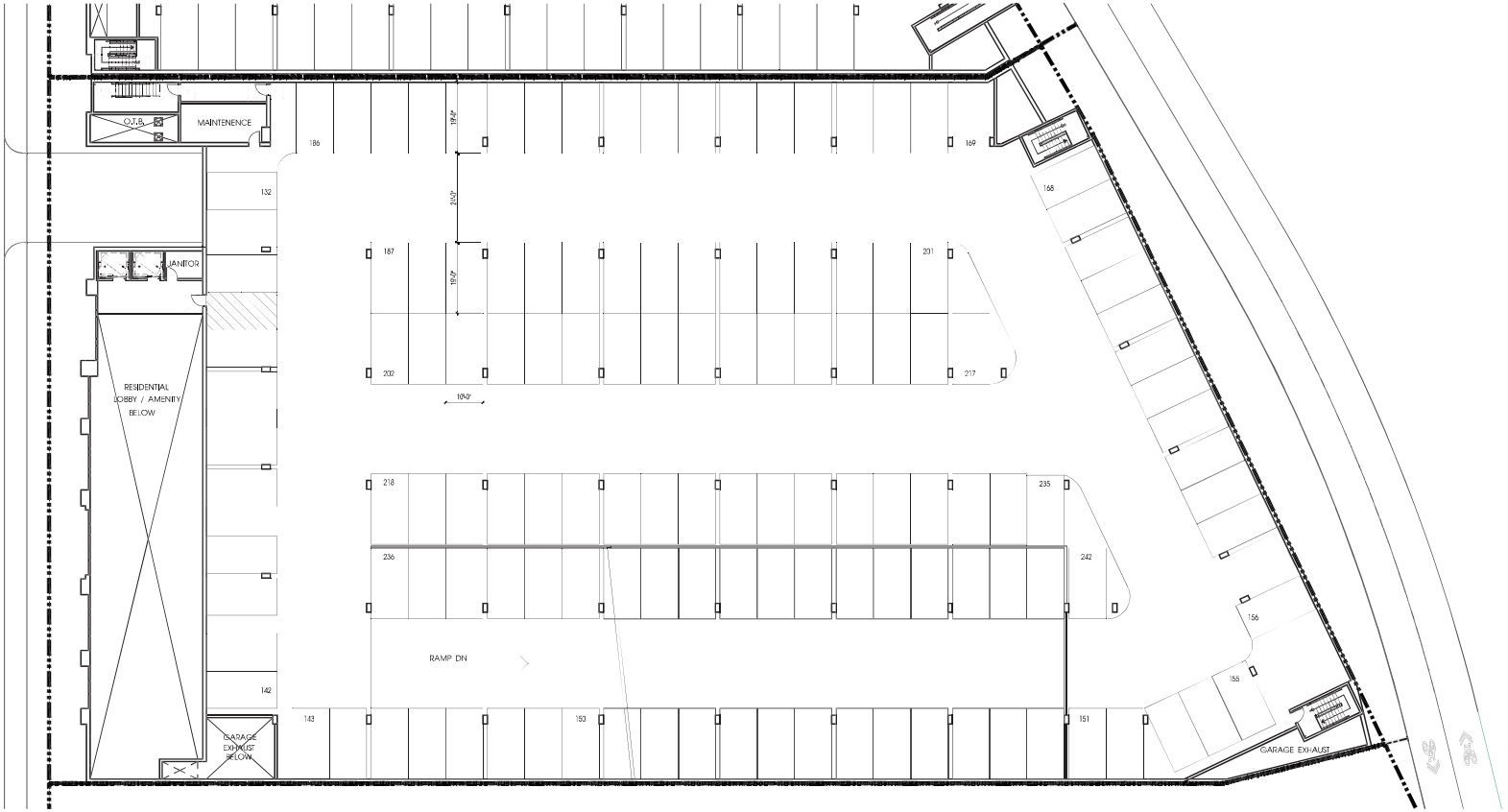
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EXHIBIT C



PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
SECOND LEVEL PARKING PLAN

A12-8

CONCEPT DESIGN

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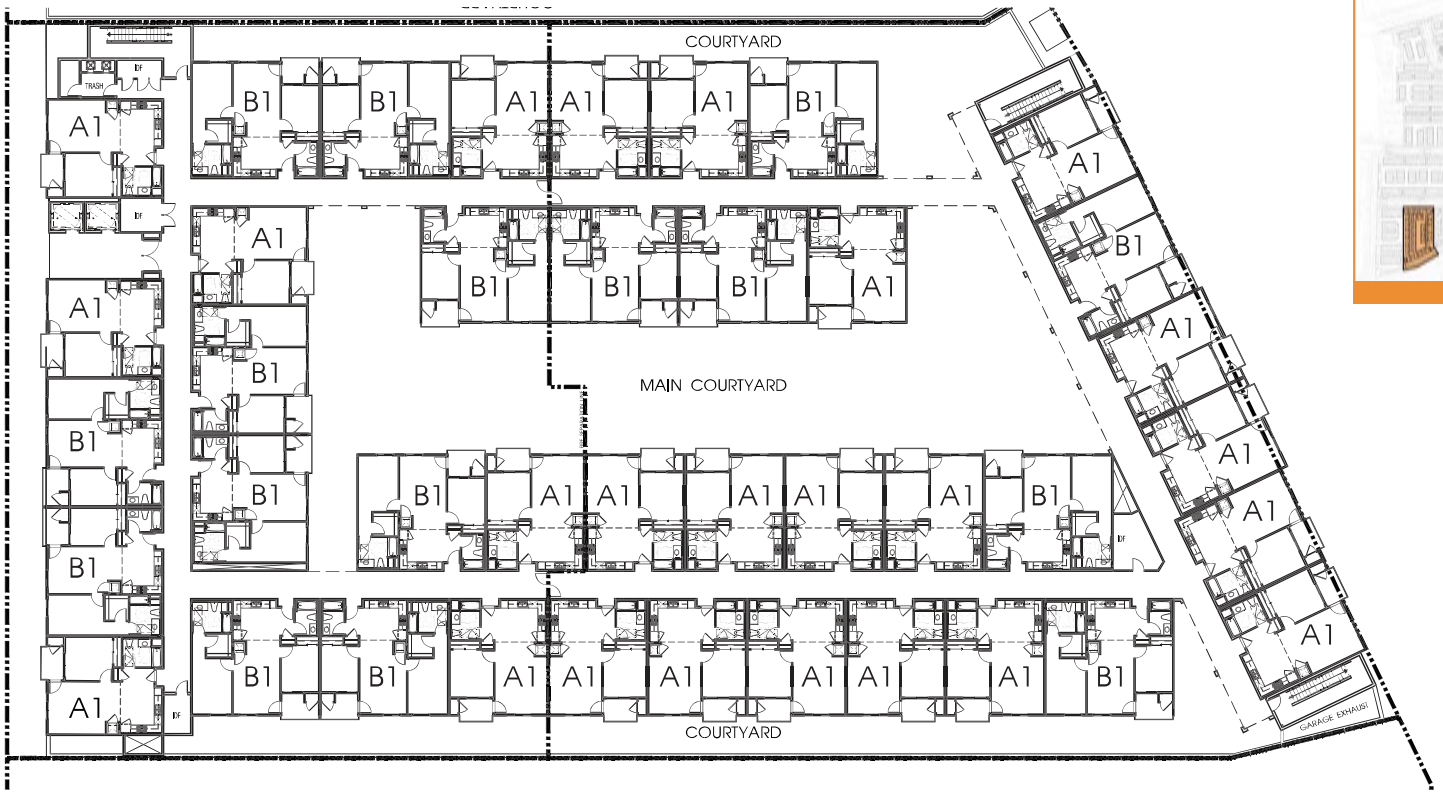
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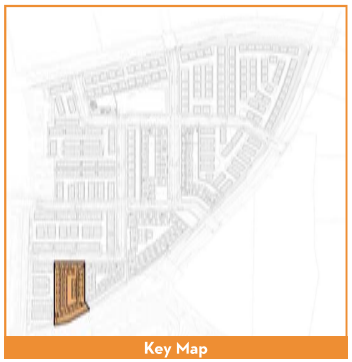
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PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
PODIUM LEVEL PLAN

A12-9

CONCEPT DESIGN

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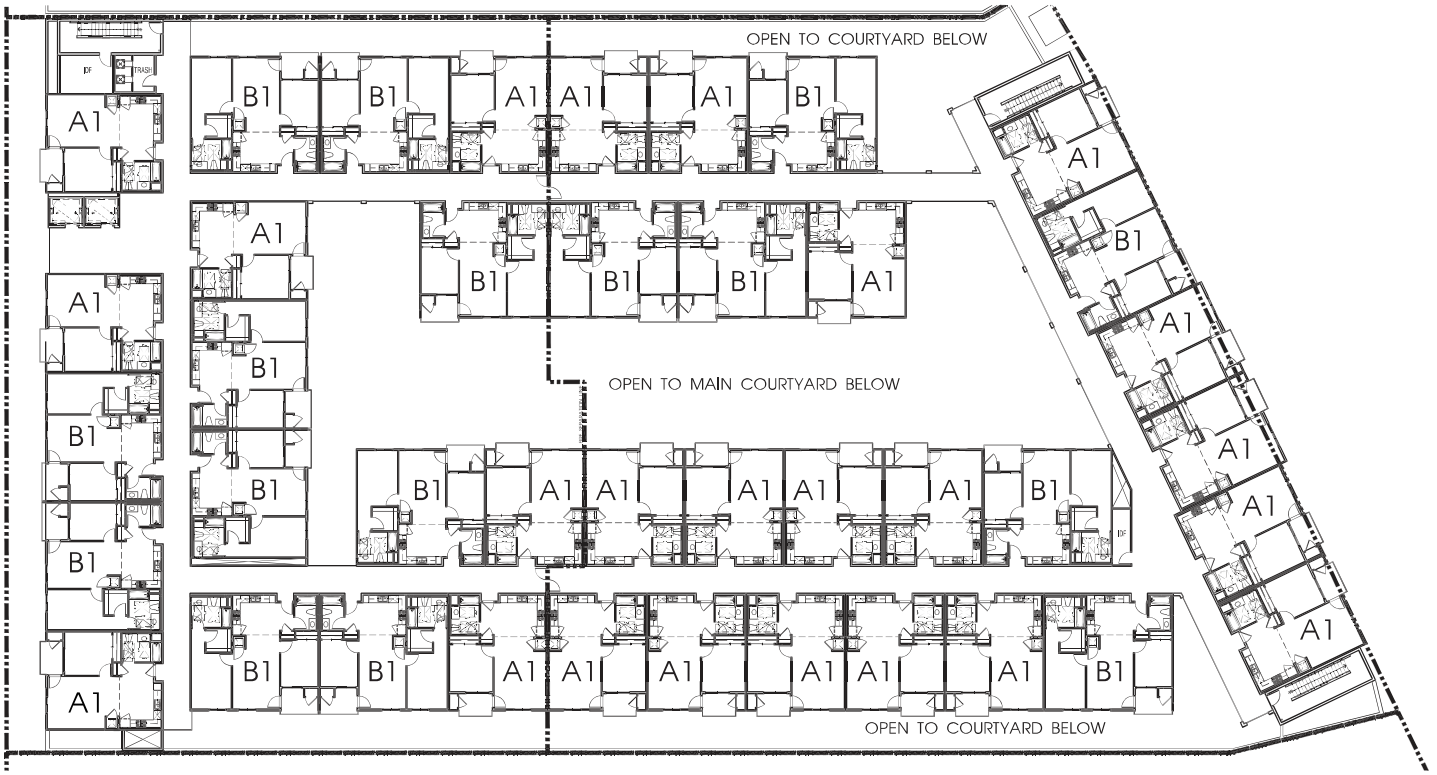
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EXHIBIT C



CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
LEVELS 4-7 FLOOR PLAN

A12-10

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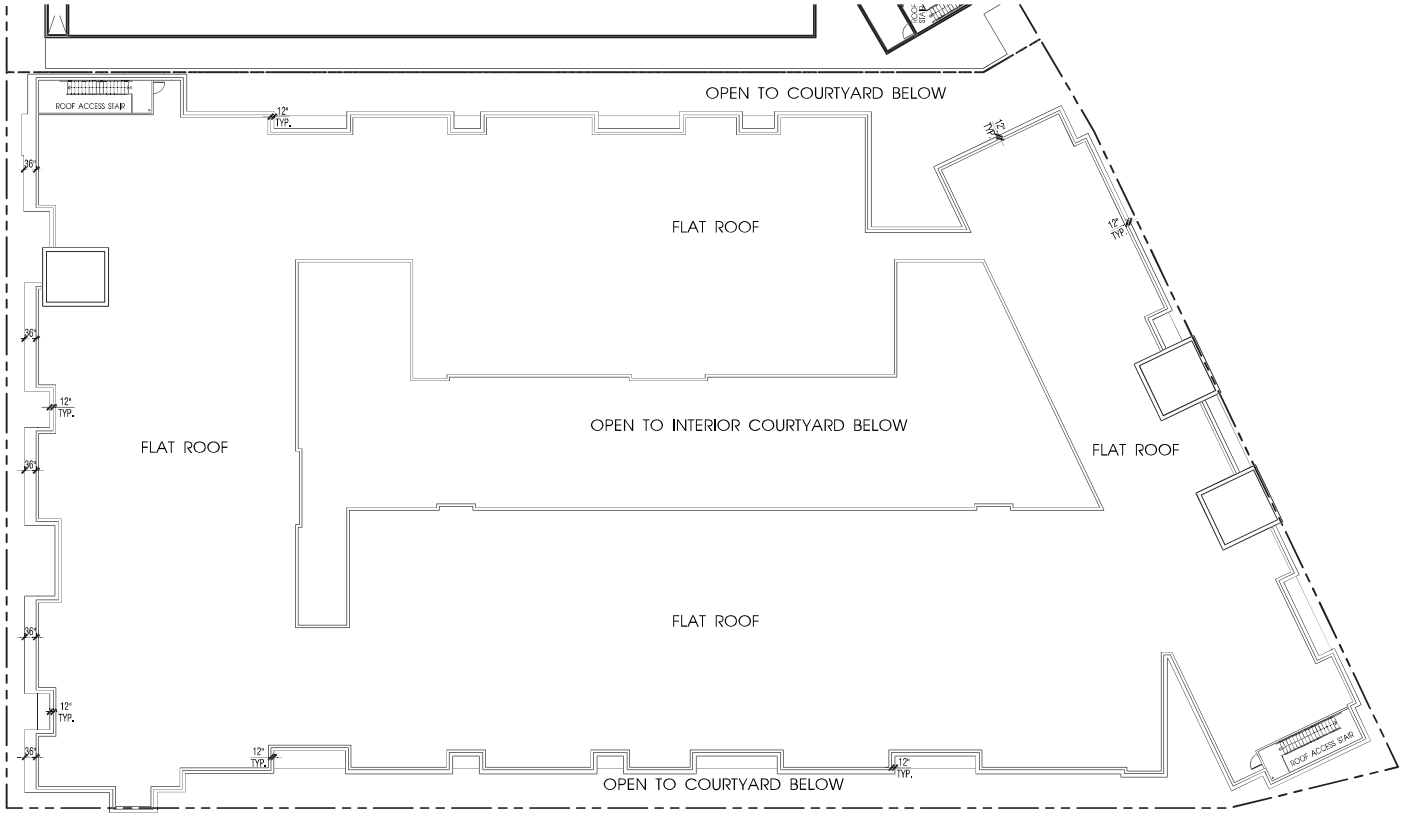
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EXHIBIT C



PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
ROOF PLAN

A12-11

CONCEPT DESIGN

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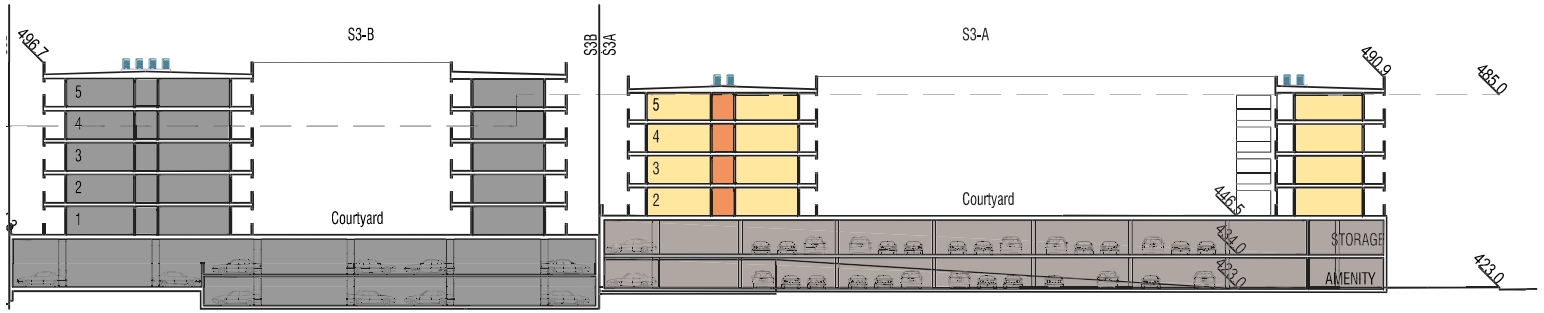
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EXHIBIT C



SECTION A

CROSS SECTION AT COURTYARD

CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
CROSS SECTION

A12-12

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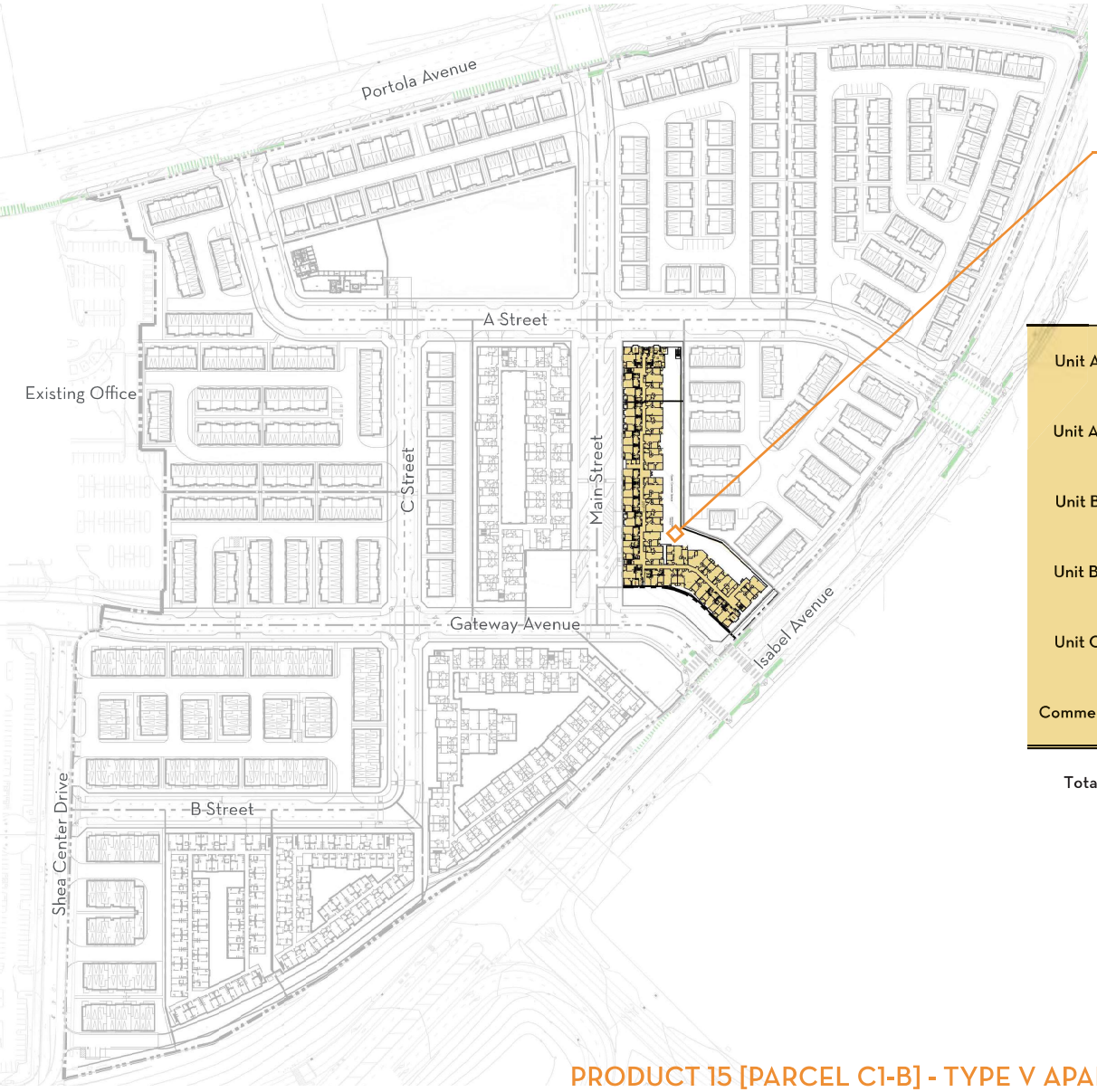
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EXHIBIT C



PARCEL C1-B

	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	731	1	1.0	63	46,053
Unit A-2	1,005	1	1.0	3	3,015
Unit B-1	950	2	2.0	24	22,800
Unit B-2	1,148	2	2.5	3	3,444
Unit C-1	1,241	3	2.5	21	26,061
Commercial					19,294
Total				114	120,667

Height Limit: 495'*

Building Height: 488.9 MSL ± 57' to ± 62'

Stories: 3 Stories over 1 + Partial Basement

Retail Floor Ceiling: >14' Avg. Ground (Sloping Site)

*Height above MSL

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE) PRODUCT ALLOCATION

A15-1

CONCEPT DESIGN

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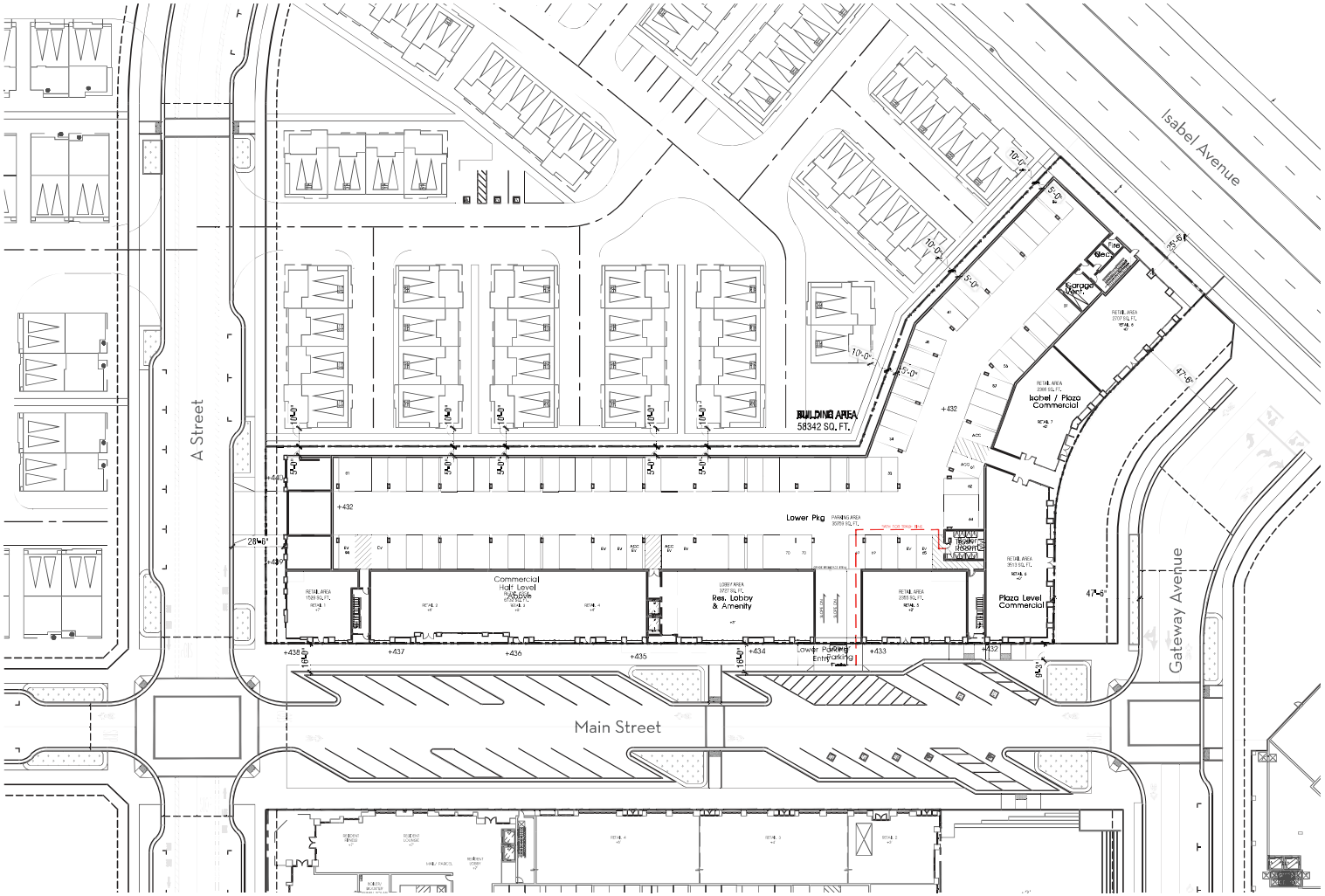
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.49 ACRES (NET)
TOTAL UNITS: 114
DENSITY: 76.6 UNITS PER ACRE

3 STORIES OVER 1 + PARTIAL BASEMENT
LEVEL 1-2: TYPE I-A PODIUM
LEVEL 3-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

114 TOTAL UNITS
- 66 ONE-BEDROOM; ONE-BATH
- 27 TWO-BEDROOM ; TWO-BATH
- 21 THREE-BEDROOM ; TWO-BATH

AVERAGE UNIT SIZE: 889 SF

BUILDING AREA
- 72,655 SF PARKING
- 19,294 SF COMMERCIAL
- 3,226 SF AMENITY
- 127,143 SF RESIDENTIAL
- 222,318 SF TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 14,618 SF = 128 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING

REQUIRED:
127 RESIDENTIAL SPACES
14 GUEST SPACES
33 COMMERCIAL

174 TOTAL REQUIRED SPACES

215 TOTAL PROVIDED SPACES
- (8) EV COMMERCIAL "CAPABLE"
- (2) EVSE
- (1) ADA VAN
- (1) ADA SPACE
- (73) EV RESIDENTIAL 25% READY
- (18) EV RESIDENTIAL 5% CHARGERS
- (4) VAN ACCESS

PROVIDED:
168 RESIDENTAL SPACES
- (4) ADA SPACES
- (1) ADA VAN SPACE

14 GUEST PARKING
- (1) ADA SPACES
- (1) ADA VAN SPACE

33 COMMERICAL PARKING
- (13) ON STREET SPACES
- (2) ADA SPACES
- (1) ADA VAN SPACE

BICYCLE PARKING
CENTER/CORE
REQUIRED
.25/BEDROOM RESIDENTIAL SPACES
.05/UNITS VISTOR SPACES

PROVIDED
61 TOTAL SPACES PROVIDED IN SECURED AREA
- (46) RESIDENTIAL SPACES
- (6) VISTOR SPACES

NBHD COMMERCIAL & GROUND FLOOR FLEX
REQUIRED: 1:1400 SF
PROVIDED: 17 SPACES IN SECURED AREA

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
SITE PLAN

A15-2

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

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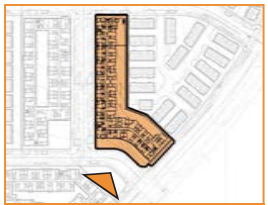
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PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PERSPECTIVE

A15-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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Key Map

CONCEPT DESIGN

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PERSPECTIVE | MAIN ENTRY VIEW

A15-4

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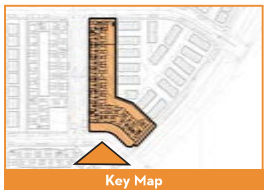
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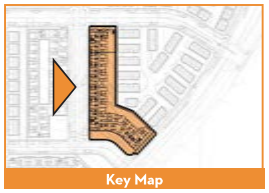
SOUTH ELEVATION



BRICK DETAILING AT LOBBY ENTRANCE



WEST ELEVATION



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
SOUTH & WEST ELEVATIONS

A15-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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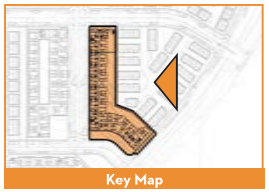


PARKING GARAGE VENTILATION SCREENING

NORTH ELEVATION



EAST ELEVATION



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
NORTH & EAST ELEVATIONS

A15-6

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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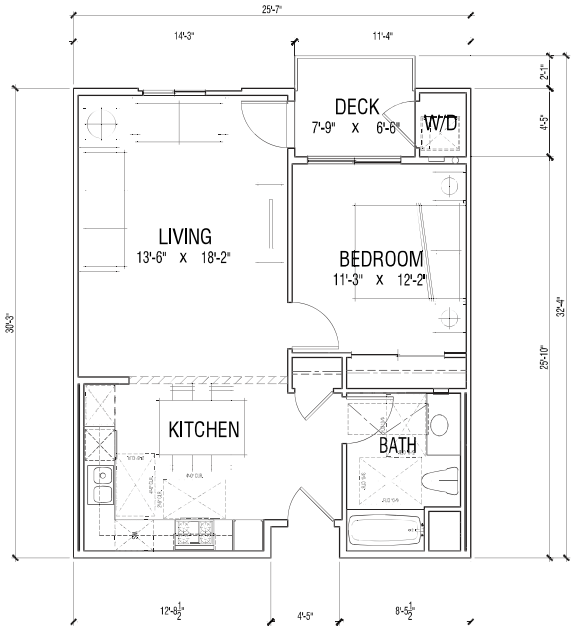
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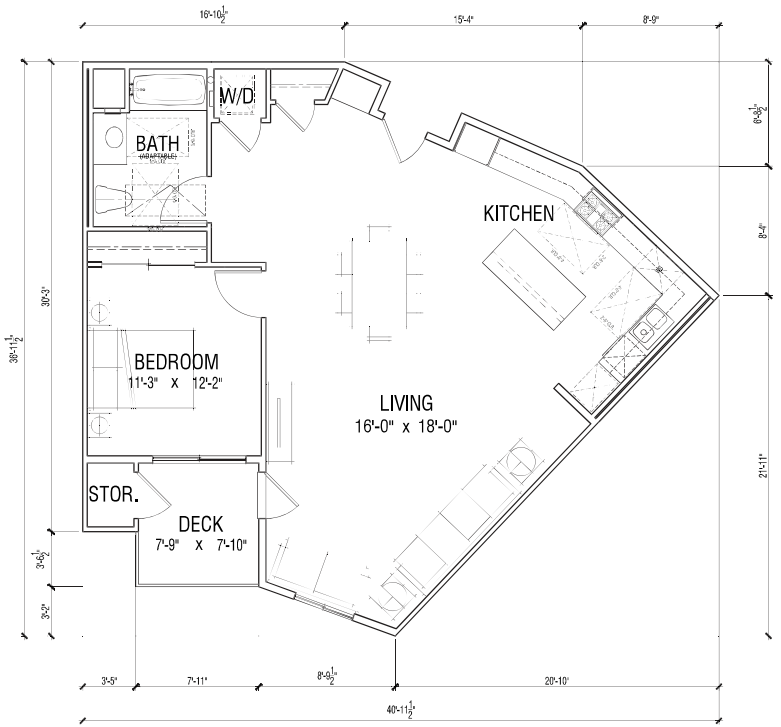
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UNIT A-1

1 Bdrm | 1 Bath
Unit: 731 sf
Deck: 50 sf

UNIT A-2

1 Bdrm | 1 Bath
Unit: 1005 sf
Deck: 62 sf

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
A-1, A-2 UNIT FLOOR PLANS

A15-7

CONCEPT DESIGN

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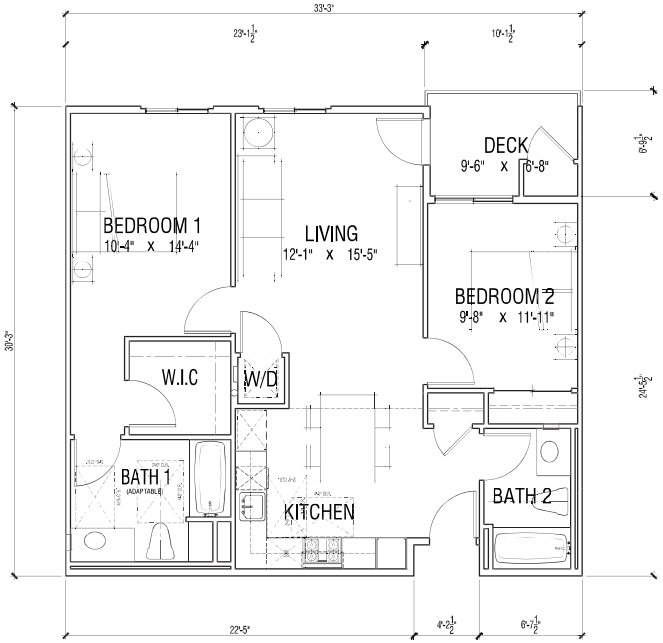
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UNIT B-1

2 Bdrm | 2 Bath
Unit: 950 sf
Deck: 54 sf

UNIT B-2

2 Bdrm | 2 Bath
Unit: 1,148 sf
Deck: 50 sf

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
B-1, B-2 UNIT FLOOR PLANS

A15-8

CONCEPT DESIGN

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UNIT C-1

3 Bdrm | 2 Bath
Unit: 1,241 sf
Deck: 54 sf

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
C-1 UNIT FLOOR PLAN

A15-9

CONCEPT DESIGN

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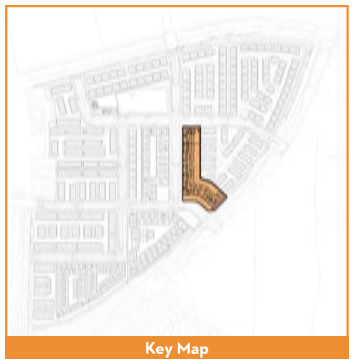
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Note: Subject to change at Final Site & Design Review

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
LOWER PARKING LEVEL PLAN

A15-10

CONCEPT DESIGN

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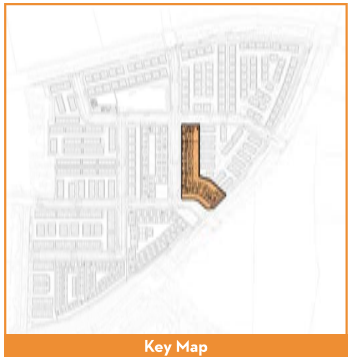
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
UPPER PARKING LEVEL PLAN

A15-11

CONCEPT DESIGN

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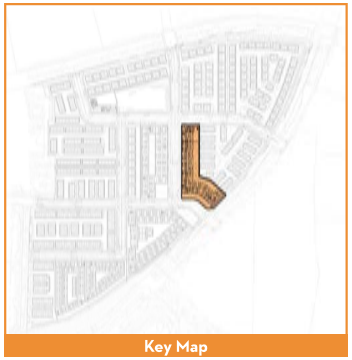
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PODIUM LEVEL PLAN

A15-12

CONCEPT DESIGN

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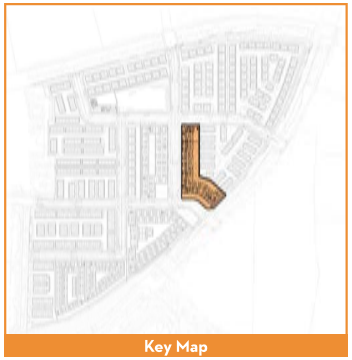
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
LEVELS 4-5 FLOOR PLAN

A15-13

CONCEPT DESIGN

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WHA.

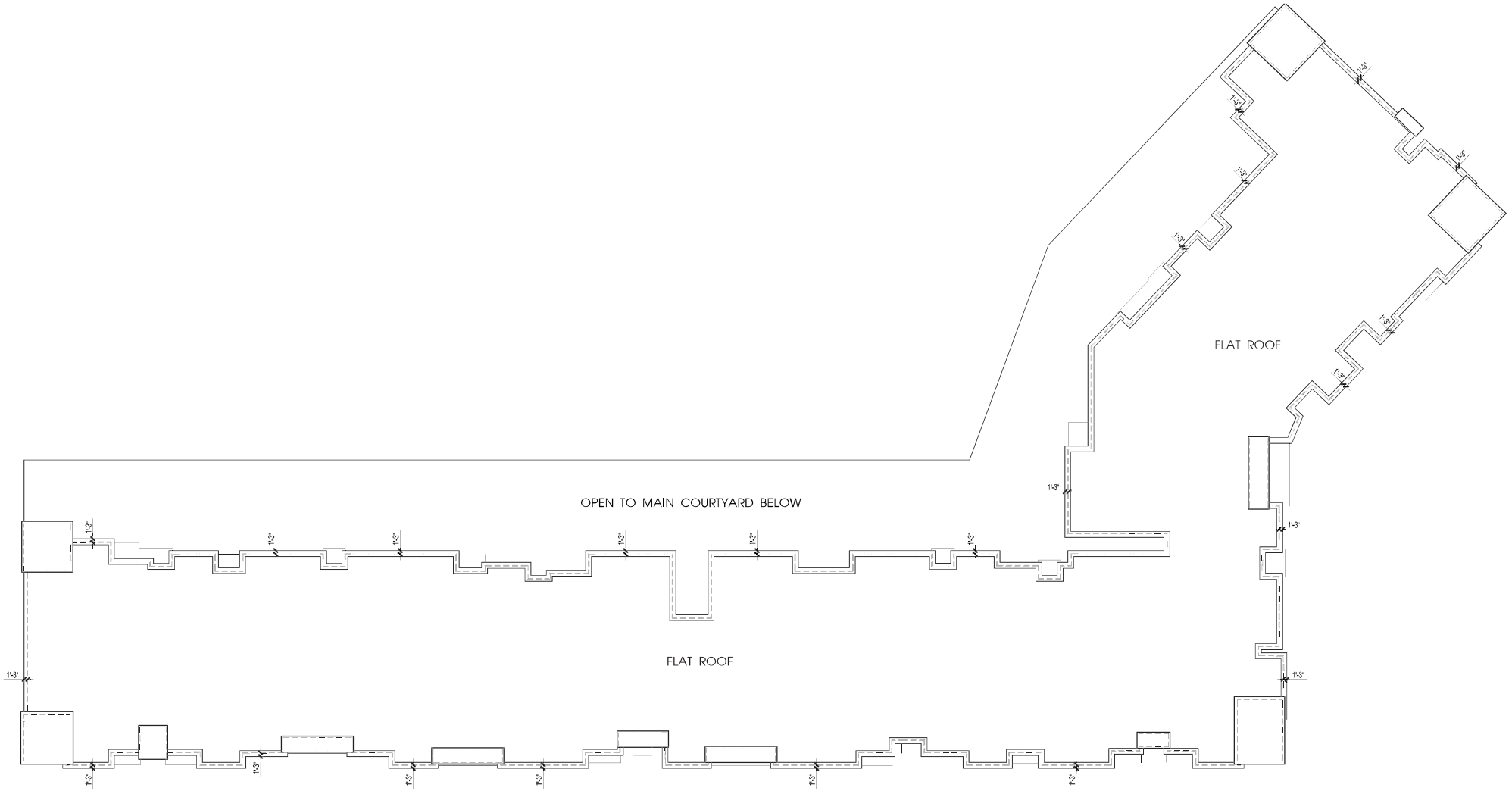
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PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
ROOF PLAN

A15-14

CONCEPT DESIGN

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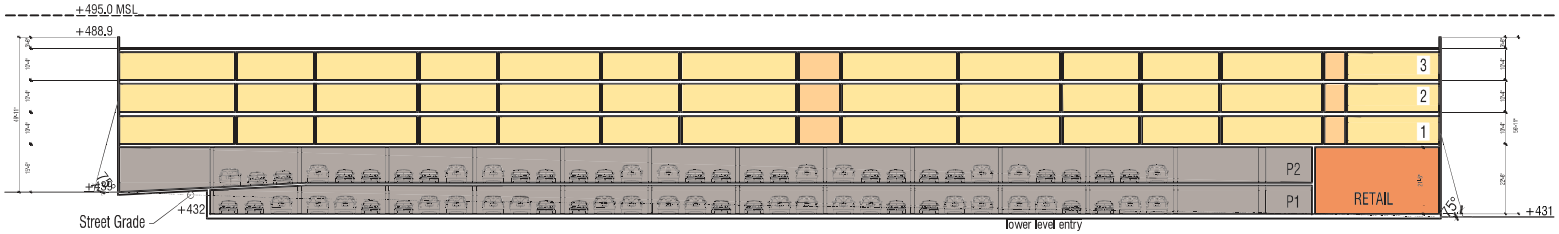
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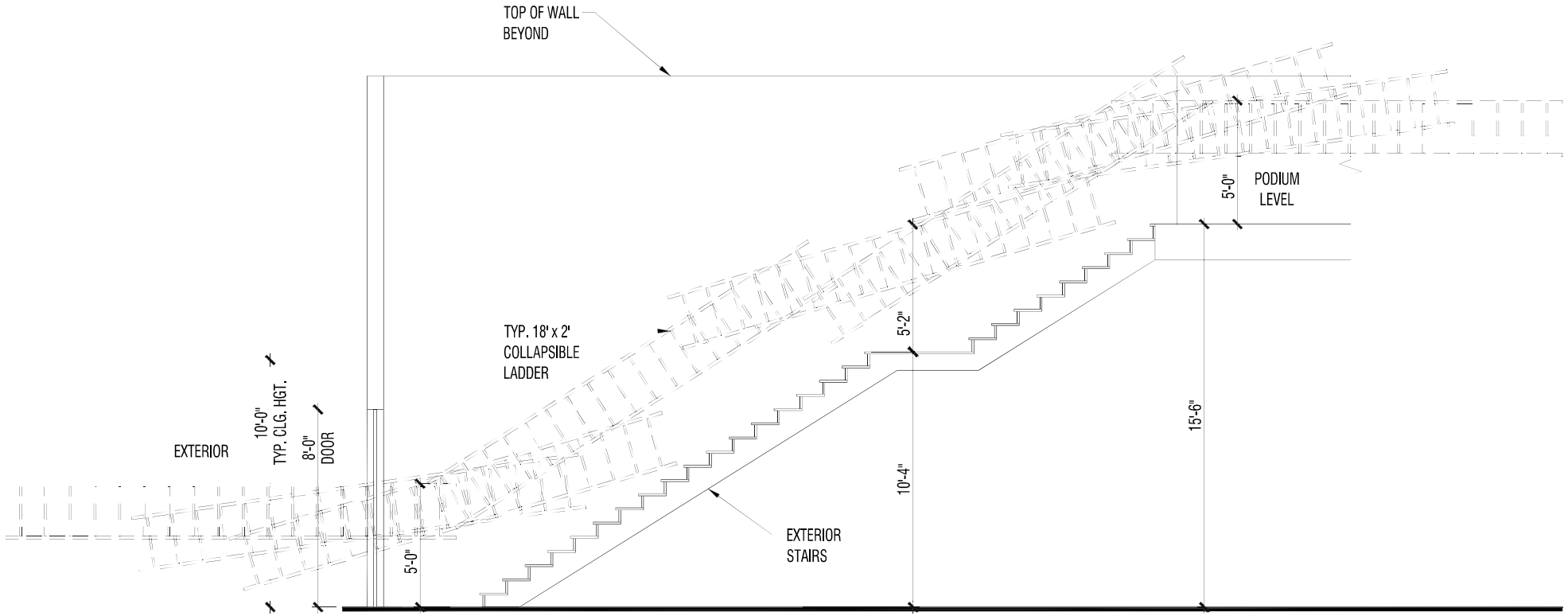
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TRANSVERSE SECTION AT COMMERCIAL

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FIREMAN'S STAIR SECTION

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
FIRE LADDER PATH STUDY - SECTION

A15-16

CONCEPT DESIGN

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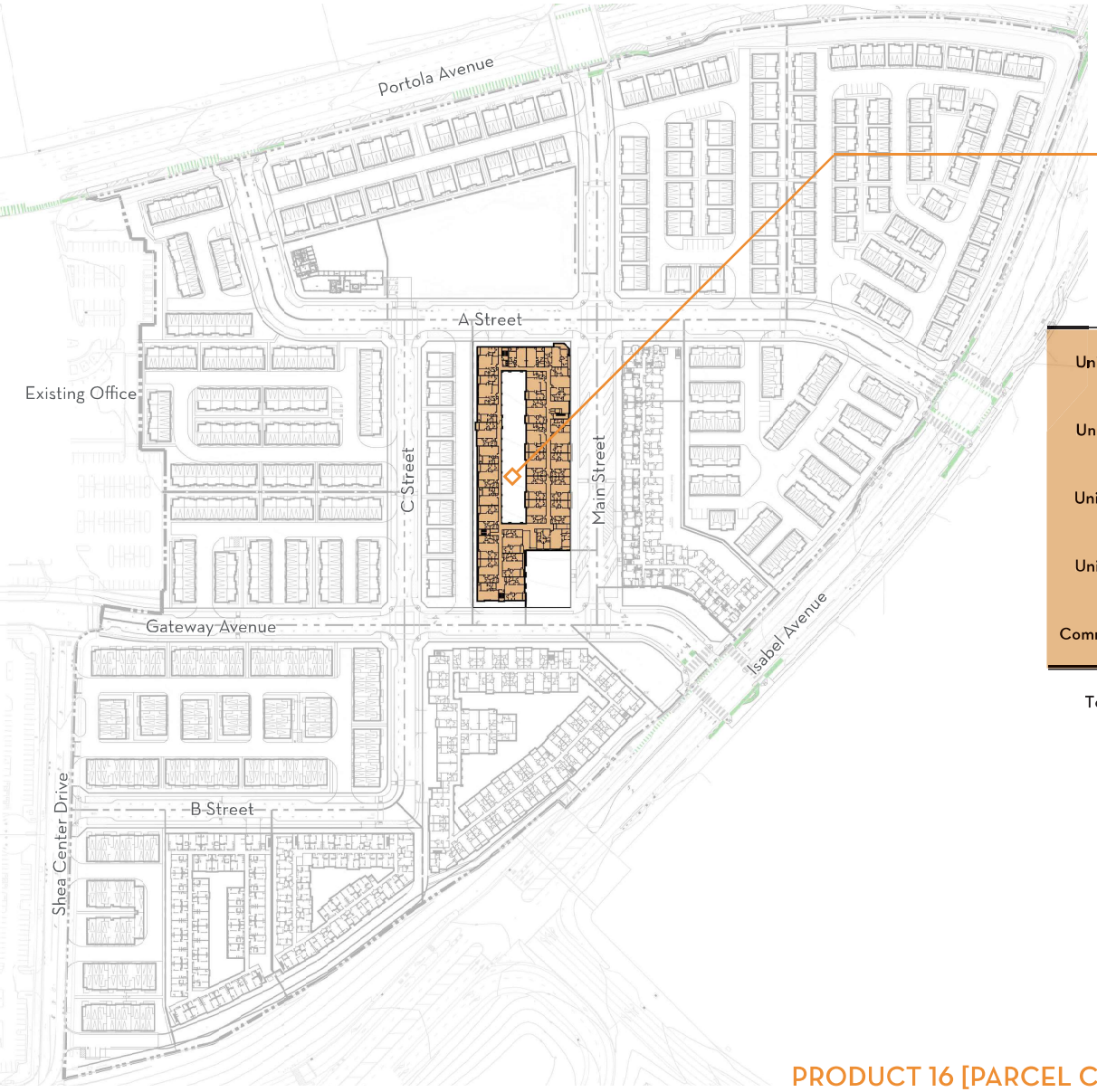
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EXHIBIT C



PARCEL C2-A

	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	949	1	1.0	24	22,776
Unit B-1	1,373	2	2.0	64	87,872
Unit B-2	1,685	2	2.0	16	26,960
Unit C-1	2,006	3	2.5	12	24,072
Commercial					24,690
Total				116	186,370

Height Limit: 490' to 500'*

Building Height: 498.2 MSL

Excedes at North End by ± 8.5'

± 62'-6" to ± 67'-6"

4 Stories over 1 + Partial Basement

Note: Average Retail Ceiling Height > 14'

*Height above MSL

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PRODUCT ALLOCATION

A16-1

CONCEPT DESIGN

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WHA

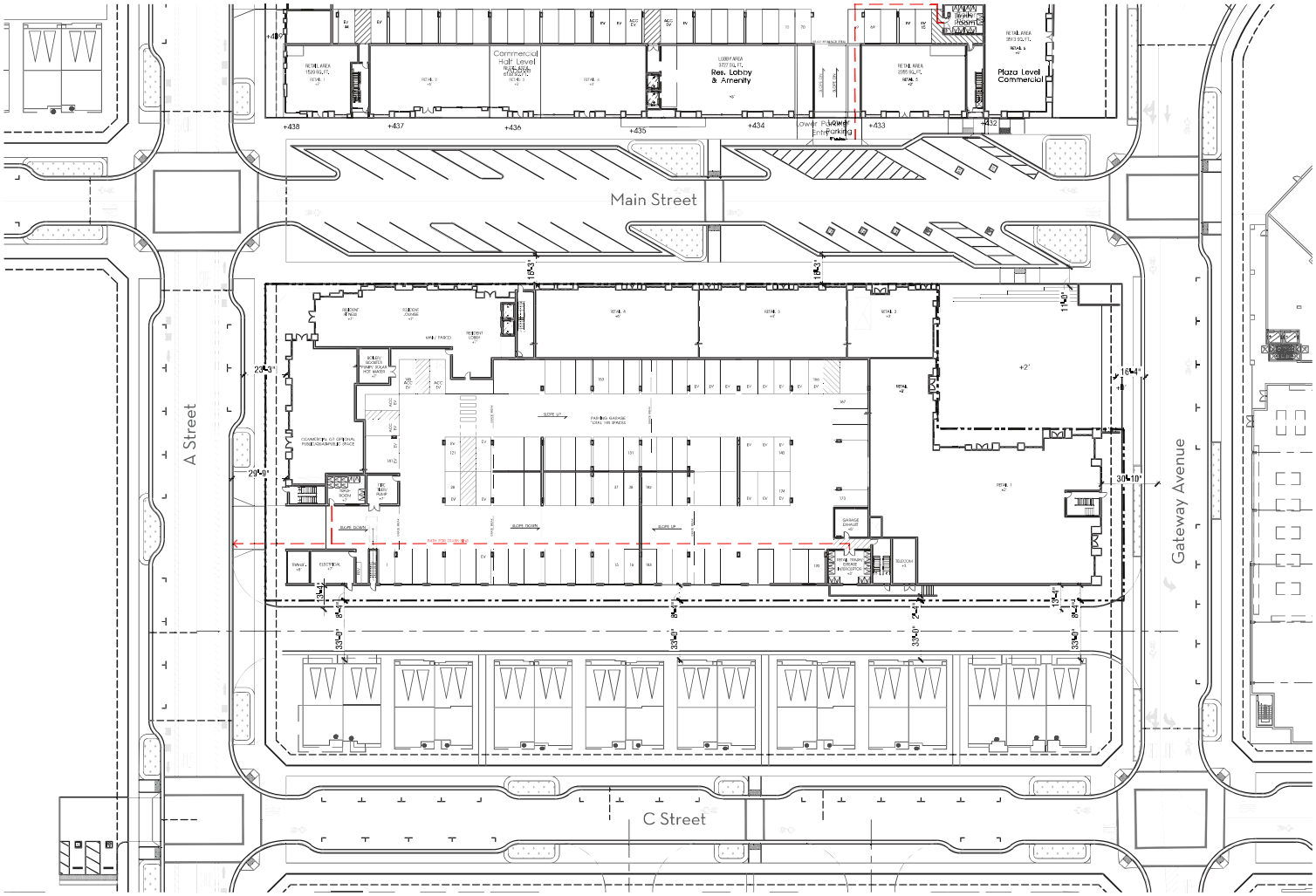
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.72 ACRES (NET)
TOTAL UNITS: 116
DENSITY: 67.5
4 STORIES OVER 1 + PARTIAL BASEMENT
BASEMENT AND LEVEL 1: TYPE I-A PODIUM
LEVEL 2-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

116 TOTAL UNITS
- 24 ONE-BEDROOM; ONE BATH
- 64 TWO-BEDROOM; TWO-BATH
- 16 TWO-BEDROOM; DEN; TWO AND ONE-HALF BATH
- 12 THREE-BEDROOM; DEN; TWO AND ONE-HALF BATH

AVERAGE UNIT SIZE: 1,396 S.F.

BUILDING AREA
- 75,661 SF PARKING
- 24,690 SF COMMERCIAL
- 3,228 SF AMENITY
- 219,996 SF RESIDENTIAL
- 323,575 SF TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 17,687 SF = 152 SF/ UNIT
- PROVIDED PRIVATE: 77 SF/ UNIT AVE.

PARKING

REQUIRED:	PROVIDED:
139 RESIDENTIAL SPACES	163 RESIDENTAL SPACES
15 GUEST SPACES	(4) ADA SPACES
42 COMMERCIAL	(1) ADA VAN SPACE
	15 GUEST PARKING
196 TOTAL REQUIRED SPACES	(1) ADA SPACES
	(1) ADA VAN SPACE
218 TOTAL PROVIDED SPACES	42 COMMERCIAL PARKING
(8) EV COMMERCIAL "CAPABLE"	(20) ON STREET SPACES
(2) EVSE	(2) ADA SPACES
(1) ADA VAN	(1) ADA VAN SPACE
(1) ADA SPACE	
(71) EV RESIDENTIAL 25% READY	
(18) EV RESIDENTIAL 5% CHARGERS	
(4) VAN ACCESS	

BICYCLE PARKING
CENTER/CORE
REQUIRED
.25/BEDROOM RESIDENTIAL SPACES
.05/UNITS VISTOR SPACES

PROVIDED
61 TOTAL SPACES PROVIDED IN SECURED AREA
(55) RESIDENTIAL SPACES
(6) VISTOR SPACES

NBHD COMMERCIAL & GROUND FLOOR FLEX
REQUIRED: 1:1400 SF
PROVIDED: 20 TOTAL SPACES PROVIDED IN SECURED AREA

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
SITE PLAN

A16-2

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PERSPECTIVE | LOOKING NORTHEAST AT PLAZA

A16-3

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PERSPECTIVE | MAIN ENTRY VIEW

A16-4

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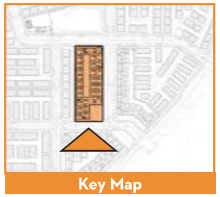
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EXHIBIT C





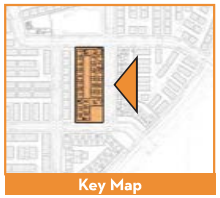
SOUTH ELEVATION



BRICK COURSEWORK DETAILING



EAST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
SOUTH & EAST ELEVATIONS

A16-5

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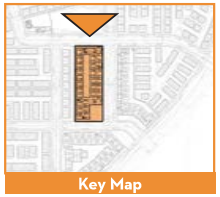
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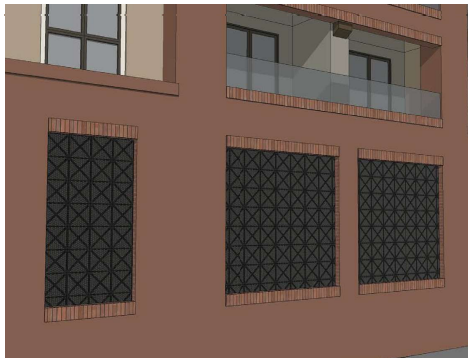
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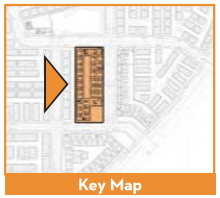




PARKING GARAGE VENTILATION SCREENING

NORTH ELEVATION





WEST ELEVATION

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
NORTH & WEST ELEVATIONS

A16-6

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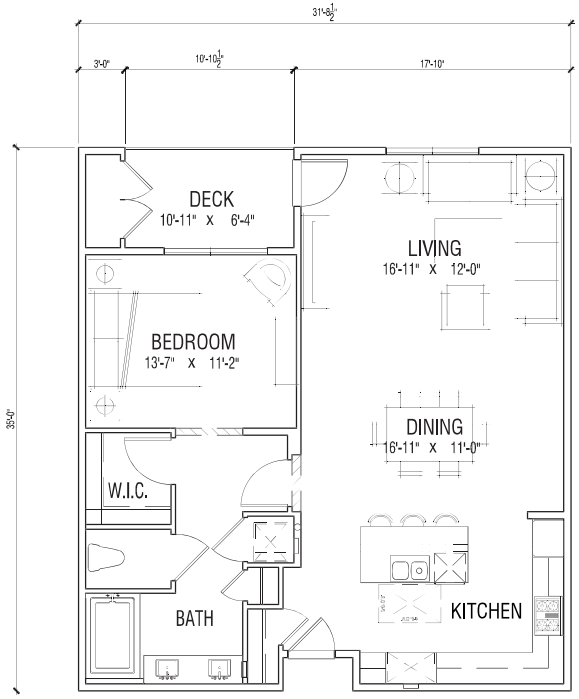
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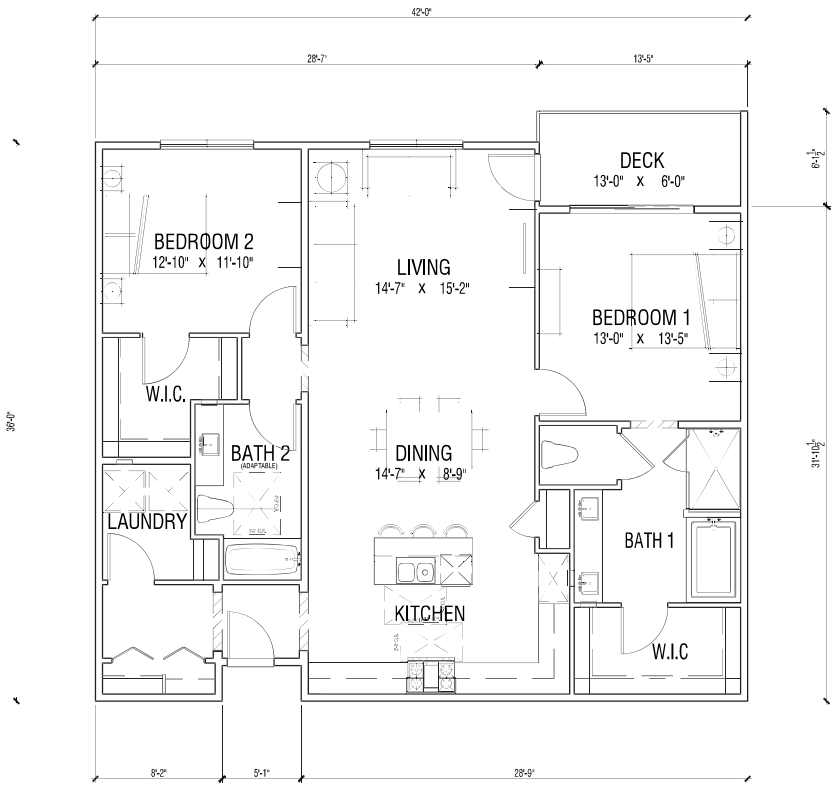
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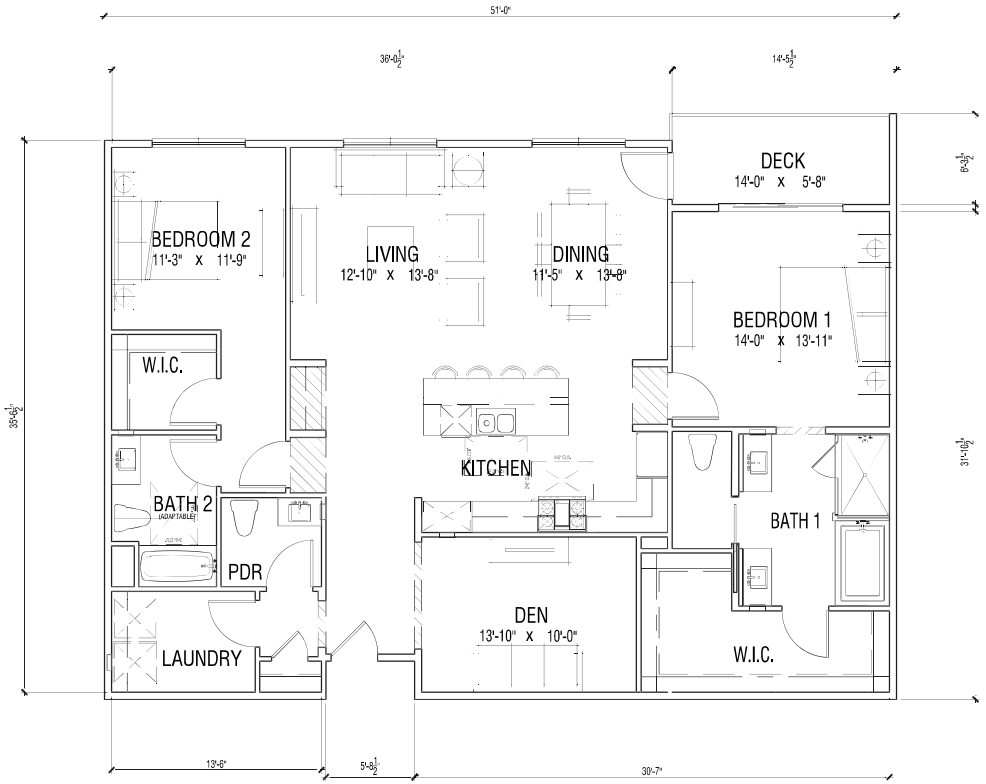


UNIT A-1

1 Bdrm | 1 Bath
Unit: 949 sf
Deck: 69 sf

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UNIT B-1

2 Bdrm | 2 Bath
Unit: 1,373 sf
Deck: 77 sf

UNIT B-2

2 Bdrm | 2.5 Bath | Den
Unit: 1,685 sf
Deck: 79 sf

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
B-1, B-2 UNIT FLOOR PLANS

A16-8

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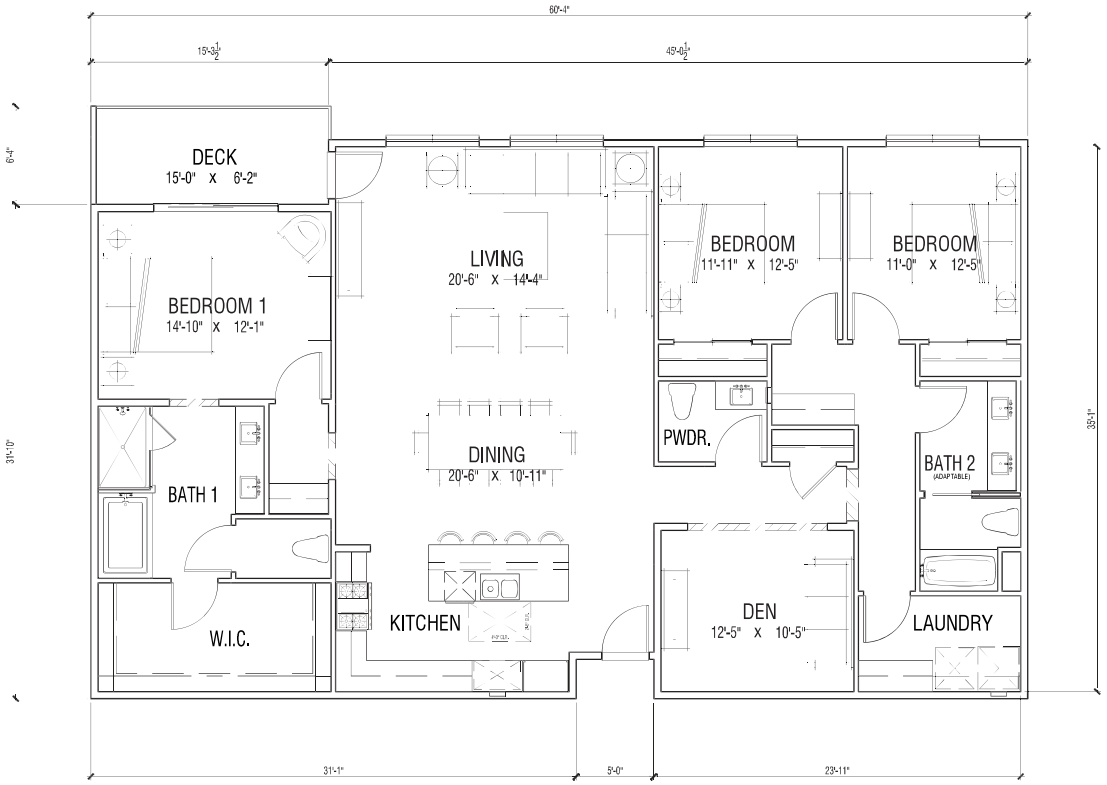
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UNIT C-1

3 Bdrm | 2.5 Bath | Den
Unit: 2,006 sf
Deck: 92 sf

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
C-1 UNIT FLOOR PLAN

A16-9

CONCEPT DESIGN

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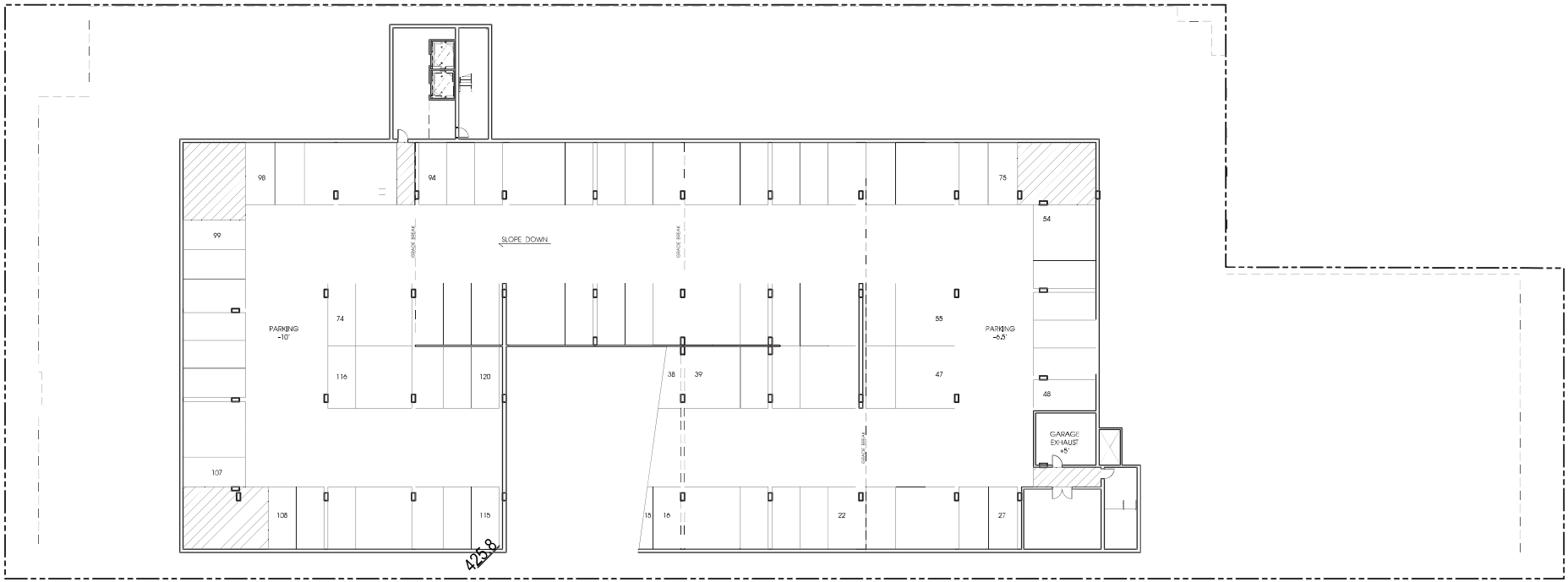
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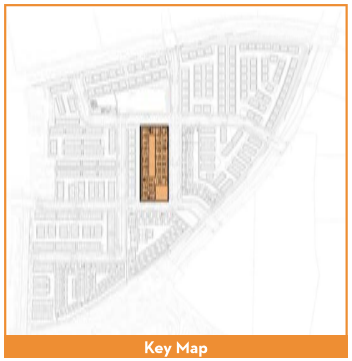
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EXHIBIT C





Key Map

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
LOWER LEVEL PLAN

A16-10

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WHA.

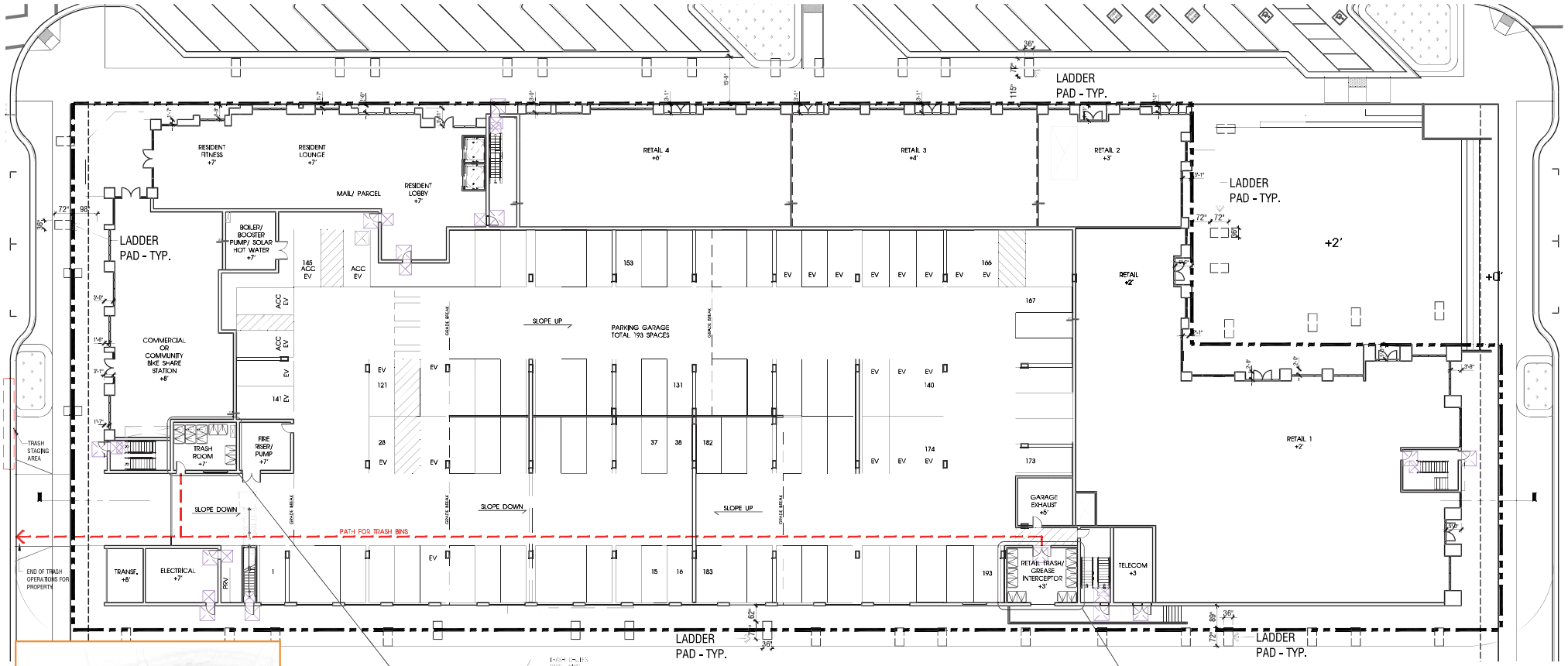
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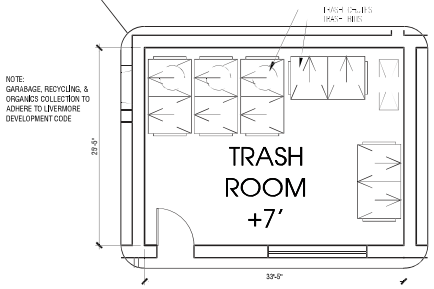
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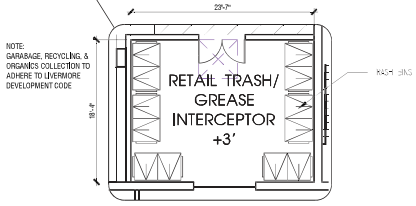


Key Map



CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM



CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
FIRST LEVEL PLAN

A16-11

ISABEL PORTOLA OWNER, LLC

WHA.

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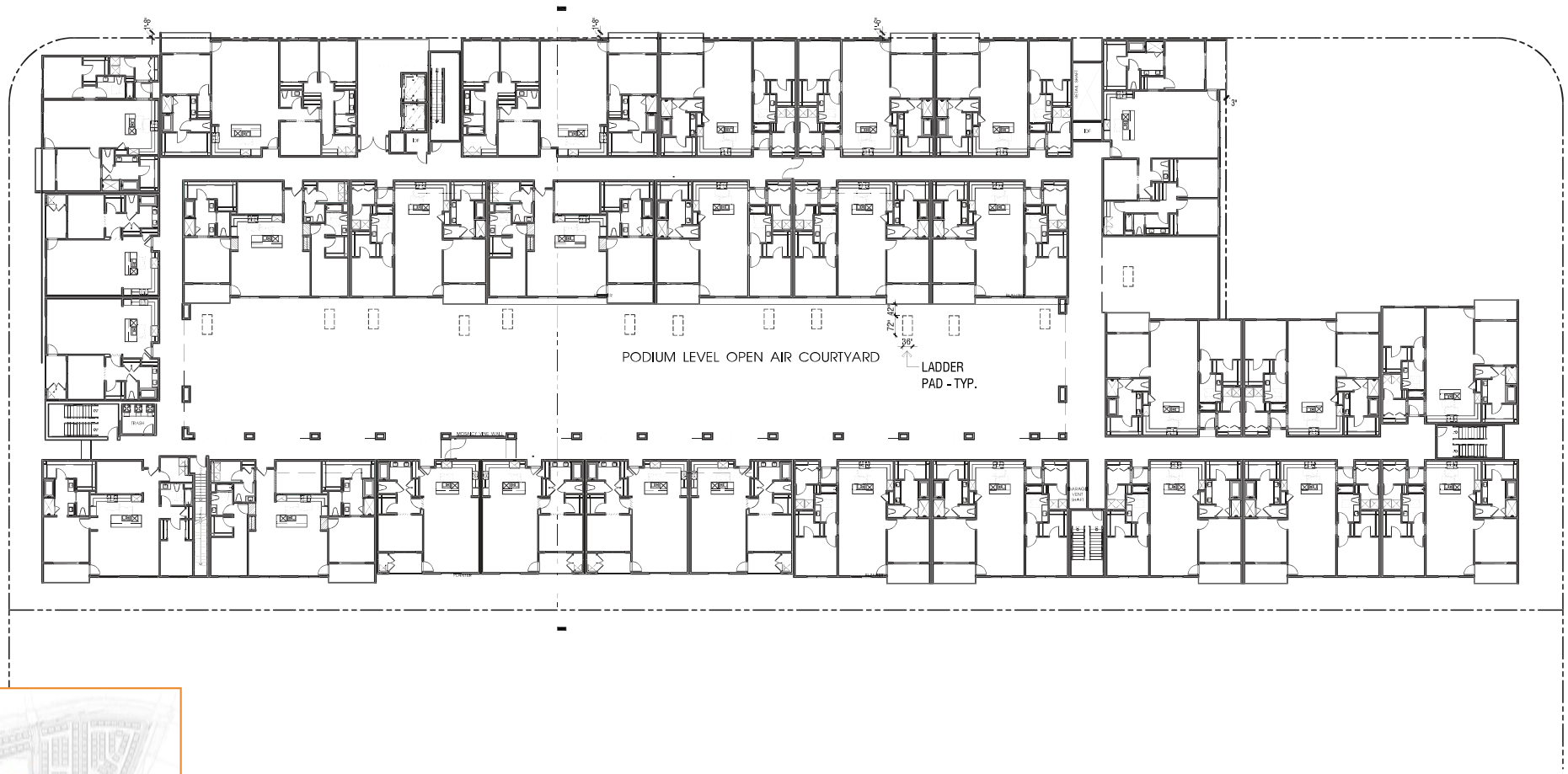
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

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1366

EXHIBIT C





Key Map

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PODIUM LEVEL PLAN

A16-12

ISABEL PORTOLA
OWNER, LLC

WHA.

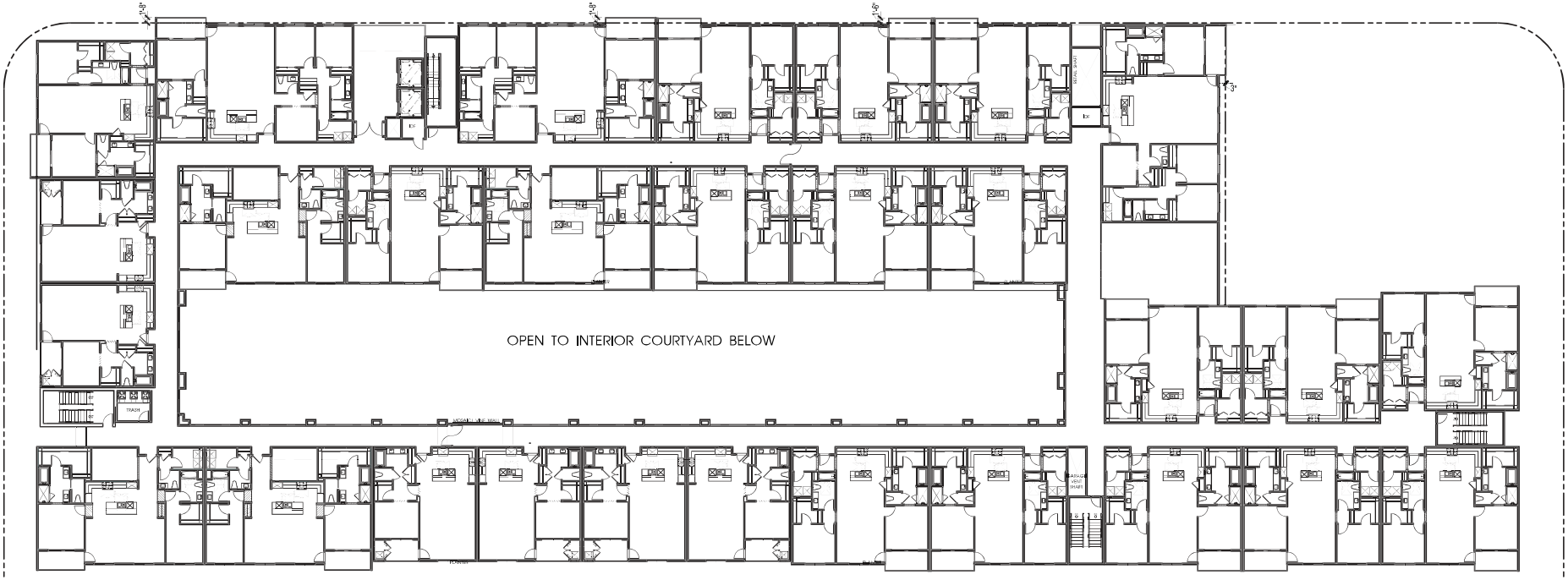
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EXHIBIT C





Key Map

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
LEVELS 3-5 FLOOR PLAN

A16-13

ISABEL PORTOLA
OWNER, LLC

WHA.

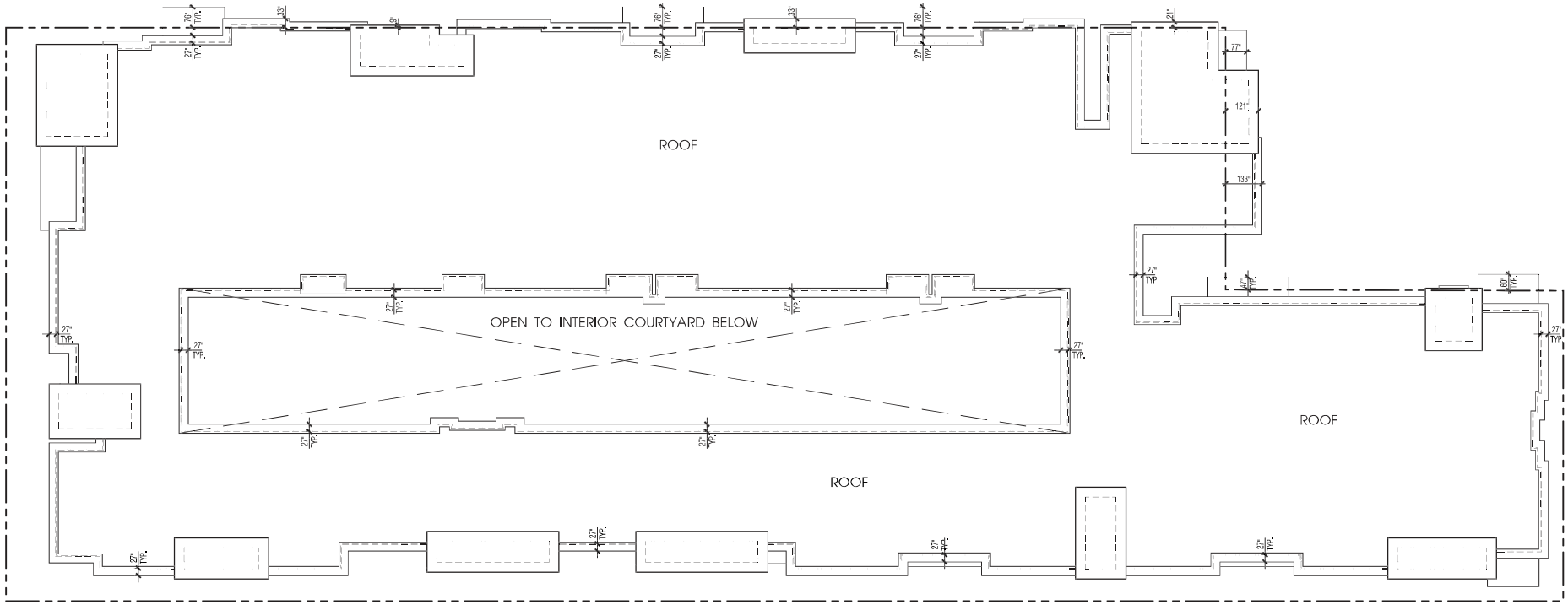
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CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
ROOF PLAN

A16-14

ISABEL PORTOLA
OWNER, LLC

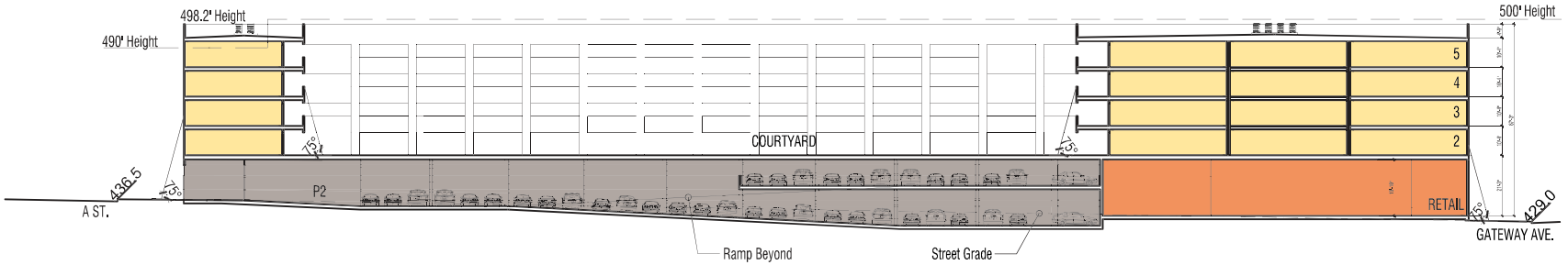
WHA.

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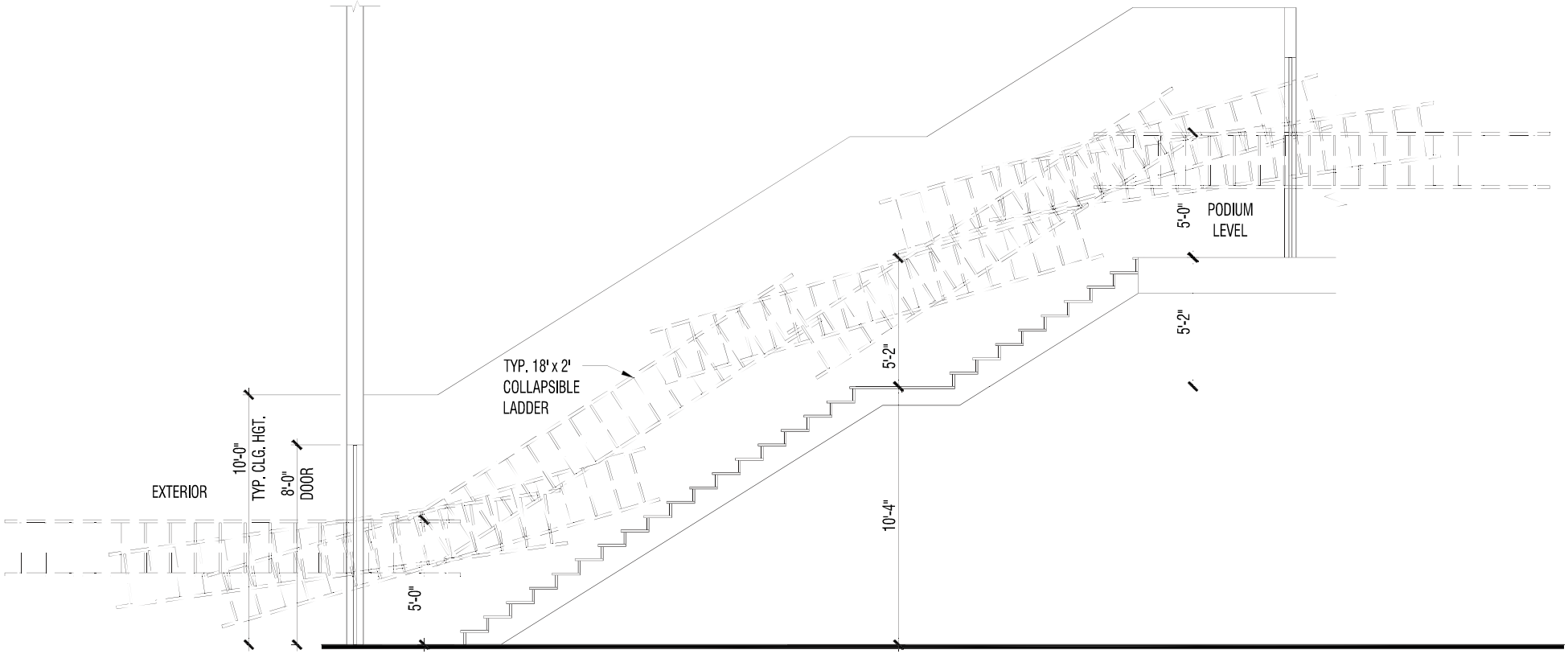
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TRANSVERSE SECTION AT COMMERCIAL

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FIREMAN'S STAIR SECTION

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
FIRE LADDER PATH STUDY - SECTION

A16-16

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

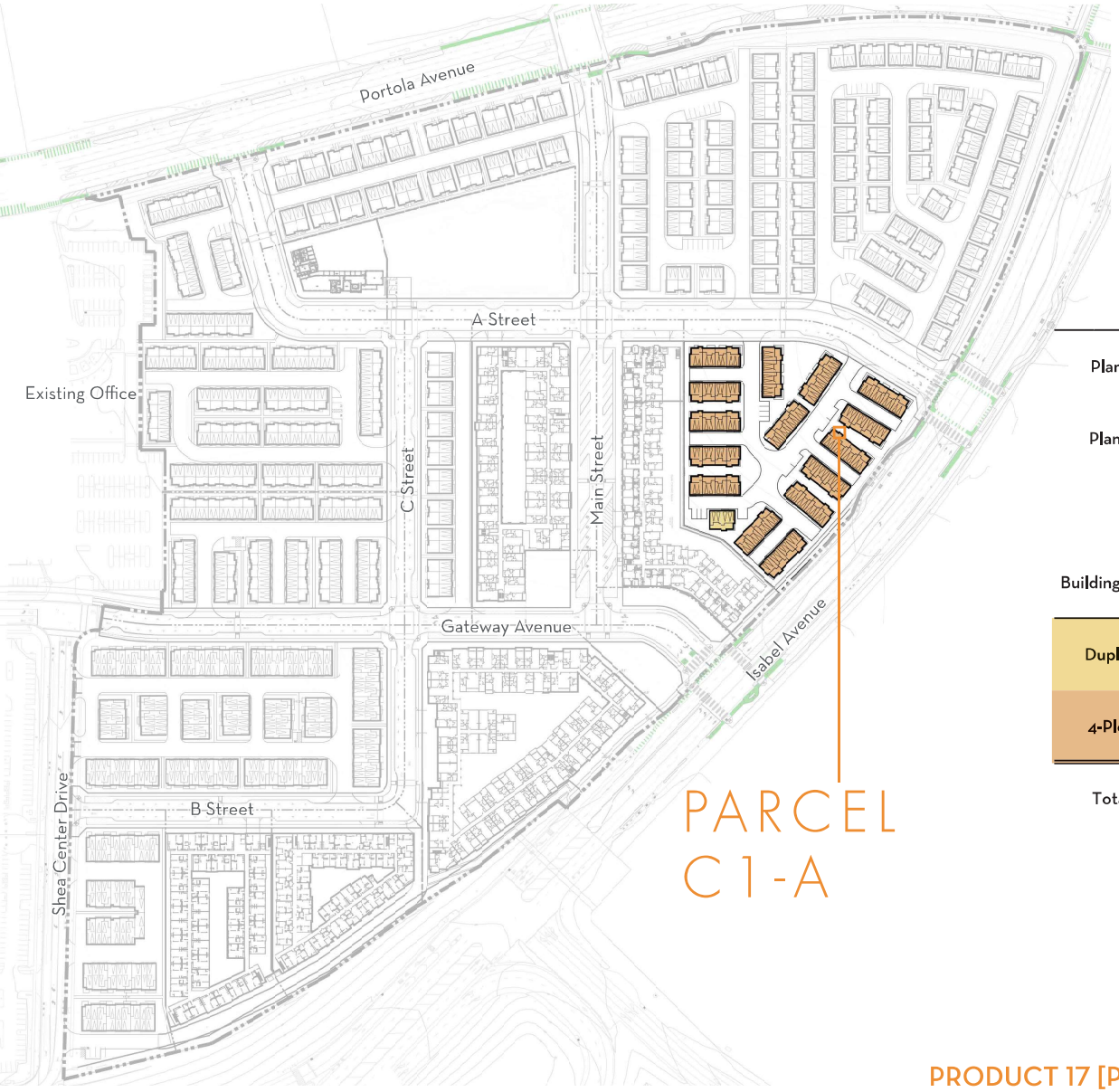
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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	1,613	3	2.5
Plan 2	1,847	4	3.0

Building Type	Plan 1	Plan 2	Total Units	Total SQFT
Duplex	1	1	2	3,460
4-Plex	30	30	60	103,800
Total	31	31	62	107,260

Height Limit:	495' to 500'*
Max. Height:	483.3 MSL
Building Height:	± 38'-3"
Stories:	3

*Height above MSL

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A17-1

ISABEL PORTOLA OWNER, LLC

WHA.

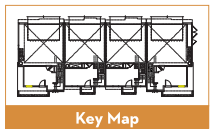
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A - CONTEMPORARY

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | PERSPECTIVES A

A17-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA OWNER, LLC

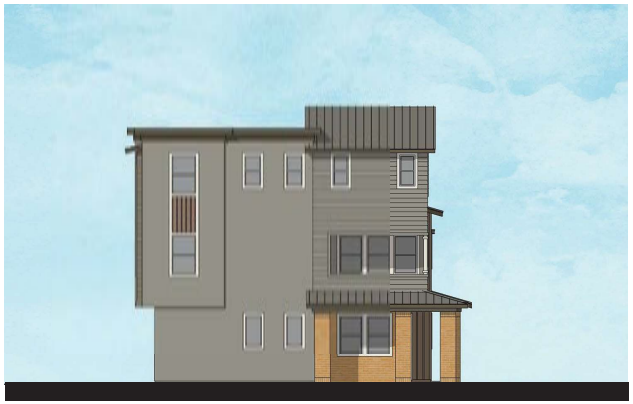
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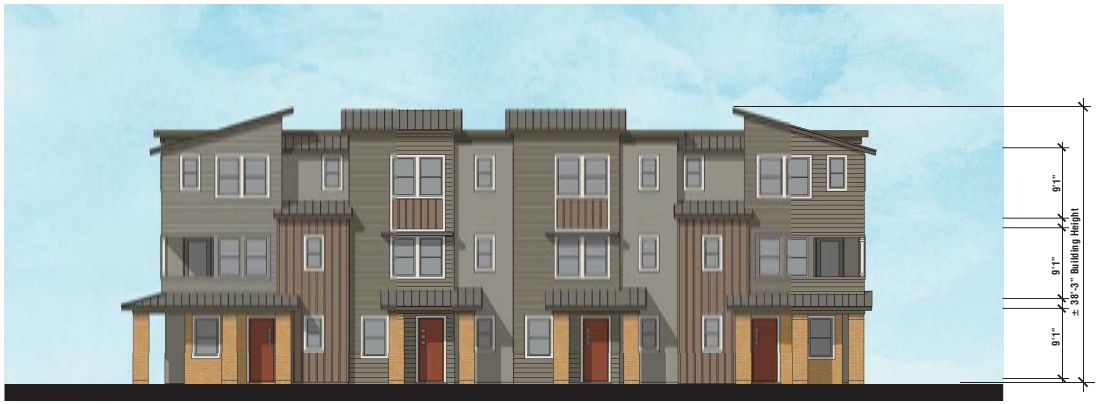
LIVERMORE ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 2 4 8

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ENHANCED LEFT



A - FRONT



RIGHT



REAR

A - CONTEMPORARY

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | ELEVATIONS A

A17-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA OWNER, LLC

WHA.

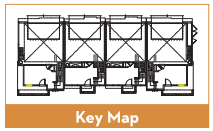
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B - TRADITIONAL

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | PERSPECTIVE B

A17-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA OWNER, LLC

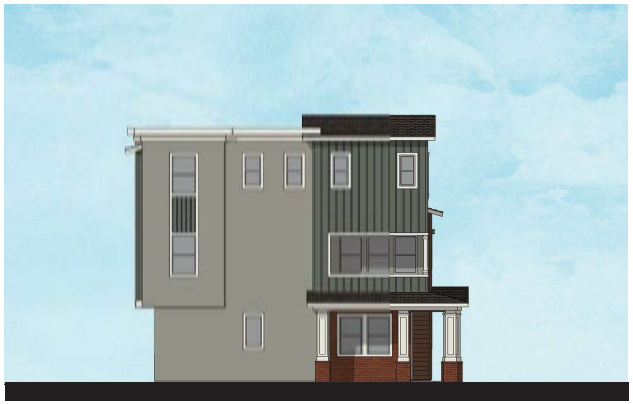
WHA.

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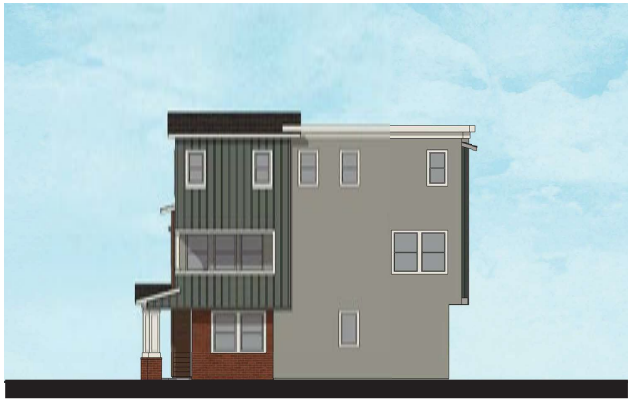
06-07-24 | 2023108



ENHANCED LEFT



B - FRONT



RIGHT



REAR

B - TRADITIONAL

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
4-PLEX BUILDING | ELEVATIONS B

A17-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

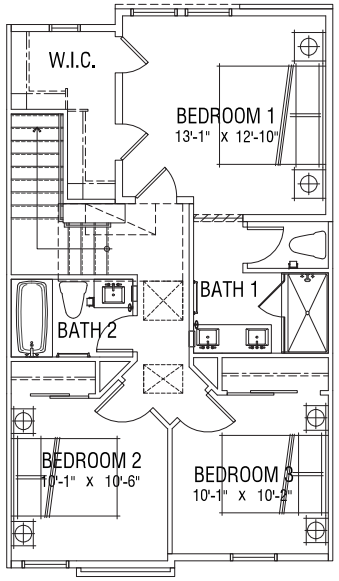
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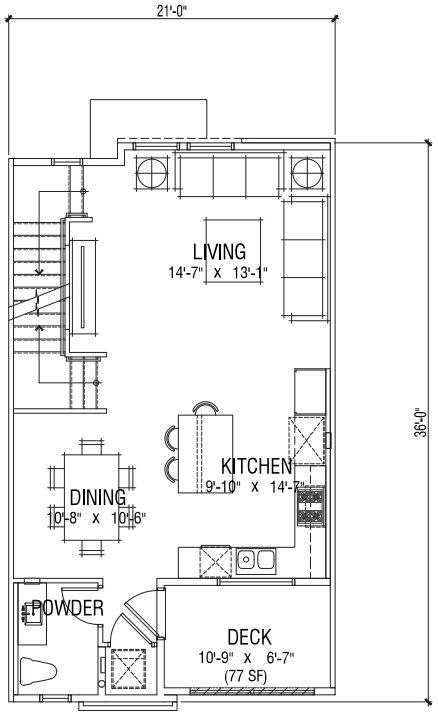
LIVERMORE
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LIVERMORE, CALIFORNIA

0 2 4 8

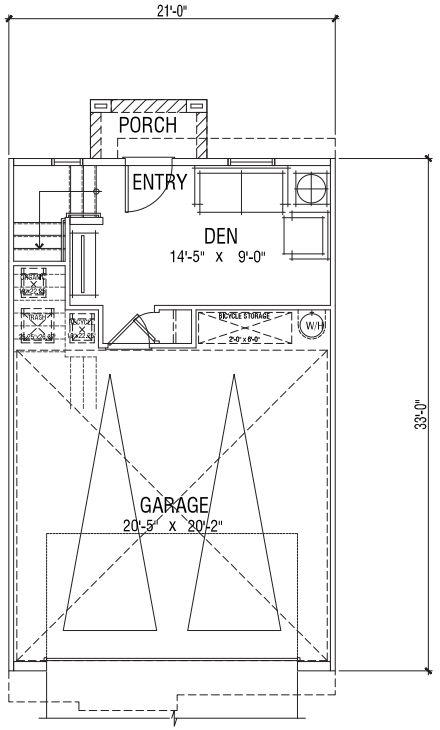
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Third Floor



Second Floor



First Floor

PLAN 1

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,613 S.F.

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A17-6

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

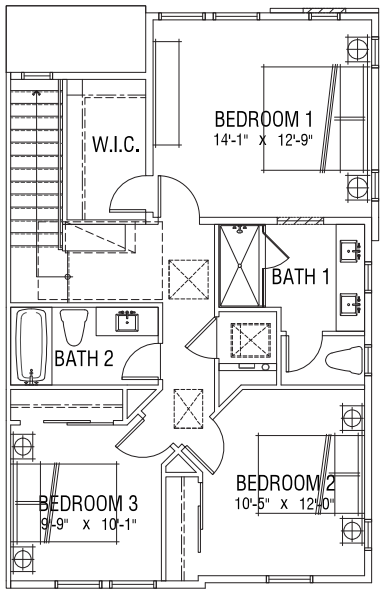
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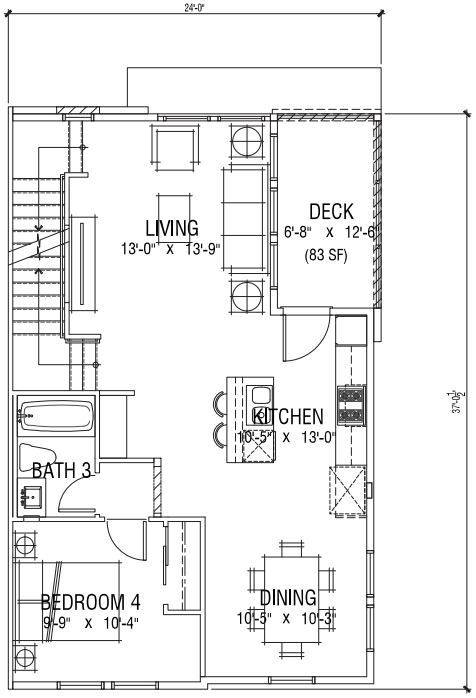
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LIVERMORE, CALIFORNIA

0 2 4 8

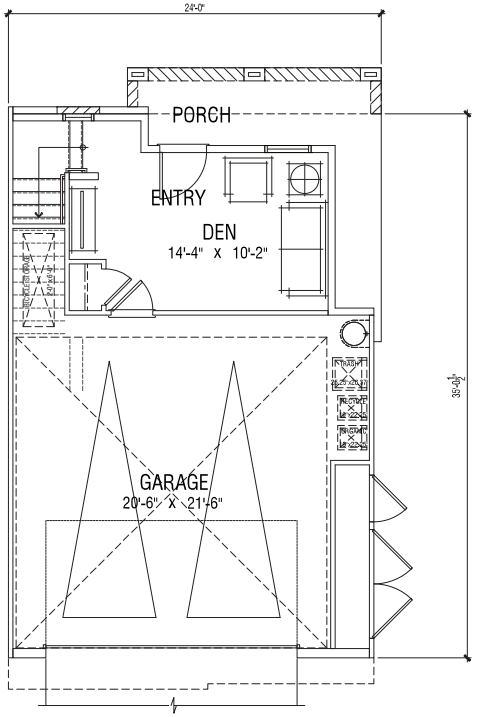
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Third Floor



Second Floor



First Floor

PLAN 2

4 Bdrm | 3 Bath | Den |
2- Bay Garage
1,847 S.F.

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A17-7

ISABEL PORTOLA
OWNER, LLC

WHA.

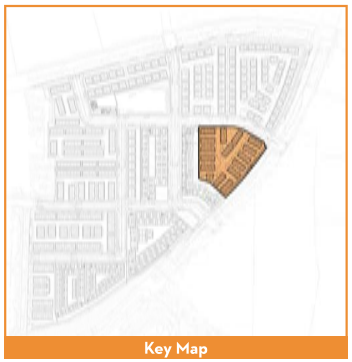
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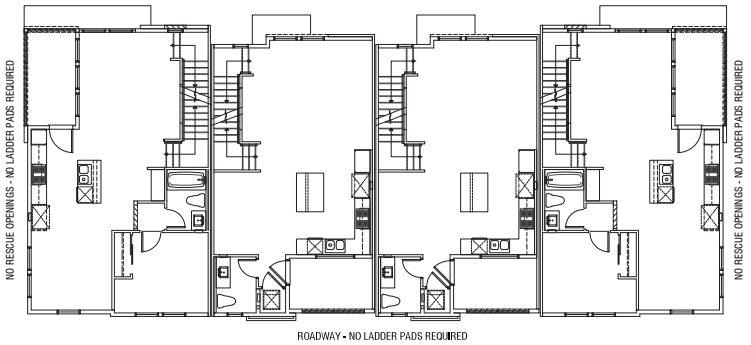
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LIVERMORE, CALIFORNIA

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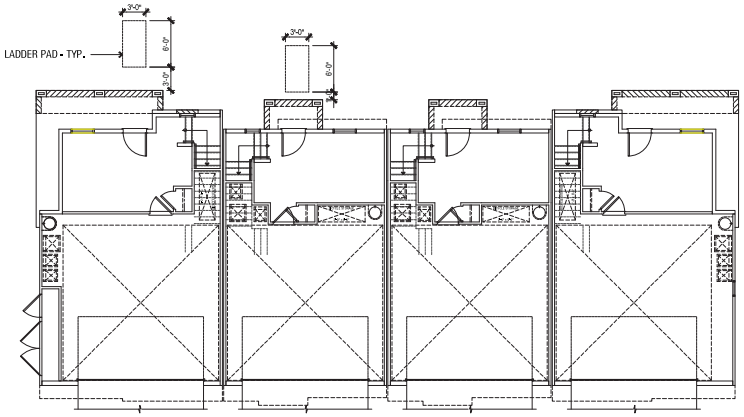
EXHIBIT C





SECOND FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2



FIRST FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U – CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
4-PLEX | FIRST & SECOND FLOOR PLAN

A17-8

ISABEL PORTOLA
OWNER, LLC

WHA.

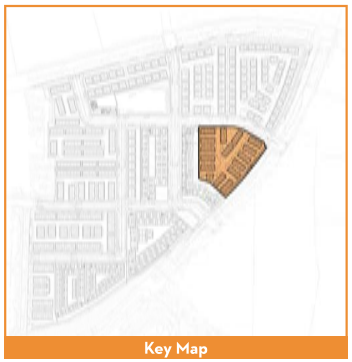
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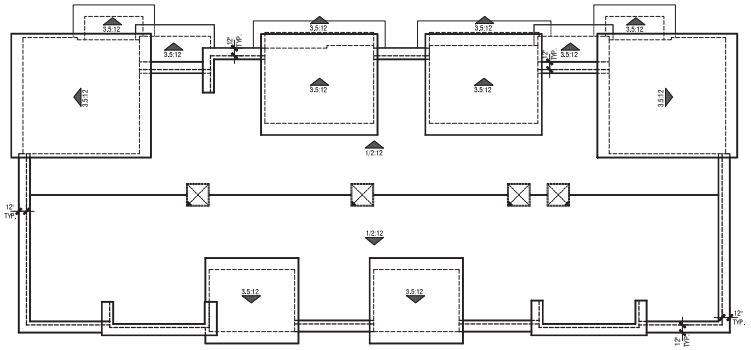
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LIVERMORE, CALIFORNIA

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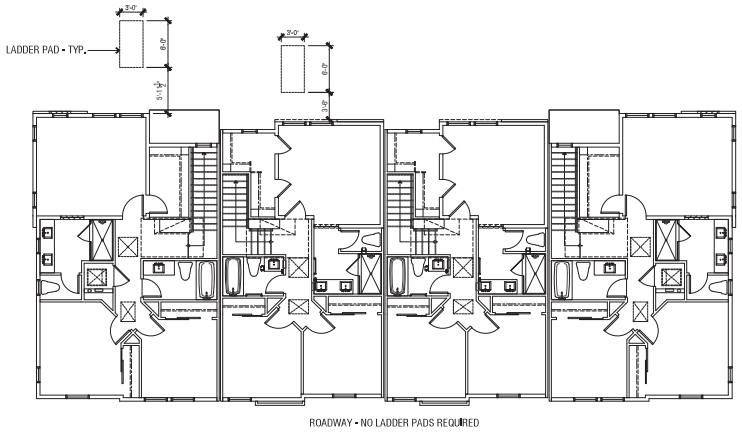
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EXHIBIT C





ROOF PLAN



THIRD FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U – CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
4-PLEX | THIRD FLOOR & ROOF PLAN

A17-9

ISABEL PORTOLA OWNER, LLC

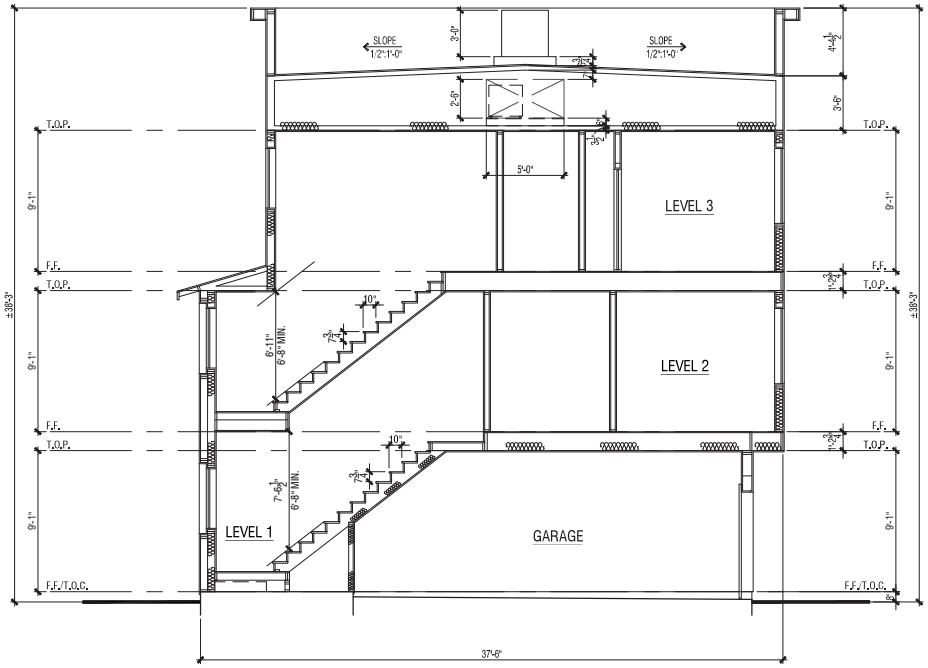
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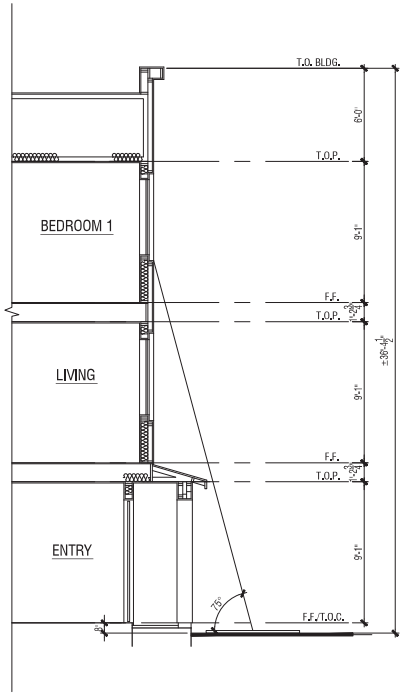
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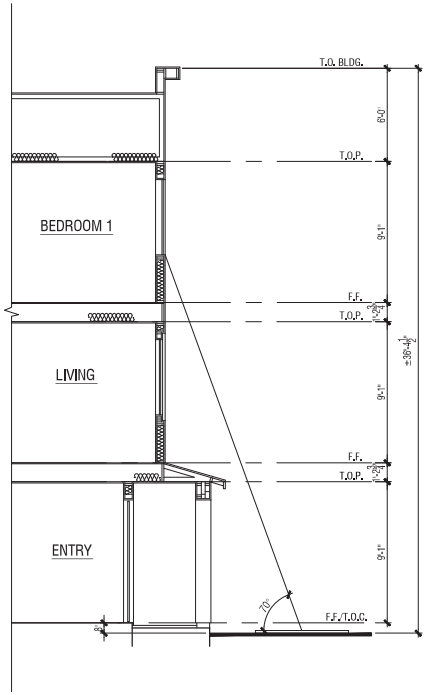


Building Section

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Unit 1



Unit 2

Ladder Pad Sections

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EXHIBIT C



	Total SQFT
Rec Building (Private)	8,575
Total	8,575

Height Limit: 485' to 490'*

Building Height: 468.2 MSL

± 29'- 3"

Stories: 2

*Height above MSL

PRIVATE RECREATION CENTER [PARCEL N3-C] PRODUCT ALLOCATION

R-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

WHA.

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EXHIBIT C



CONCEPT DESIGN

PRIVATE RECREATION CENTER [PARCEL N3-C]
SITE PLAN

R-2

ISABEL PORTOLA
OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

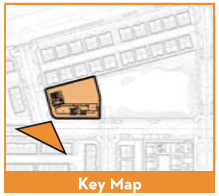
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06-07-24 | 2022245

1384

EXHIBIT C





CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRIVATE RECREATION CENTER [PARCEL N3-C]
PERSPECTIVE 1

R-3

ISABEL PORTOLA
OWNER, LLC

WHA.

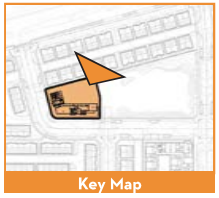
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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRIVATE RECREATION CENTER [PARCEL N3-C]
PERSPECTIVE 2

R-4

ISABEL PORTOLA
OWNER, LLC

WHA.

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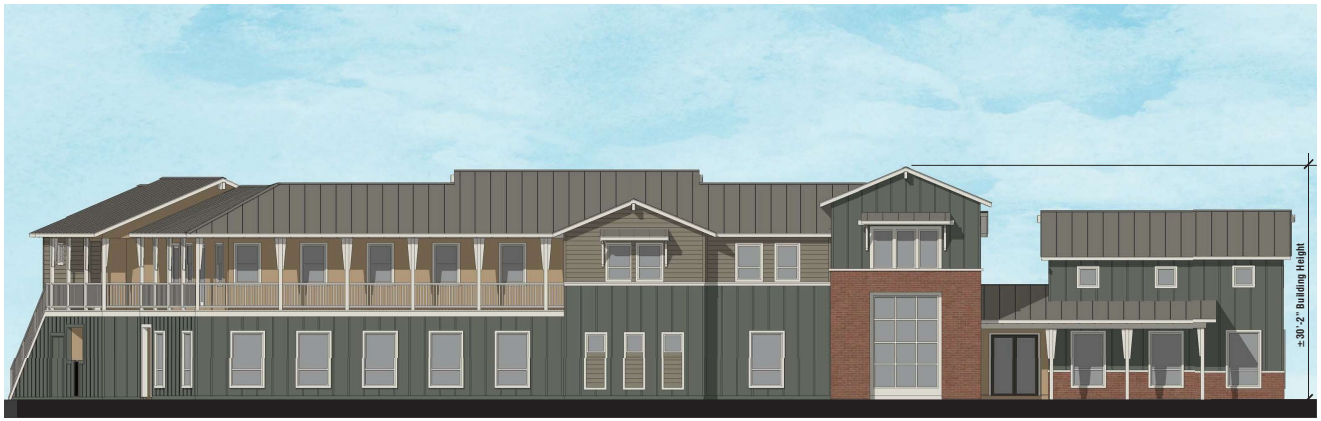
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LIVERMORE, CALIFORNIA

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EXHIBIT C



WEST ELEVATION



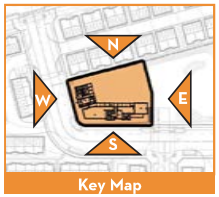
SOUTH ELEVATION



EAST ELEVATION



NORTH ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

TRADITIONAL

PRIVATE RECREATION CENTER [PARCEL N3-C] ELEVATIONS

R-5

ISABEL PORTOLA
OWNER, LLC

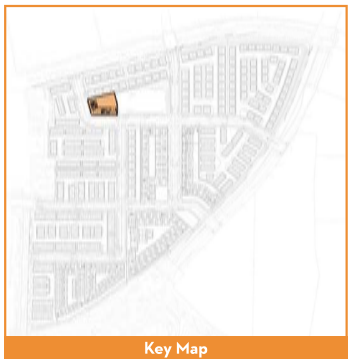
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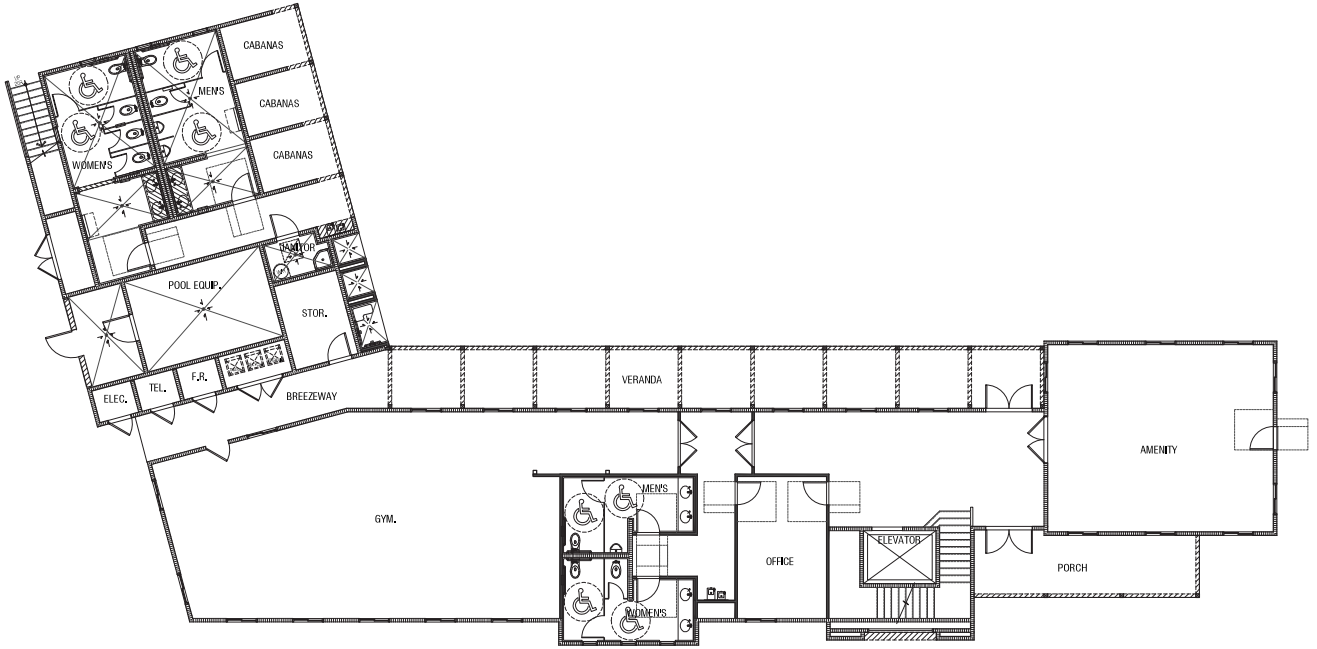
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LIVERMORE, CALIFORNIA

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First Floor

REC. & POOL BUILDING

8,575 S.F.

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | FIRST FLOOR

R-6

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

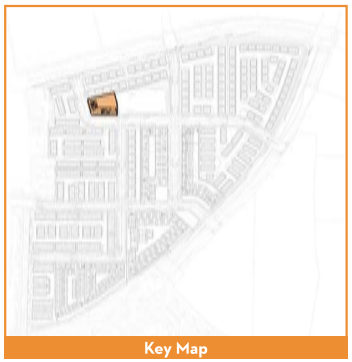
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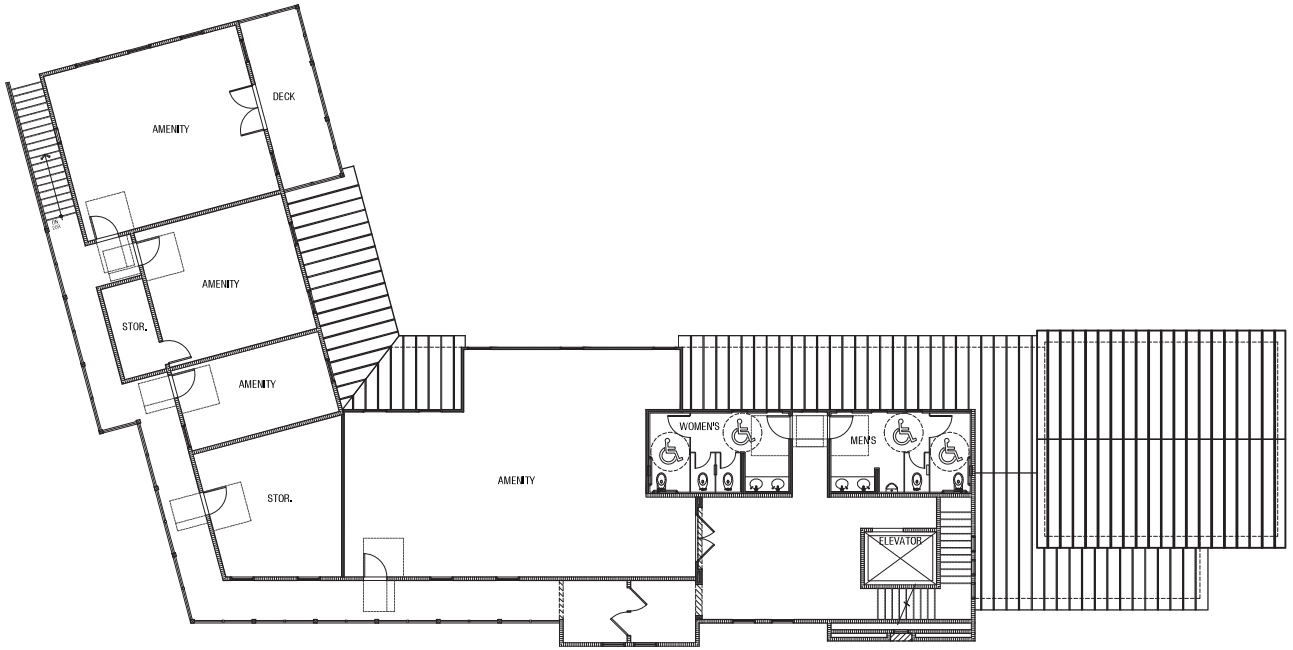
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Second Floor

REC. & POOL BUILDING

8,575 S.F.

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | SECOND FLOOR

R-7

CONCEPT DESIGN

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OWNER, LLC

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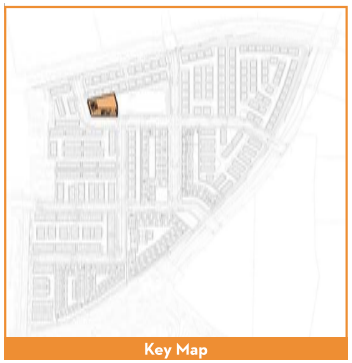
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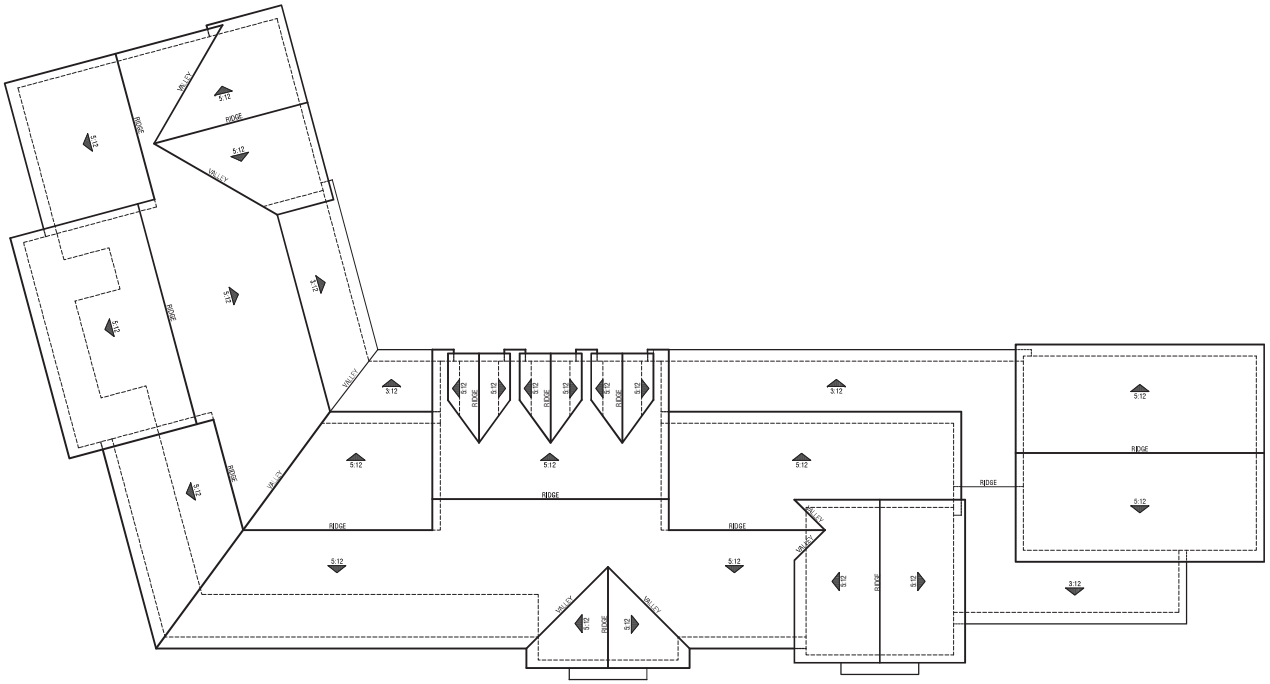
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1389





Roof Plan

REC. & POOL BUILDING

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | ROOF PLAN

R-8

CONCEPT DESIGN

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Building Section

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EXHIBIT C



VIEW #6

Looking South from Portola Ave. and Montage Drive



VIEW #1

Looking South West from Portola Ave. and Isabel Ave.



VIEW #5

Looking South East from Portola Ave.



AERIAL SITE MAP



VIEW #2

Looking North West from Isabel Ave. and Gateway Ave.



VIEW #4

Looking North from Shea Center Drive and West Bound 580 On-Ramp



VIEW #3

Looking North West from Isabel Ave. and 580 Off-Ramp

AERIAL SITE MAP & VIEWS

S-1

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EXHIBIT C



CONCRETE ROOF TILE #1
Westlake Royal Roofing - 1FACS 0330 - Appalachian Blend



*CONCRETE ROOF TILE #2
Westlake Royal Roofing - 1FACS 1132 - Charcoal Brown Blend



*CONCRETE ROOF TILE #3
Westlake Royal Roofing - 1FACS 3184 - Rustic Brown Blend



*CONCRETE ROOF TILE #4
Westlake Royal Roofing - 1FBCF 3726 - Hickory



CONCRETE ROOF TILE #5
Westlake Royal Roofing - 1FBCF 1132 - Charcoal Brown Blend



*CONCRETE ROOF TILE #6
Westlake Royal Roofing - 1FBCJ 3184 - Rustic Brown Blend



BRICK #1
H.C. Muddox - Summer Wheat



BRICK #2
H.C. Muddox - Dusty Rose



BRICK #3
H.C. Muddox - Old Town Red



BRICK #4
H.C. Muddox - Monterey Bay Flash, Smooth



METAL ROOF
Custom-Bilt Metals - Zinc Gray



*STUCCO #1
Sherwin Williams - SW 7731 San Antonio Sage



*STUCCO #2
Sherwin Williams - SW 7540 Artisan Tan



STUCCO #3
Sherwin Williams - SW 7549 Studio Taupe



*STUCCO #4
Sherwin Williams - SW 7039 Virtual Taupe



*STUCCO #5
Sherwin Williams - SW 9172 Studio Clay



*STUCCO #6
Sherwin Williams - SW 9131 Cornwall Slate



*SIDING #1
Sherwin Williams - SW 7525 Tree Branch



*SIDING #2
Sherwin Williams - SW 6090 Java



*SIDING #3
Sherwin Williams - SW 6166 Eclipse



*SIDING #4
Sherwin Williams - SW 7061 Night Owl



SIDING #5
Sherwin Williams - SW 7053 Adaptive Shade



*TRIM #1 / STUCCO & SIDING ACCENT
Sherwin Williams - SW 6070 Heron Plume



*TRIM #2
Sherwin Williams - SW 6103 Tea Chest



*TRIM #3
Sherwin Williams - SW 7027 Hickory Smoke



*TRIM #4
Sherwin Williams - SW 7054 Oak Leaf Brown



ACCENT #1 / SIDING #6
Sherwin Williams - SW 2858 Harvest Gold



*ACCENT #2 / SIDING #7
Sherwin Williams - SW 0008 Cajun Red



ACCENT #3 / SIDING #8
Sherwin Williams - SW 0015 Gallery Green



*ACCENT #4 / SIDING #9
Sherwin Williams - SW 6223 Still Water



ACCENT #5
Sherwin Williams - SW 7020 Black Fox

NOTE: *Materials and colors are referenced from Auburn Grove, Livermore, California. This palette is a representative range only; equivalent materials and colors from other manufacturers may be utilized.

CONCEPTUAL MATERIALS & COLOR PALETTE

S-2

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ATTACHED & DETACHED

NOTE: *Wall sconces will be shielded to direct illumination downward and outward.










PODIUM |STORE FRONT

INSPIRATIONAL LIGHTING SELECTION

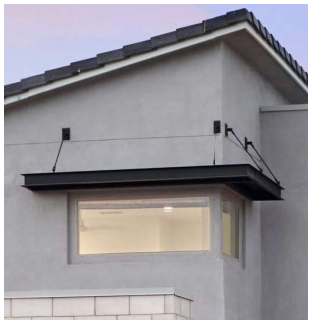
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EXHIBIT C





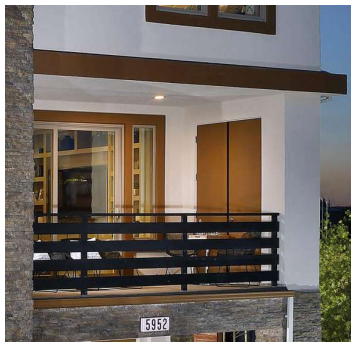
BOARD & BATTS GABLE TRIM


EYEBROW/CANOPIES



BOX WINDOW


DECK & RAILING





COLUMN DETAILS

CONCEPT DESIGN

INSPIRATIONAL ARCHITECTURAL DETAILS

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CORNICE AT PARCEL S1



CORNICE AT PARCEL S3-A



CORNICE AT PARCEL S3-B

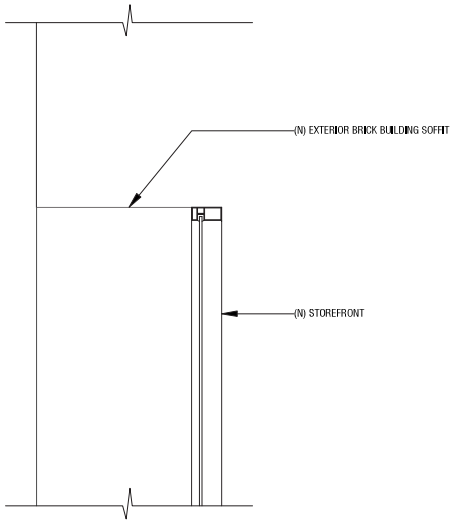


CORNICE AT C1-B

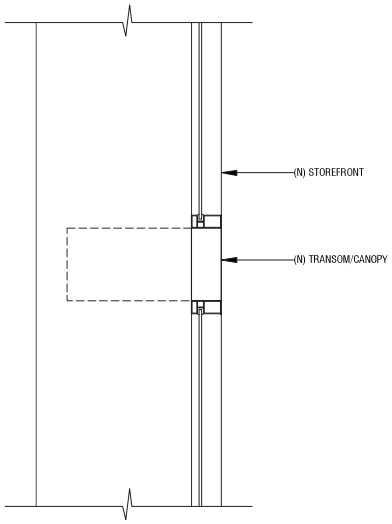


CORNICE AT C2-A

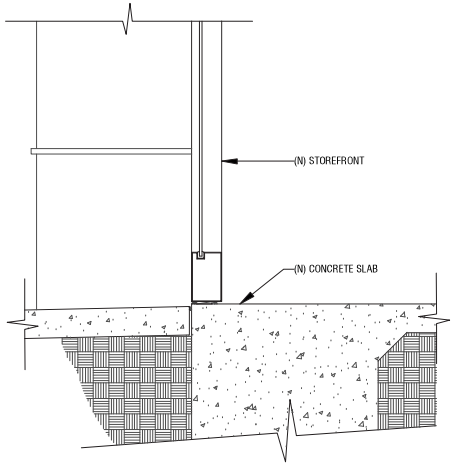
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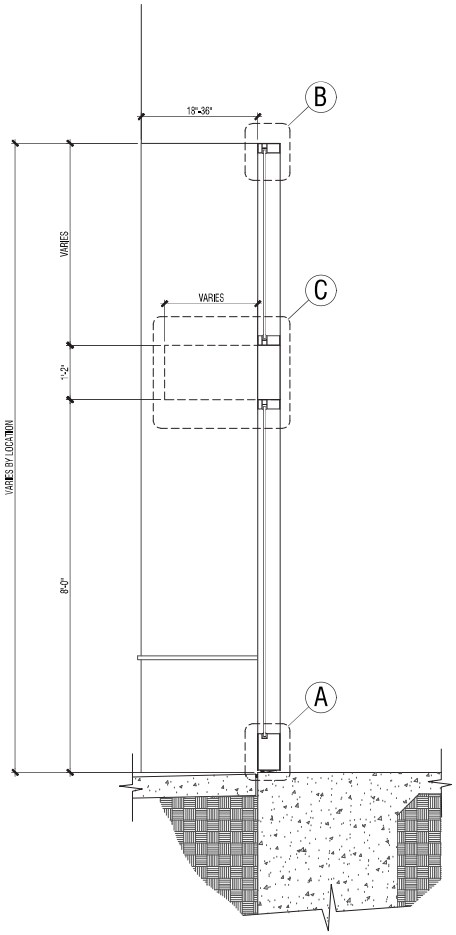
B STOREFRONT HEAD DETAIL



C STOREFRONT TRANSOM DETAIL



A STOREFRONT SILL DETAIL



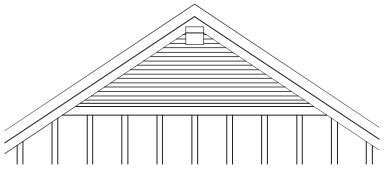
STOREFRONT SECTION

ISABEL PORTOLA
OWNER, LLC

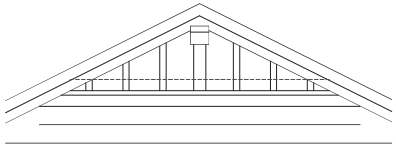
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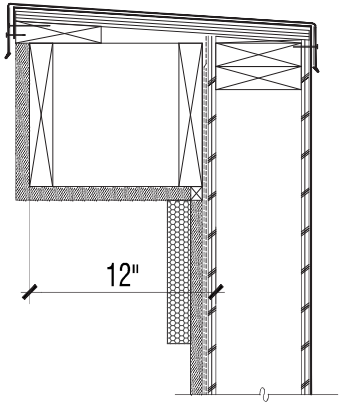
EXHIBIT C



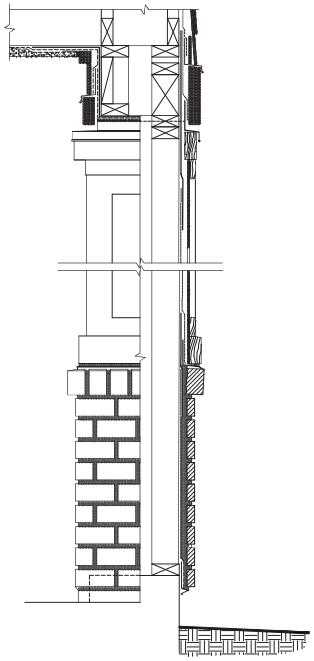
GABLE 'A'



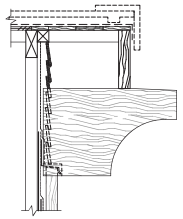
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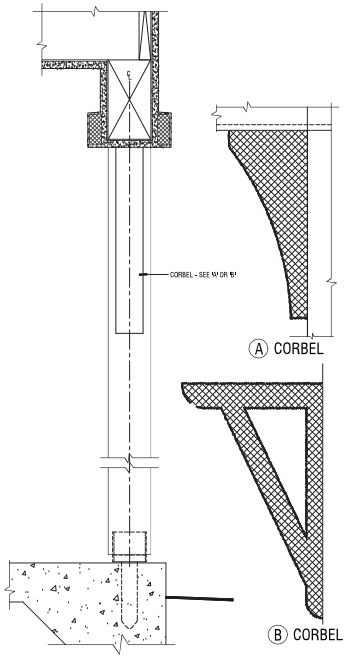
CORNICE/PARAPET DETAIL



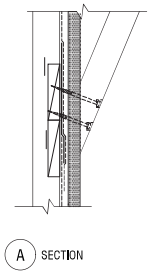
BRICK POST - ELEV/SECTION

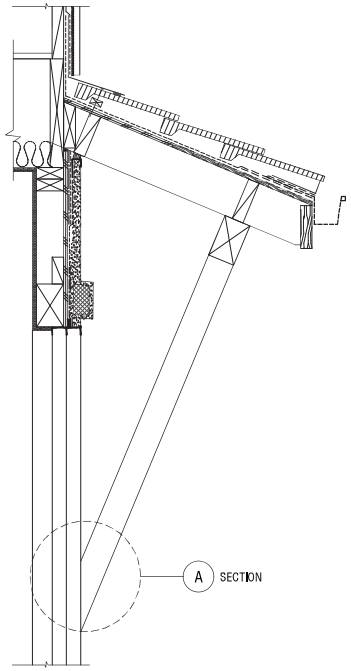


OUTLOOKER



WOOD POST & CORBEL





SHED ROOF

CONCEPT DESIGN

TYPICAL ARCHITECTURAL DETAILS ALL PRODUCTS

S-7

ISABEL PORTOLA OWNER, LLC

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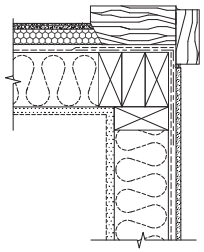
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

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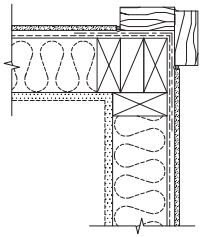
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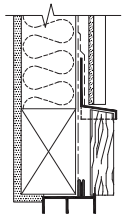
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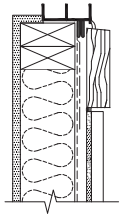
OUTSIDE CORNER
TRIM SIDING/STUCCO



OUTSIDE CORNER
TRIM SIDING/SIDING

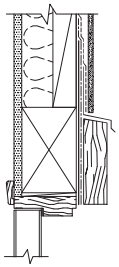


WINDOW HEAD

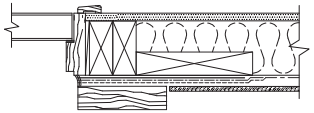


WINDOW SILL

WINDOW DETAIL
AT SIDING

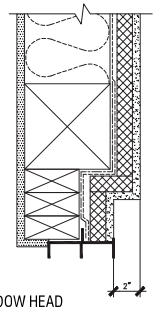


DOOR HEAD

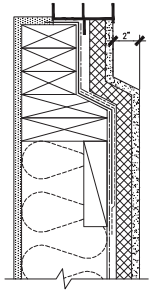


DOOR JAMB

DOOR HEAD/JAMB
DETAIL AT SIDING

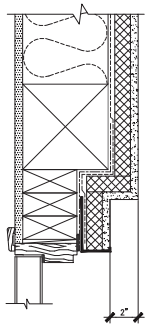


WINDOW HEAD

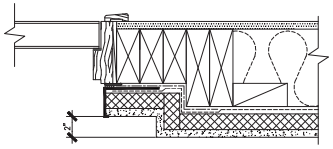


WINDOW SILL

RECESSED WINDOW
DETAIL AT STUCCO



DOOR HEAD



DOOR JAMB

DOOR HEAD/JAMB
DETAIL AT STUCCO

CONCEPT DESIGN

TYPICAL ARCHITECTURAL DETAILS
ALL PRODUCTS

S-8

ISABEL PORTOLA
OWNER, LLC

WHA.

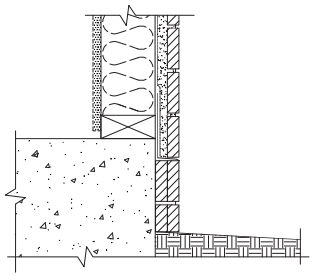
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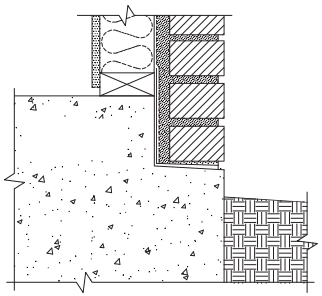
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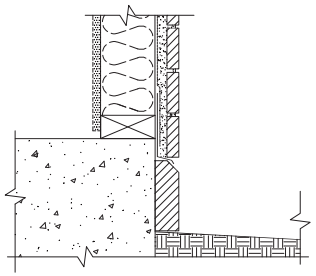
1399



THIN SET BRICK SCREED
WITH THIN SET BRICK SPACERS



FULL BRICK VENEER
AT GRADE

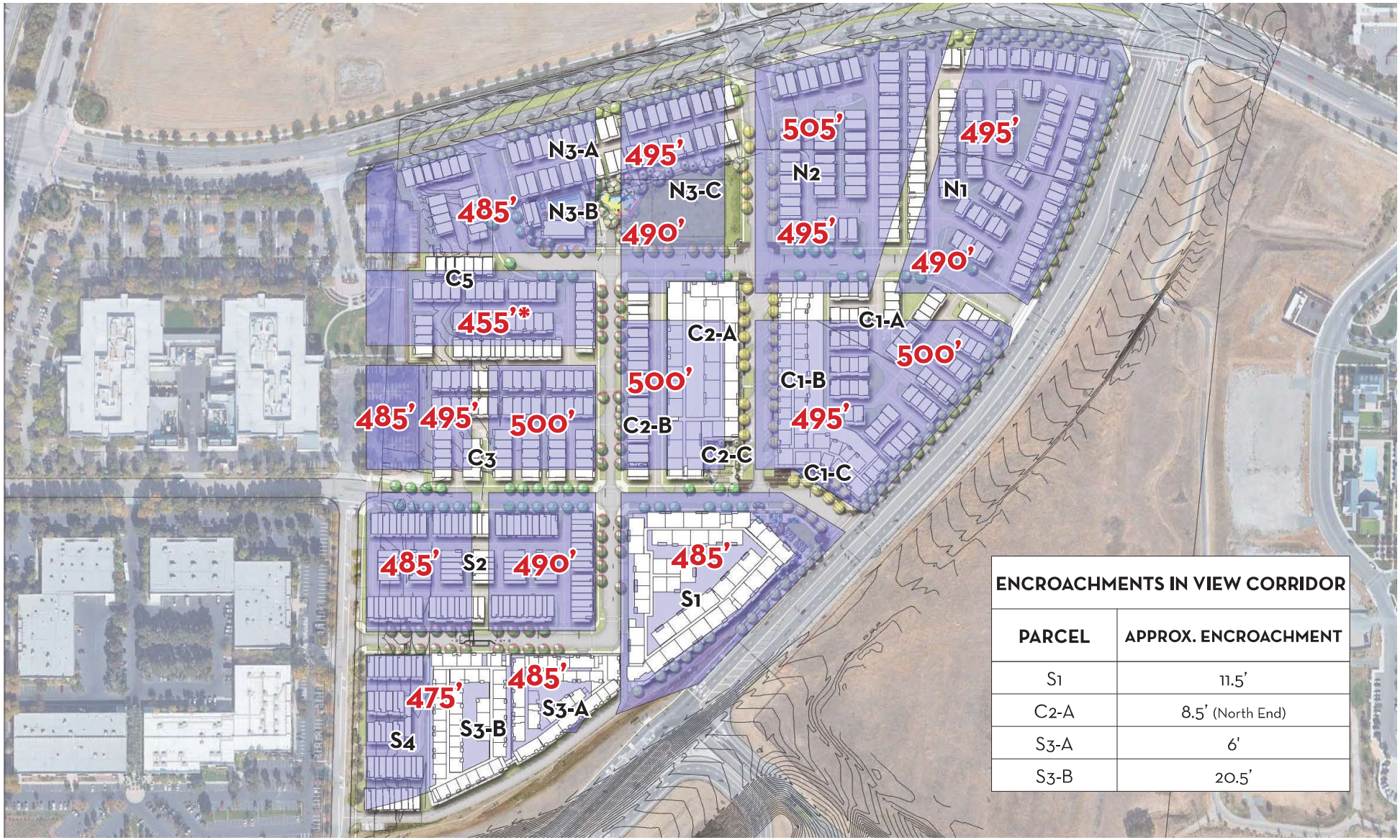


THIN SET BRICK SCREED
WITH STONE LINTEL

BRICK VENEER
DETAIL AT SCREED

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EXHIBIT C



ENCROACHMENTS IN VIEW CORRIDOR	
PARCEL	**APPROX. ENCROACHMENT**
S1	11.5'
C2-A	8.5' (North End)
S3-A	6'
S3-B	20.5'

HEIGHTS ANALYSIS
MASTER PLAN

H-1

CONCEPT DESIGN

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EXHIBIT C

N-1: Max. Height: ± 490.25' MSL



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL N1 | VIEW CORRIDOR ANALYSIS

H-2

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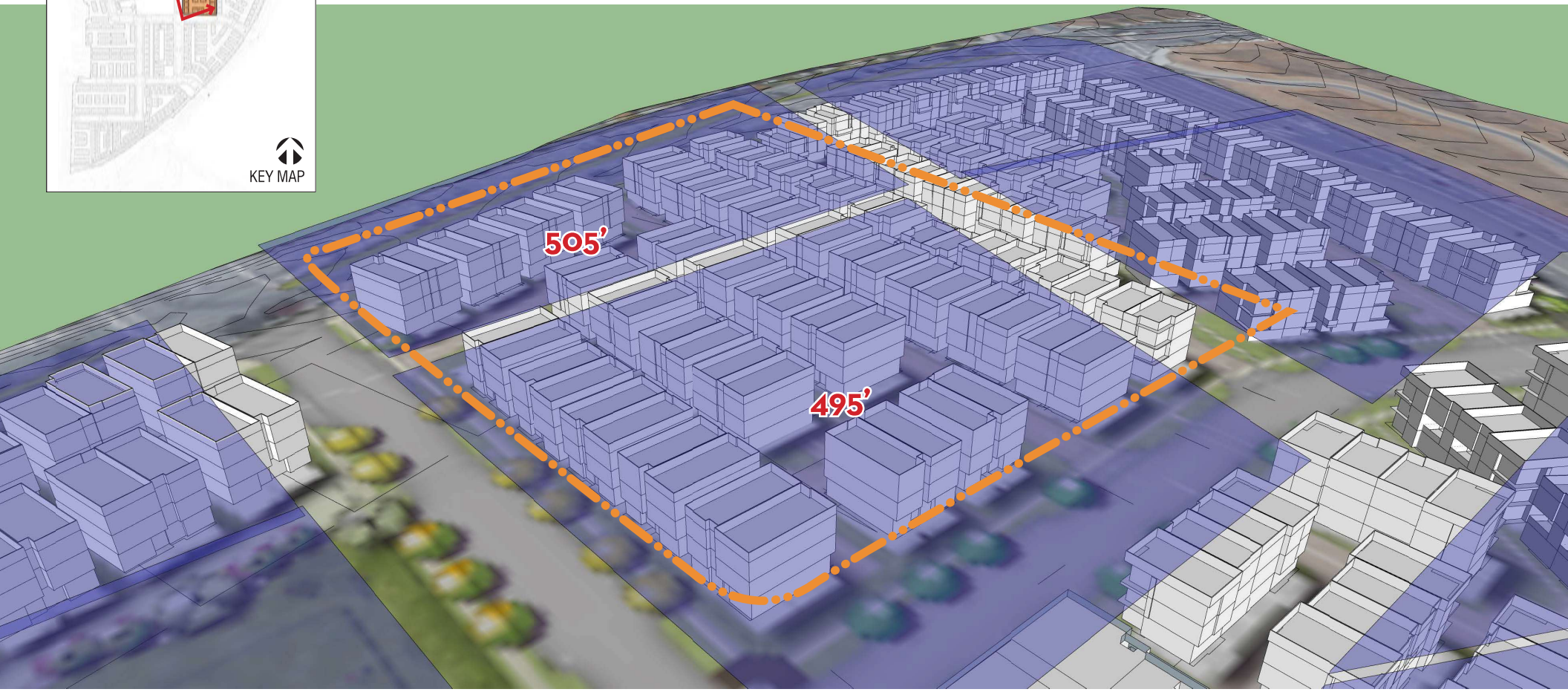
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LIVERMORE, CALIFORNIA

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1402

EXHIBIT C

N-2: Max. Height: ± 486.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL N2 | VIEW CORRIDOR ANALYSIS

H-3

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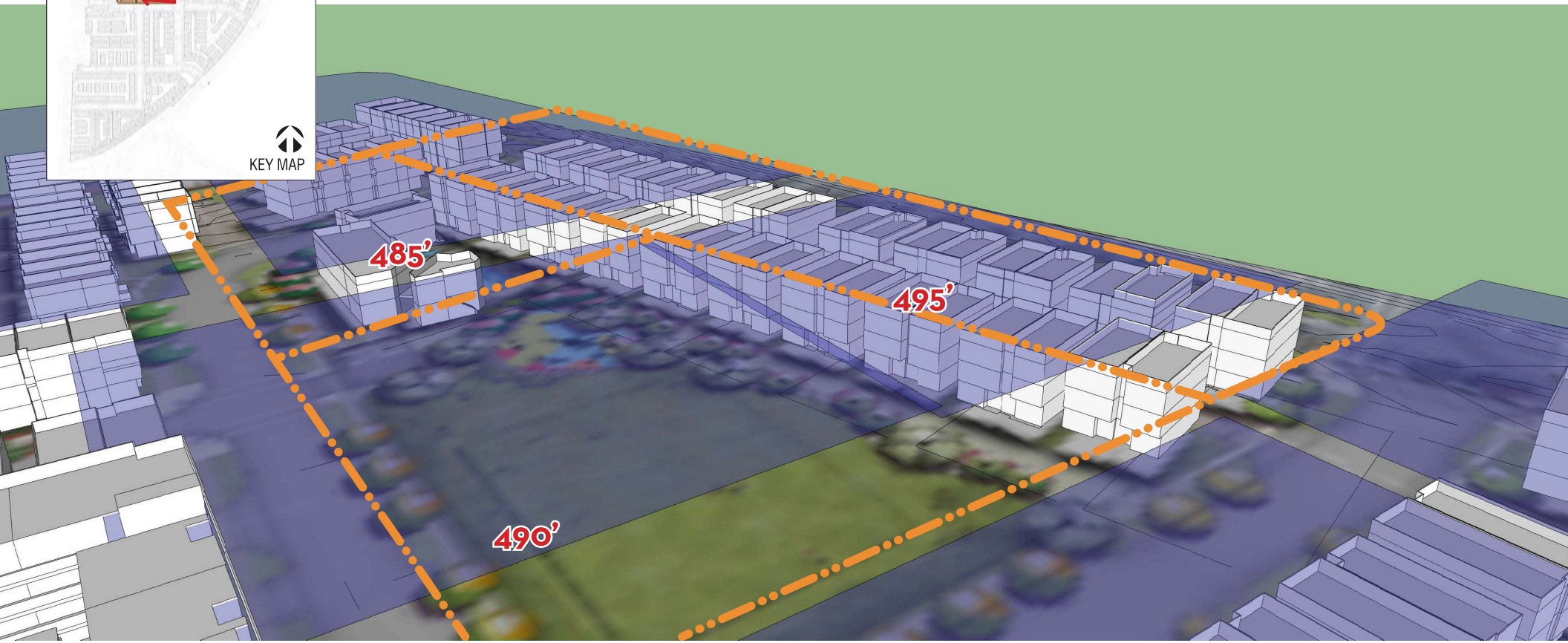
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1403

EXHIBIT C

N3-A: Max. Height: ± 487.5' MSL No Encroachment
N3-B: Park
N3-C: Max. Height: ± 486.2' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCELS N3-A, N3-B, & N3-C | VIEW CORRIDOR ANALYSIS

H-4

ISABEL PORTOLA
OWNER, LLC

WHA.

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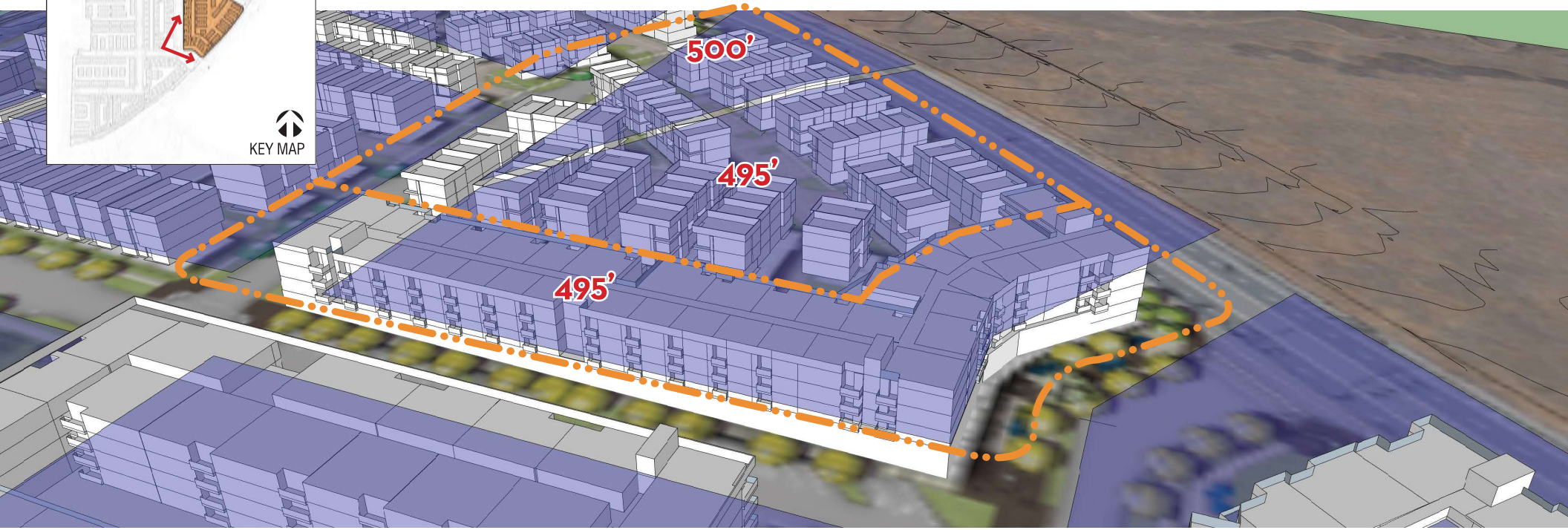
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

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1404

EXHIBIT C

C1-A: Max. Height: ± 483.3' MSL No Encroachment
C1-B: Max. Height: ± 488.9' MSL No Encroachment



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EXHIBIT C

C2-A: Max. Height: ± 498.5' MSL
Encroachment Approx. 8.5' North End Only
C2-B: Max. Height: ± 474.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCELS C2-A & C2-B | VIEW CORRIDOR ANALYSIS

H-6

ISABEL PORTOLA
OWNER, LLC

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EXHIBIT C

C3: Max. Height: ± 469.3' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL C3 | VIEW CORRIDOR ANALYSIS

H-7

ISABEL PORTOLA
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1407

EXHIBIT C

C5: Max. Height: ± 478.3' MSL No Encroachment

*Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL C5 | VIEW CORRIDOR ANALYSIS

H-8

ISABEL PORTOLA OWNER, LLC

WHA.

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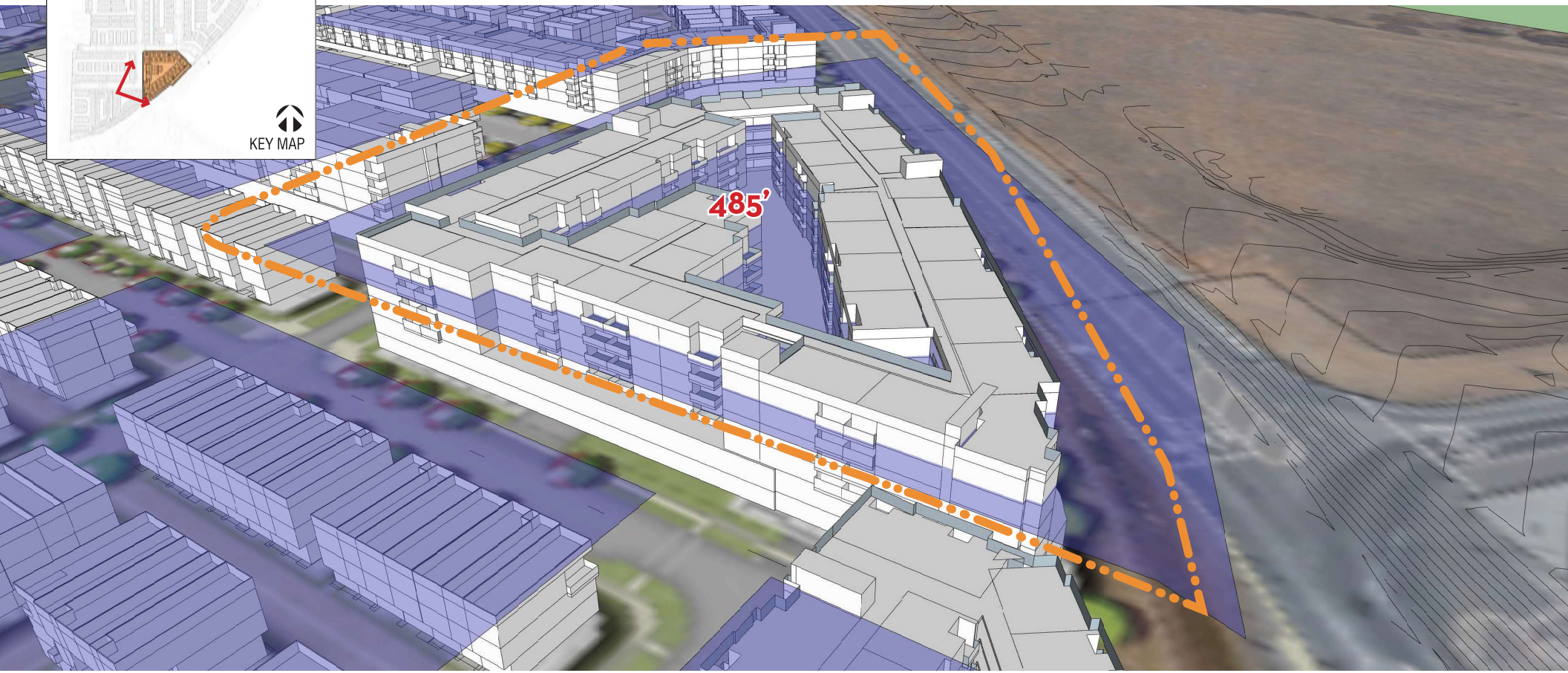
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

06-07-24 | 2022015

1408

EXHIBIT C

S1: Max. Height: ± 495.5' MSL
Approx. 11.5' Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S1 | VIEW CORRIDOR ANALYSIS

H-9

ISABEL PORTOLA
OWNER, LLC

WHA.

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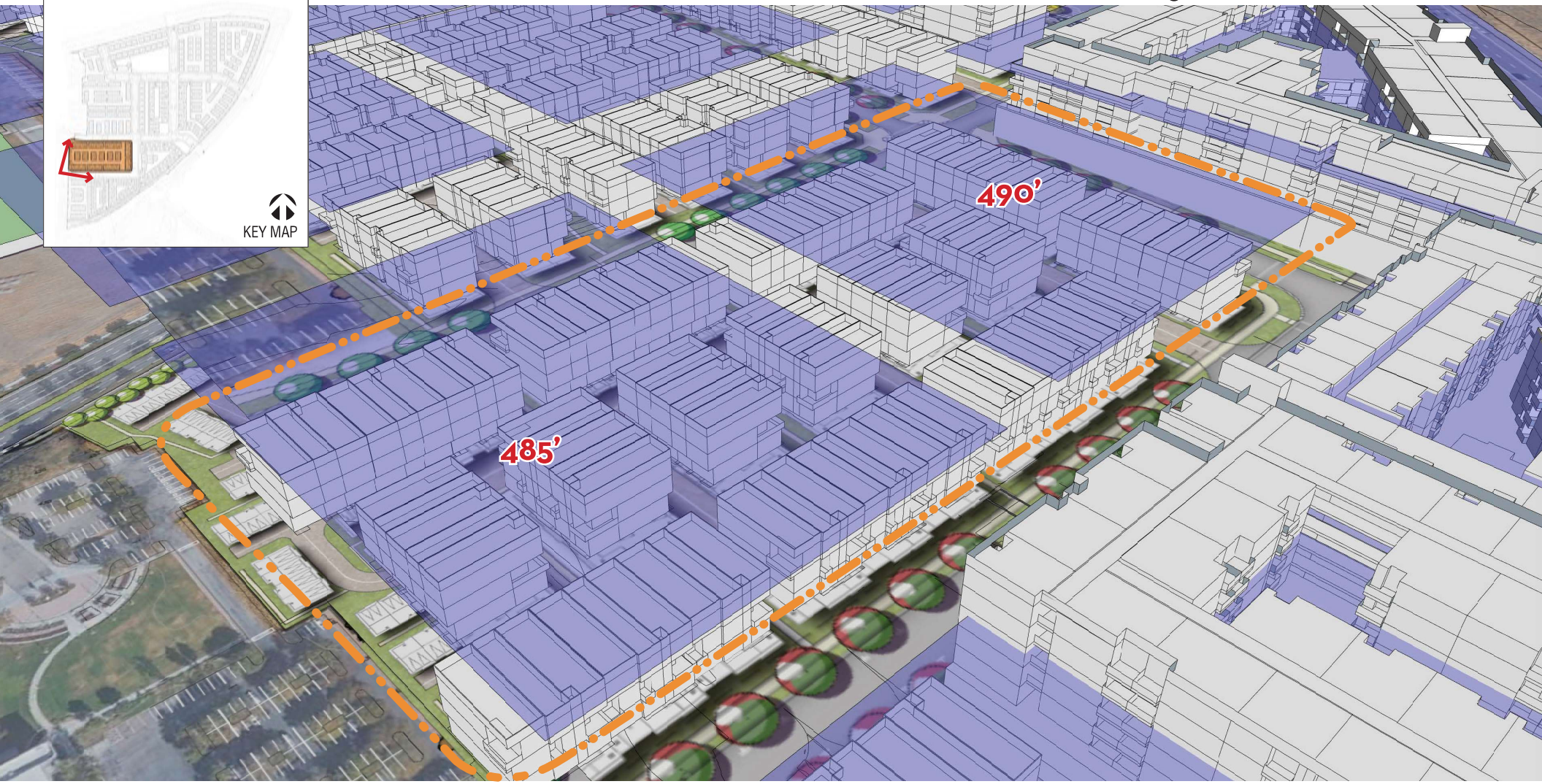
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

06-07-24 | 2022015

1409

EXHIBIT C

S2: Max. Height: ± 463.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S2 | VIEW CORRIDOR ANALYSIS

H-10

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OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

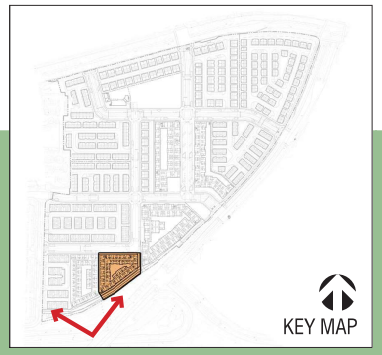
06-07-24 | 2022015

1410

EXHIBIT C

S3-A: Max. Height: ± 491 ' MSL

APPROX. 6'-0" Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S3-A | VIEW CORRIDOR ANALYSIS

H-11

ISABEL PORTOLA
OWNER, LLC

WHA.

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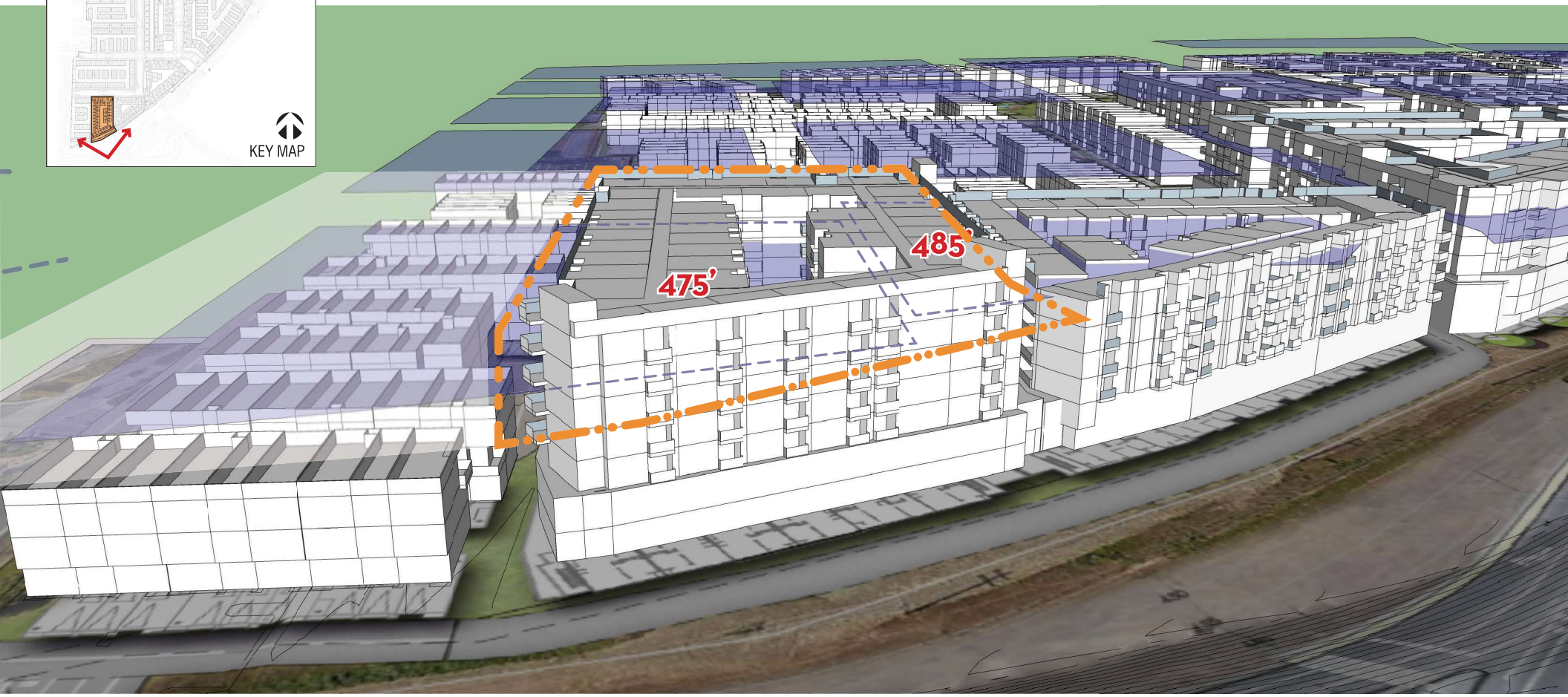
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

06-07-24 | 2022015

1411

EXHIBIT C

S3-B: Max. Height: ± 495.5' MSL
Approx. 20.5' Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S3-B | VIEW CORRIDOR ANALYSIS

H-12

ISABEL PORTOLA
OWNER, LLC

WHA.

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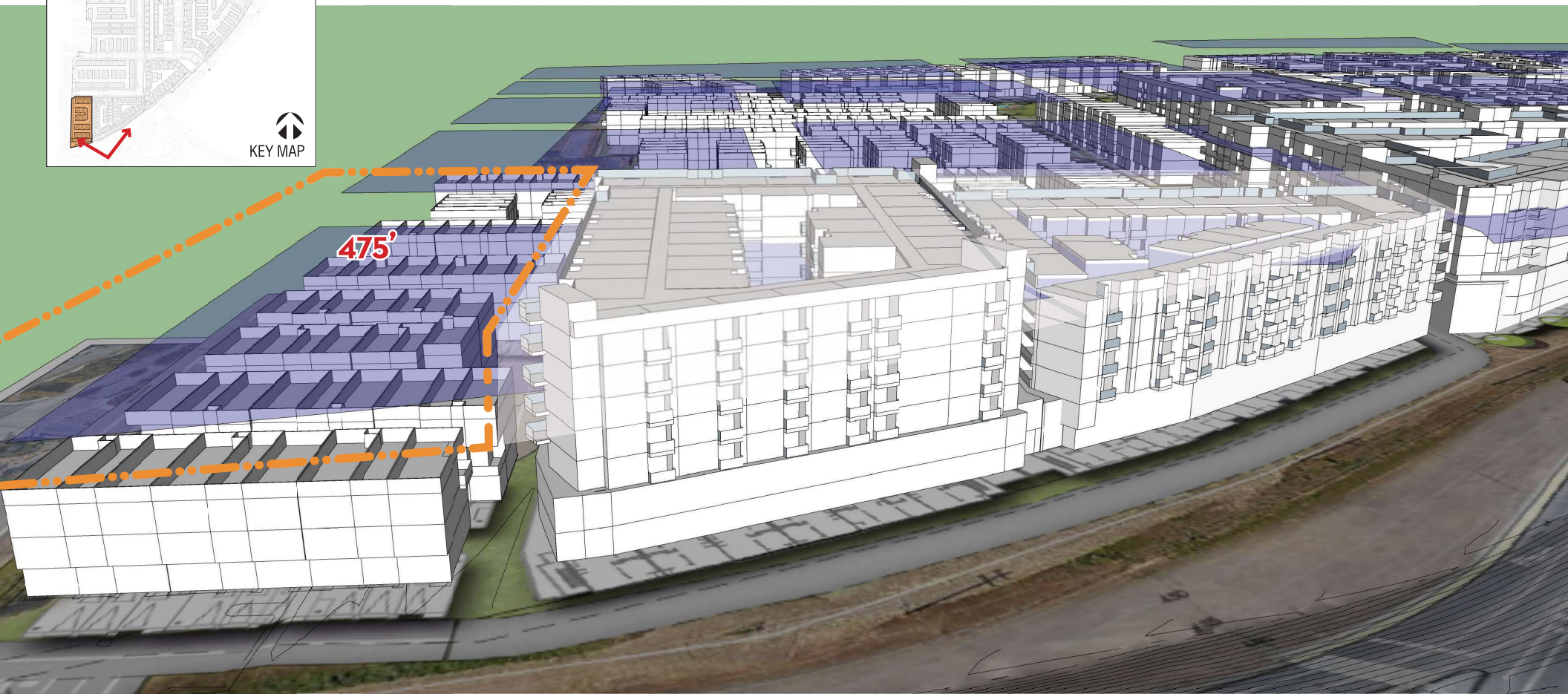
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

06-07-24 | 2022015

1412

EXHIBIT C

S4: Max. Height: ± 459' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S4 | VIEW CORRIDOR ANALYSIS

H-13

ISABEL PORTOLA
OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

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1413

EXHIBIT C



CONCEPT DESIGN

MASSING MODEL
NORTHEAST VIEW

M-1

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WHA.

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LIVERMORE, CALIFORNIA

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EXHIBIT C



CONCEPT DESIGN

MASSING MODEL
SOUTHEAST VIEW

M-2

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OWNER, LLC

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1415

EXHIBIT C



CONCEPT DESIGN

MASSING MODEL
SOUTHWEST VIEW

M-3

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1416

EXHIBIT C



CONCEPT DESIGN

MASSING MODEL
ELEVATED ENTRY VIEW

M-4

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OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

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CONCEPT DESIGN

MASSING MODEL
PERSPECTIVE ENTRY VIEW

M-5

ISABEL PORTOLA
OWNER, LLC

WHA.

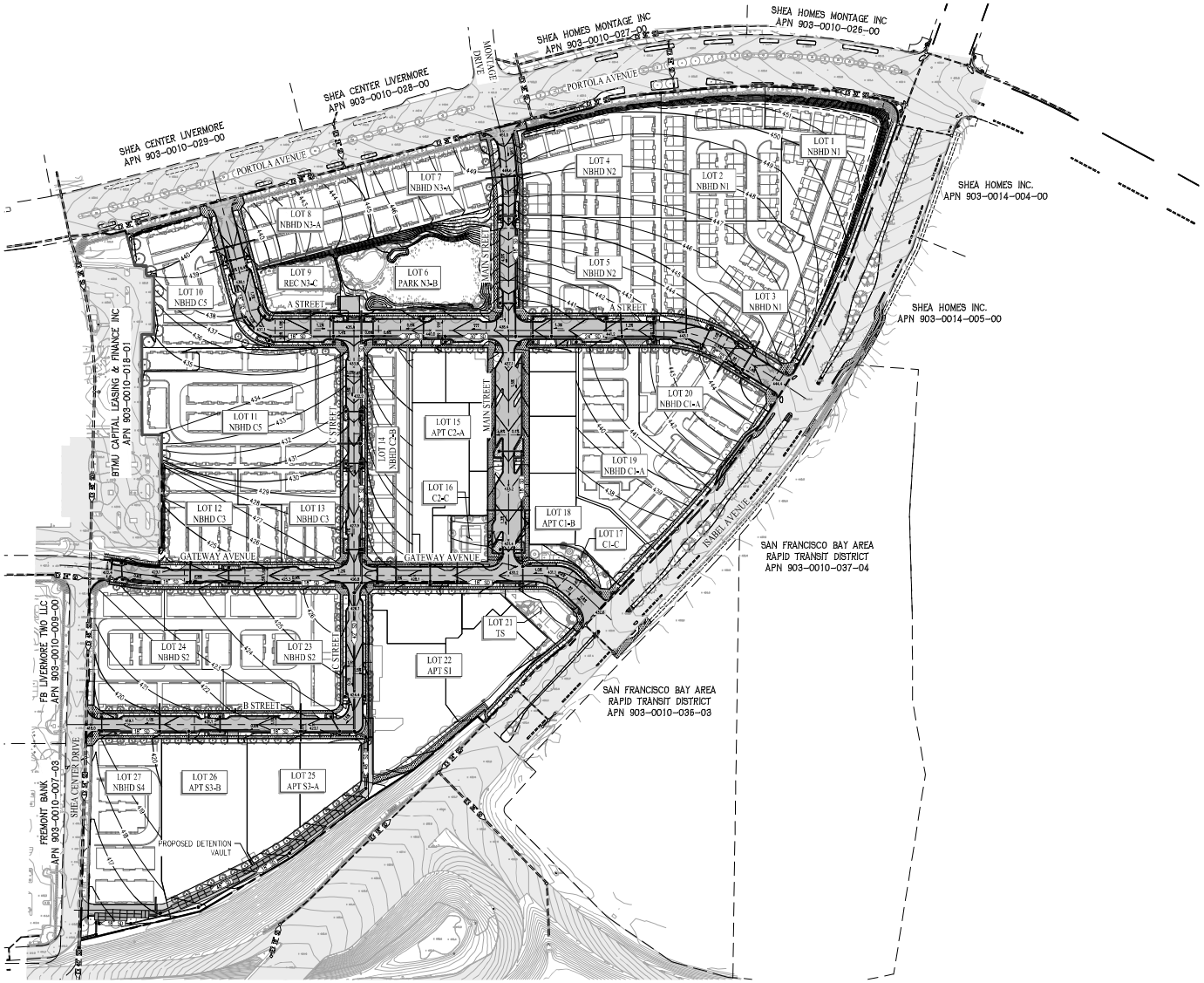
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LIVERMORE, CALIFORNIA

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1418

EXHIBIT C





INDEX MAP
NOT TO SCALE

CONCEPTUAL MASTER PLAN

MASTER GRADING PLAN

C1.0

ISABEL PORTOLA
OWNER, LLC

cbg

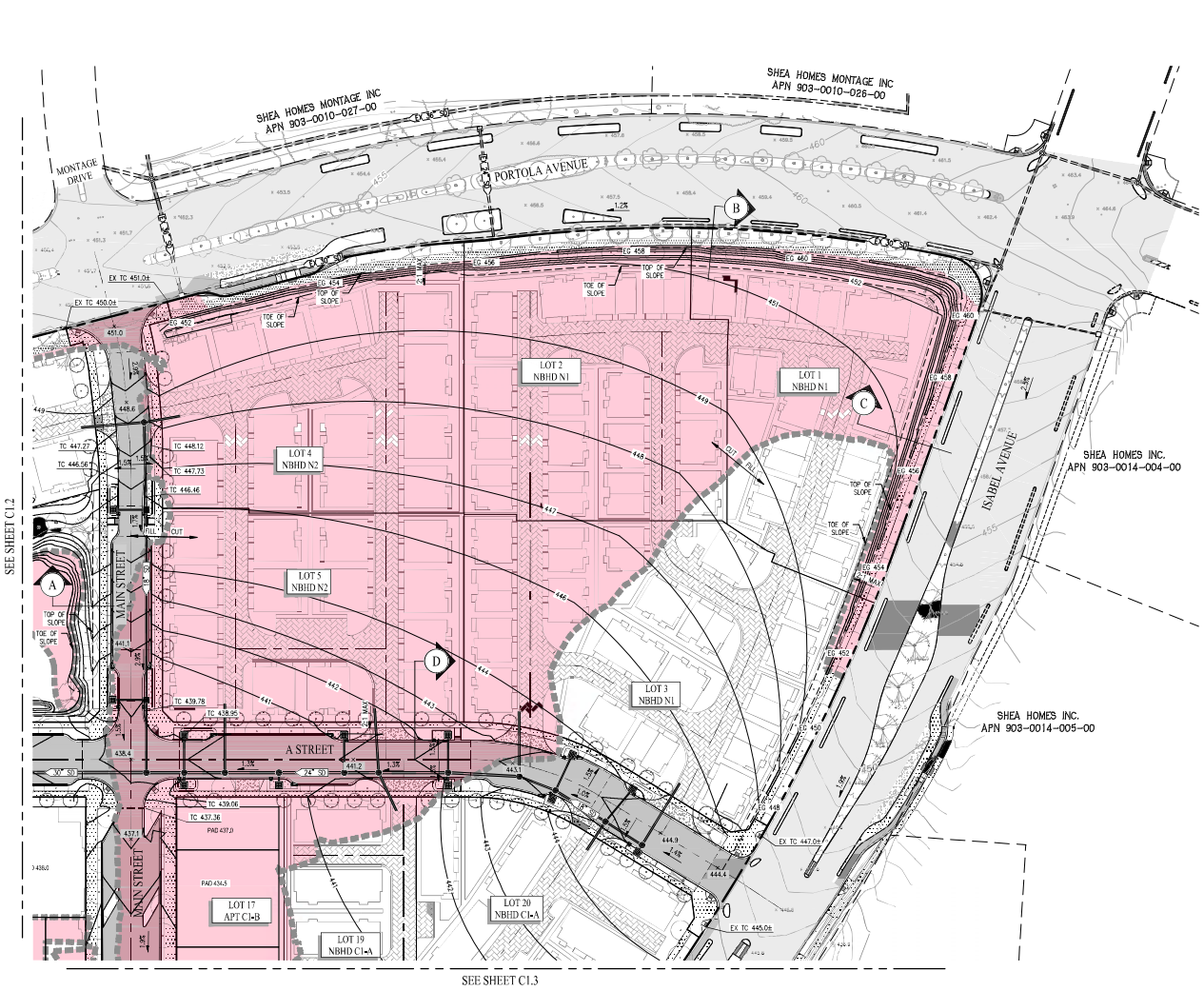
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 60 120 240

06-06-24 | 3591-000

1419

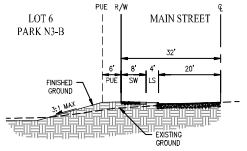
EXHIBIT C



LEGEND

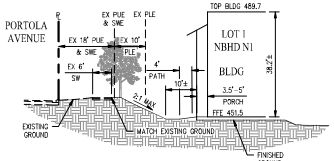
CUT/FILL LINE

CUT AREAS



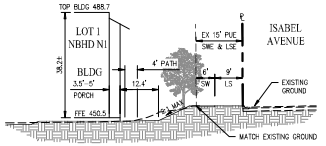
SECTION A

SCALE: 1"=20'



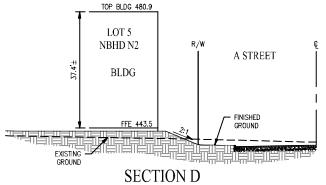
SECTION B

SCALE: 1"=20'



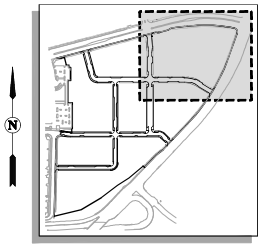
SECTION C

SCALE: 1"=20'



SECTION D

SCALE: 1"=20'



INDEX MAP

NOT TO SCALE

CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.1

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

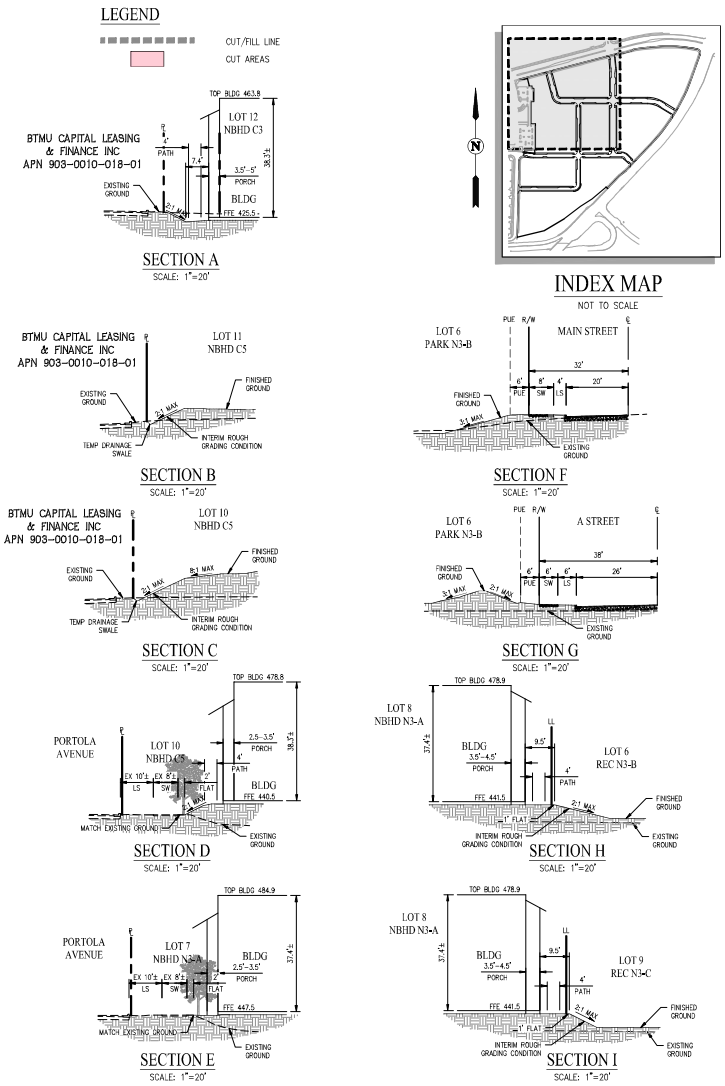
0 30 60 120

06-06-24 | 3591-000

1420

EXHIBIT C





CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.2

ISABEL PORTOLA
OWNER, LLC

cbg

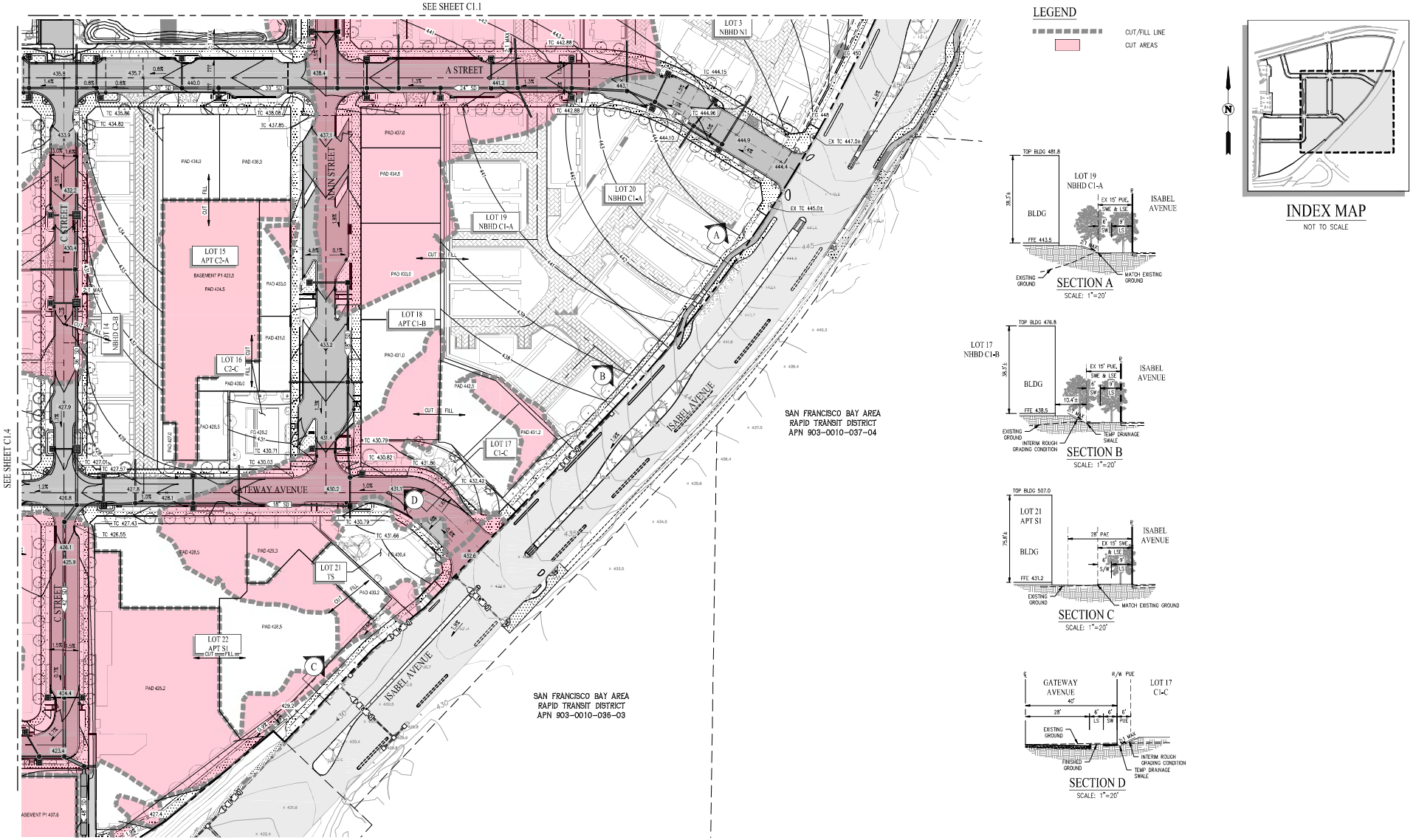
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

06-06-24 | 3591-000

1421

EXHIBIT C



CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.3

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

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1422

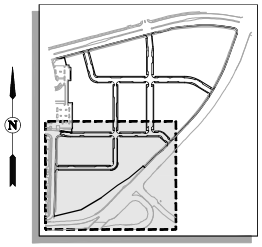
EXHIBIT C



LEGEND

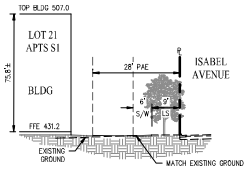
CUT/FILL LINE

CUT AREAS



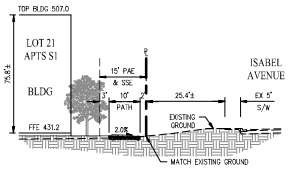
INDEX MAP

NOT TO SCALE



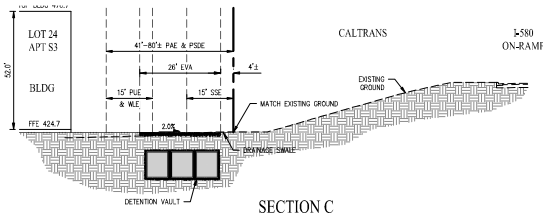
SECTION A

SCALE: 1"=20'



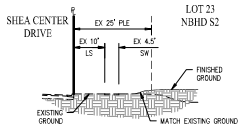
SECTION B

SCALE: 1"=20'



SECTION C

SCALE: 1"=20'



SECTION D

SCALE: 1"=20'

CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.4

ISABEL PORTOLA
OWNER, LLC

cbg

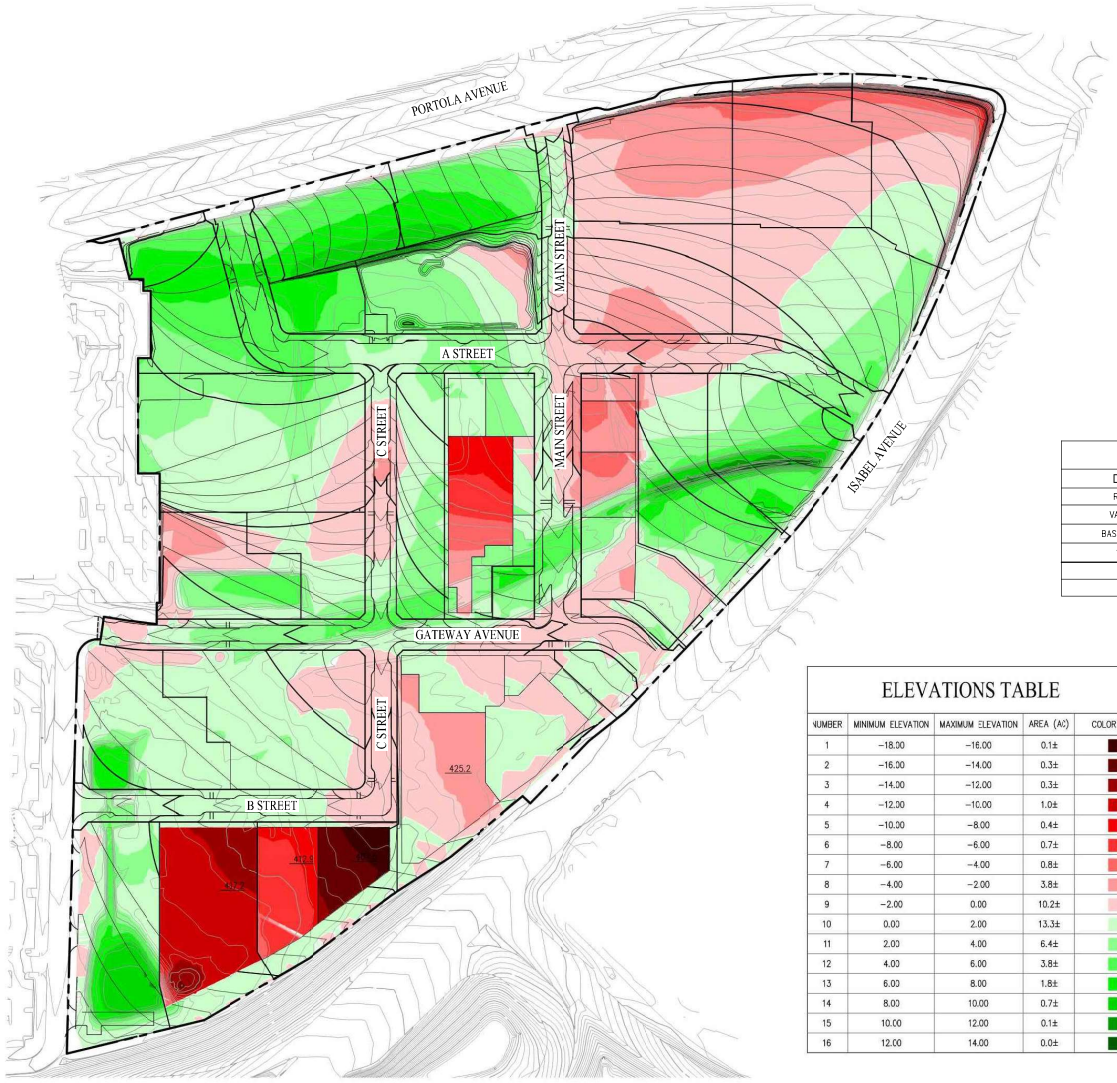
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

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1423

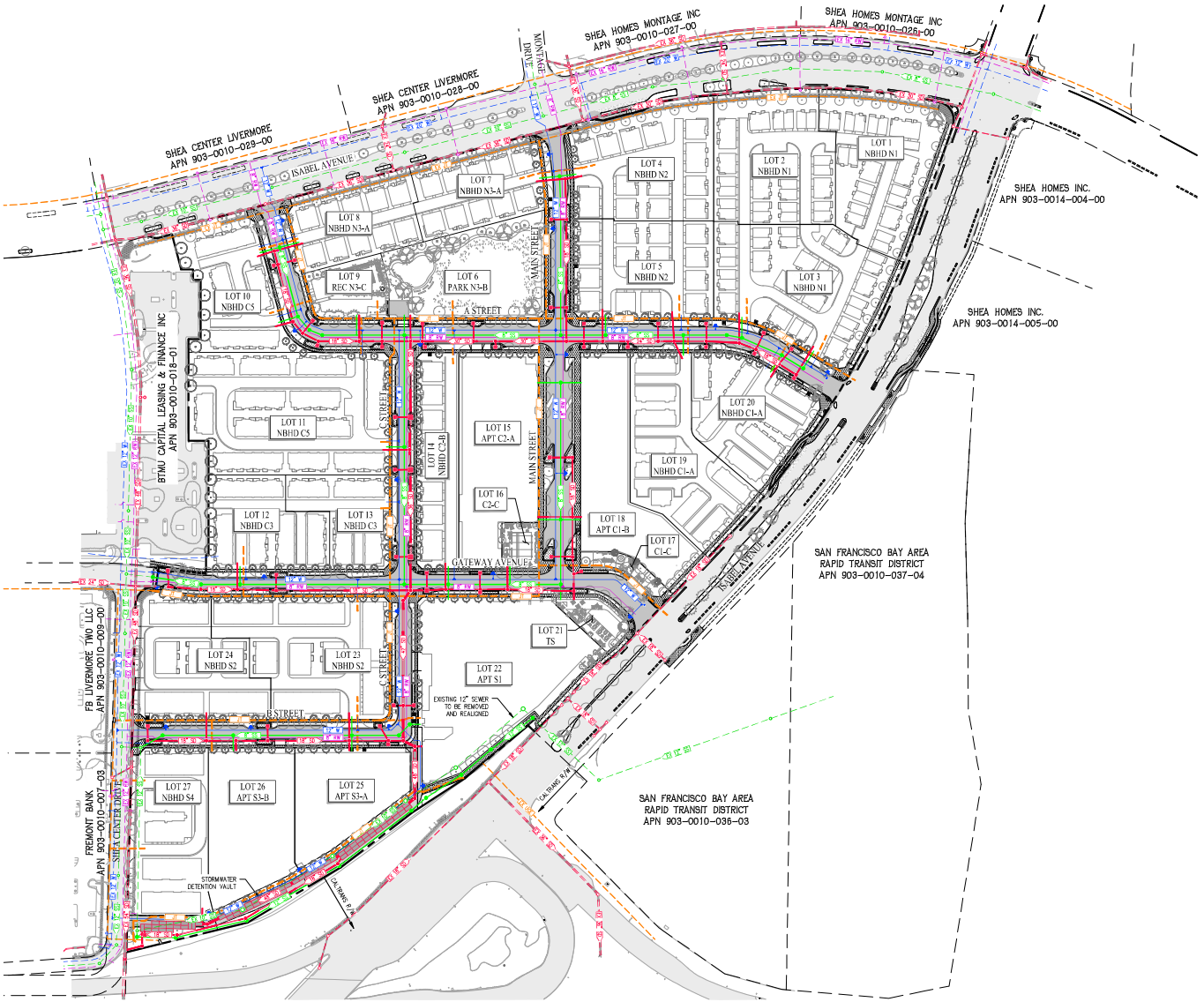
EXHIBIT C



EARTHWORK SUMMARY		
DESCRIPTION	CUT (CY)	FILL (CY)
RAW EARTHWORK	99,800	89,100
VAULT EXCAVATION	5,100	
BASEMENT EXCAVATION	53,500	
15% SHRINKAGE	23,800	
NET	182,000	89,100
OFFHAUL	93,100	

ELEVATIONS TABLE				
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA (AC)	COLOR
1	−18.00	−16.00	0.1±	
2	−16.00	−14.00	0.3±	
3	−14.00	−12.00	0.3±	
4	−12.00	−10.00	1.0±	
5	−10.00	−8.00	0.4±	
6	−8.00	−6.00	0.7±	
7	−6.00	−4.00	0.8±	
8	−4.00	−2.00	3.8±	
9	−2.00	0.00	10.2±	
10	0.00	2.00	13.3±	
11	2.00	4.00	6.4±	
12	4.00	6.00	3.8±	
13	6.00	8.00	1.8±	
14	8.00	10.00	0.7±	
15	10.00	12.00	0.1±	
16	12.00	14.00	0.0±	

EXHIBIT C



LEGEND

EXISTING	PROPOSED	
		PROJECT BOUNDARY
SS	SS	SANITARY SEWER PIPE
W	W	POTABLE WATER PIPE
RW	RW	RECYCLED WATER PIPE
SD	SD	STORM DRAIN PIPE
JT	JT	JOINT TRENCH
UE		UNDERGROUND ELECTRICAL
OHW		OVERHEAD WIRE
	N1	PARCEL NAME
		POTABLE WATER FIRE HYDRANT
		RECYCLED WATER FIRE HYDRANT
		STORMWATER HYDROMODIFICATION VAULT

CONCEPTUAL MASTER PLAN

MASTER UTILITY PLAN

C2.0

ISABEL PORTOLA
OWNER, LLC

cbg

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LIVERMORE, CALIFORNIA

0 60 120 240

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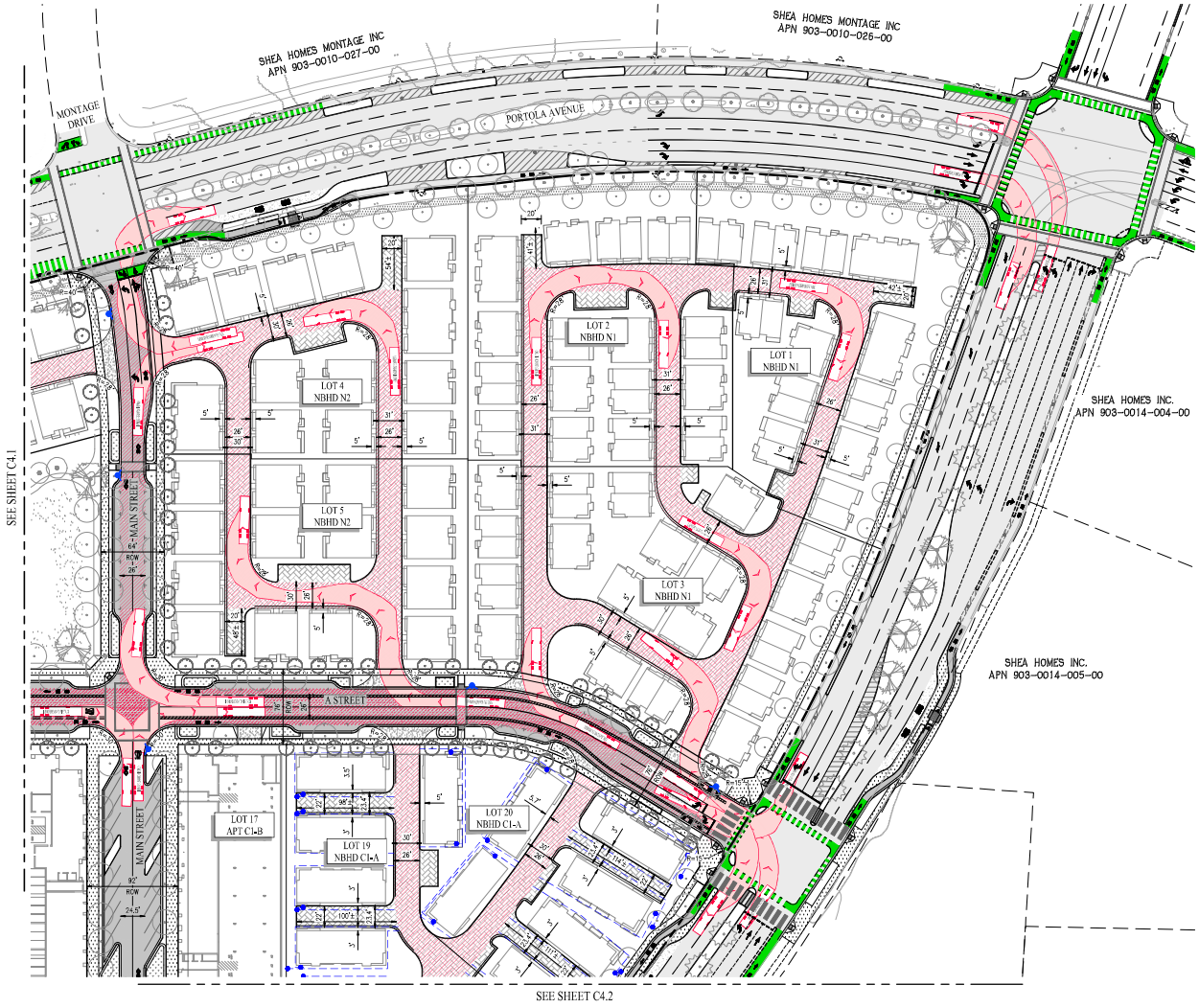
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EXHIBIT C



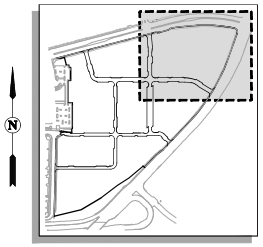
	LAND USE	PROPOSED STORMWATER FACILITIES
	GREEN STREETS	BIOTREATMENT AREAS
	ON-SITE TOWNHOMES	ON-SITE PERVIOUS PAVERS (ALLEYS)
	ON-SITE HIGH DENSITY	ON-SITE BIOTREATMENT/FLOW THROUGH PLANTER AREAS
	OPEN SPACE AREAS	ON-SITE BIOTREATMENT AREAS AND PERVIOUS SURFACES
	DETENTION VAULT	SITE WIDE COMPLIANCE

EXHIBIT C



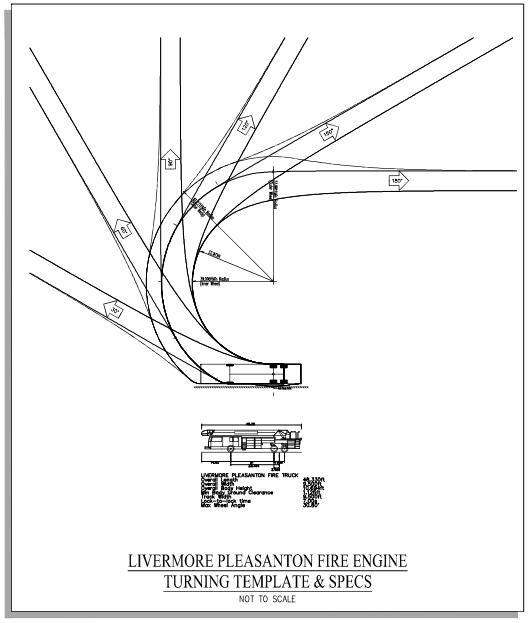
LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

NOTE:
SEE SHEET C4.1 FOR LIVERMORE SANITATION GARBAGE TRUCK TURNING TEMPLATE AND SPECS.



LIVERMORE PLEASANTON FIRE ENGINE
TURNING TEMPLATE & SPECS
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.0

ISABEL PORTOLA
OWNER, LLC

cbg

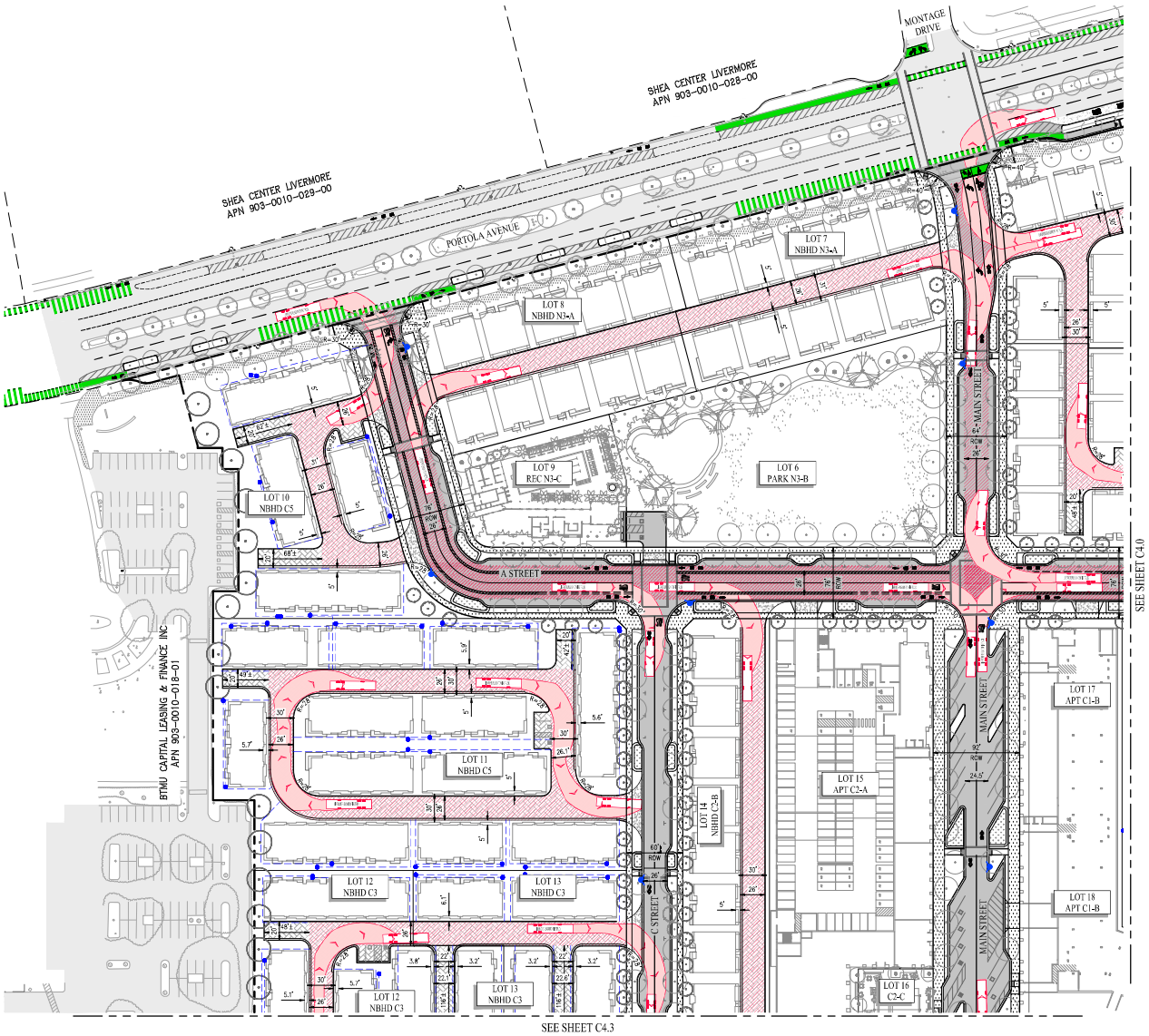
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

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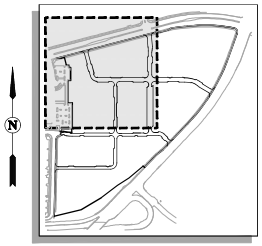
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EXHIBIT C



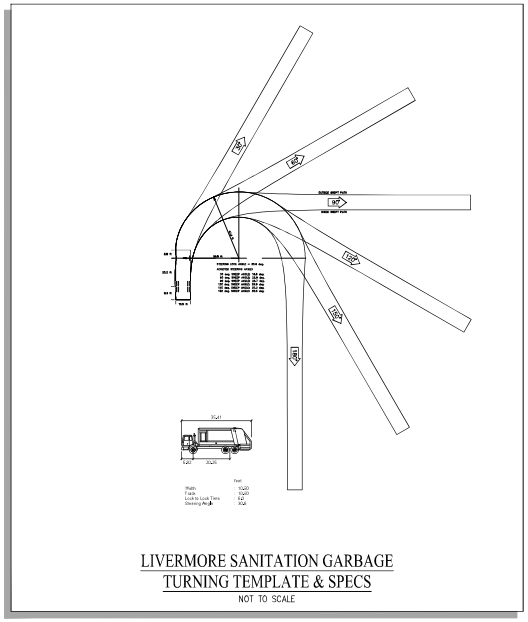
LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

NOTE:
TRASH COLLECTION AND ENCLOSURES – ALL PARCELS WITHIN C1-A, C2-B, C3, C5, N(ALL), S2 AND S4 WILL HAVE PRIVATE COLLECTION PICK-UP WITH TRASH BINS LOCATED WITHIN PRIVATE GARAGES. ALL PARCELS WITHIN C1-B , C2-A, S1, S3-A AND S3-B WILL HAVE BUILDING TRASH CHUTES WITH CENTRAL TRASH ENCLOSURES LOCATED WITHIN THE COMMON GARAGES.



LIVERMORE SANITATION GARBAGE
TURNING TEMPLATE & SPECS
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.1

ISABEL PORTOLA
OWNER, LLC

cbg

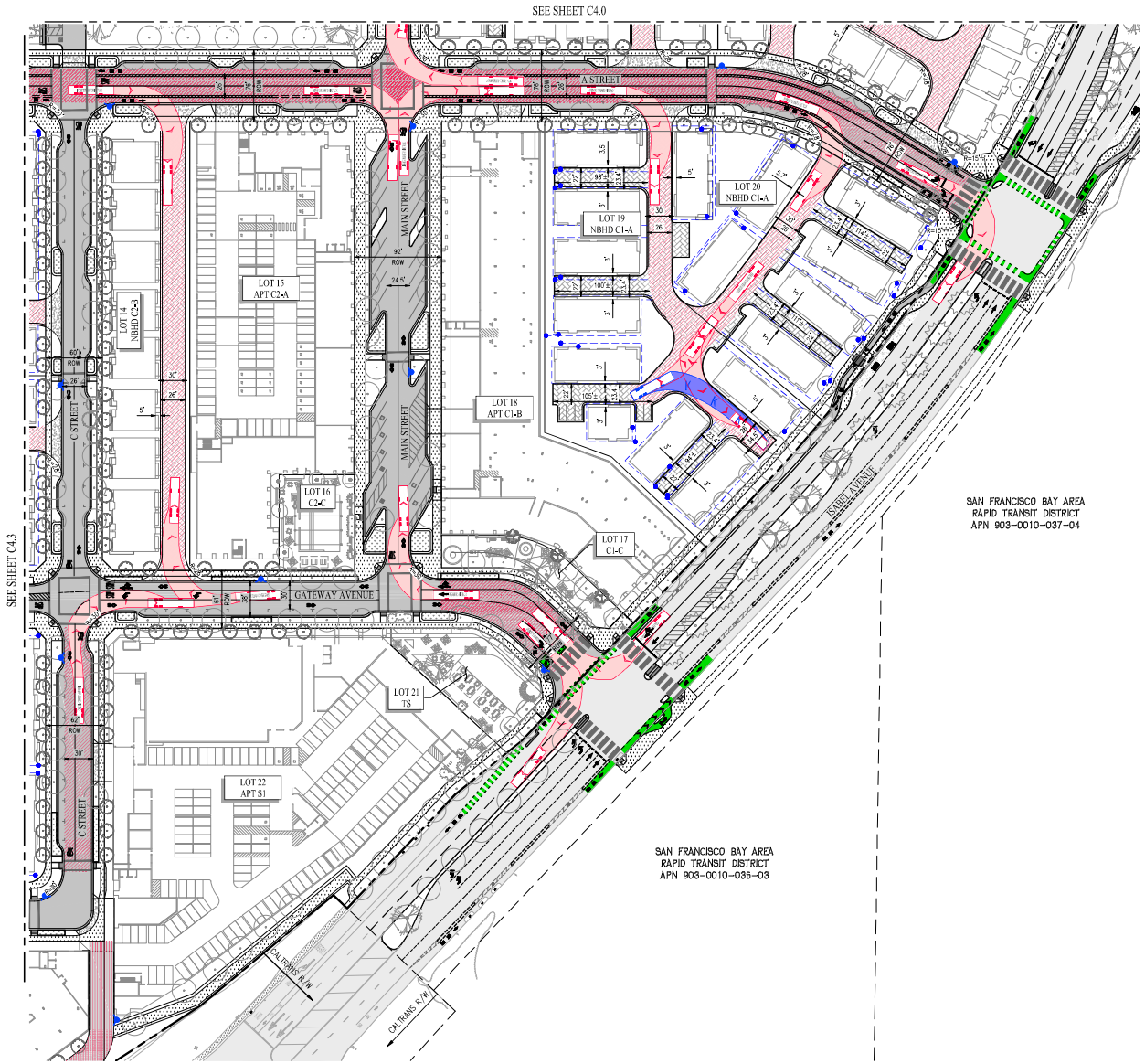
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

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06-06-24 | 3591-000

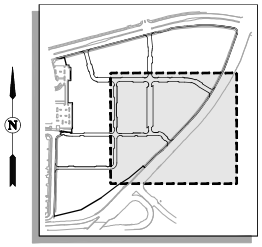
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EXHIBIT C

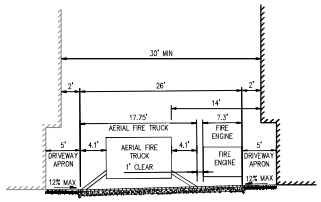


LEGEND

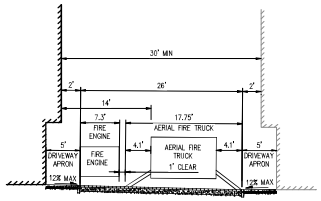
- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

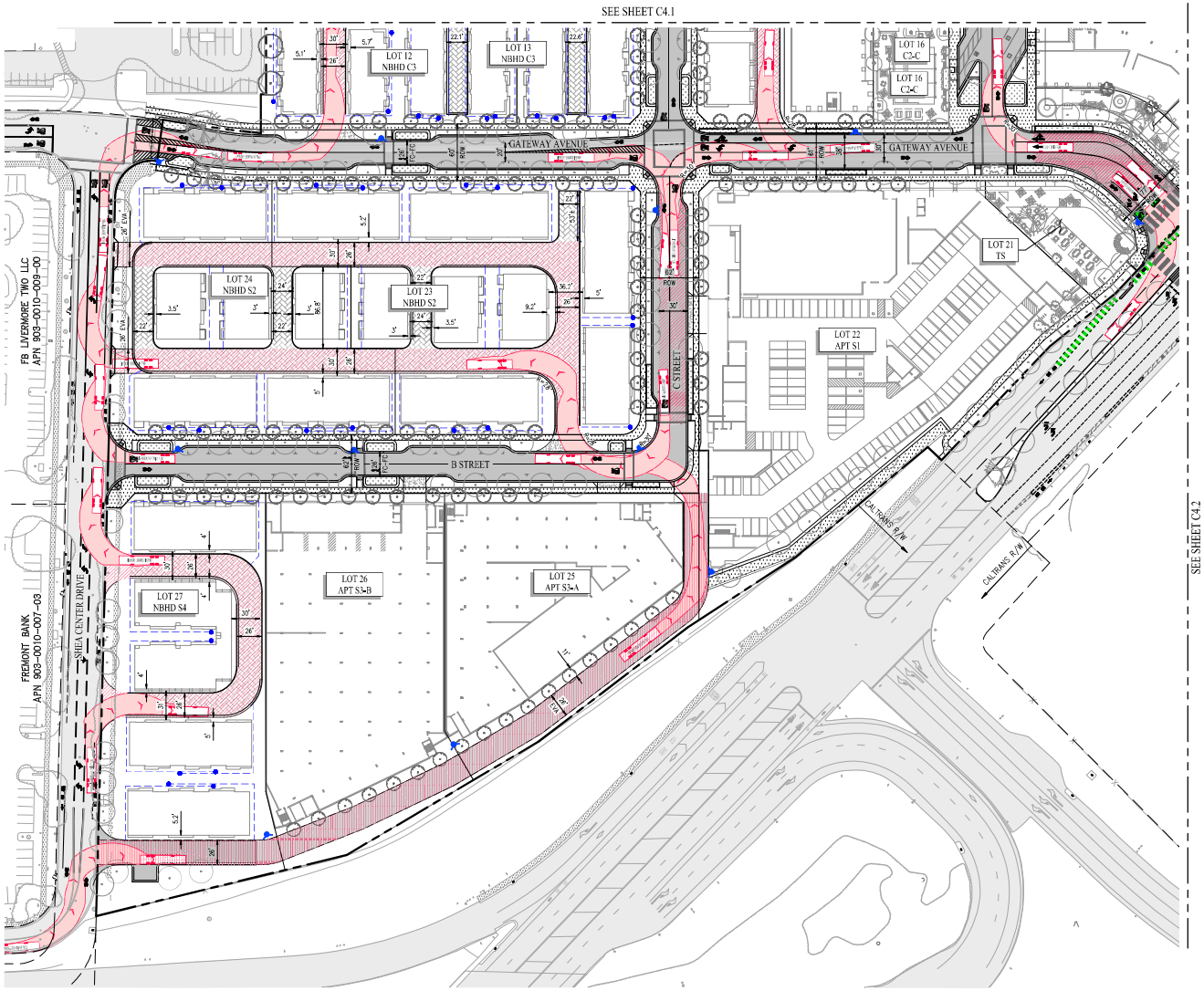


IN-TRACT AERIAL ACCESS CROSS SECTION VIEW - RIGHT BUILDING
SCALE: 1"=10'



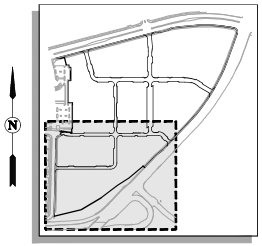
IN-TRACT AERIAL ACCESS CROSS SECTION VIEW - LEFT BUILDING
SCALE: 1"=10'

EXHIBIT C



LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.3

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

06-06-24 | 3591-000

1430

Appendix B

CalEEMod Output Files

Appendix B-1

Isabel Crossing Parcels – Original Project

Harridge Development Orginal Project Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Harridge Development Orginal Project
Construction Start Date	1/1/2024
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	33.2
Location	37.706194790730734, -121.79792273434387
County	Alameda
City	Livermore
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1677
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Single Family Housing	138	Dwelling Unit	48.4	269,100	1,616,374	—	389	—
Apartments Mid Rise	451	Dwelling Unit	0.00	432,960	0.00	—	1,272	—
Apartments Low Rise	749	Dwelling Unit	0.00	793,940	0.00	—	2,112	—
General Office Building	39.6	1000sqft	0.91	39,640	0.00	—	—	—
Regional Shopping Center	167	1000sqft	3.84	167,190	0.00	—	—	—
Enclosed Parking with Elevator	819	Space	0.00	327,600	0.00	—	—	—
Parking Lot	281	Space	0.00	0.00	0.00	—	—	—
Other Asphalt Surfaces	2.17	Acre	2.17	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	311	36.0	59.3	0.07	1.60	19.8	21.4	1.47	10.1	11.6	—	18,217	18,217	0.52	1.28	54.9	18,665
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.21	34.4	57.5	0.07	1.45	10.9	11.4	1.33	3.69	5.02	—	17,797	17,797	0.59	1.34	1.52	18,214
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	64.3	21.5	38.0	0.05	0.88	7.62	7.97	0.81	2.50	3.31	—	12,557	12,557	0.40	0.93	17.0	12,861
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.7	3.93	6.93	0.01	0.16	1.39	1.45	0.15	0.46	0.60	—	2,079	2,079	0.07	0.15	2.81	2,129

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.71	36.0	33.7	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,775	6,775	0.27	0.06	0.75	6,800
2025	5.12	20.4	59.3	0.07	0.52	10.9	11.4	0.48	2.61	3.10	—	18,217	18,217	0.52	1.28	54.9	18,665
2026	4.61	19.5	56.6	0.07	0.46	10.9	11.3	0.43	2.61	3.05	—	17,929	17,929	0.52	1.28	50.7	18,373
2027	4.42	18.4	53.7	0.07	0.42	10.9	11.3	0.40	2.61	3.01	—	17,633	17,633	0.49	1.28	46.4	18,072
2028	4.30	17.7	51.5	0.07	0.39	10.9	11.2	0.36	2.61	2.98	—	17,328	17,328	0.49	0.94	42.1	17,663
2029	311	6.48	10.4	0.01	0.24	1.85	1.86	0.22	0.43	0.44	—	1,933	1,933	0.06	0.02	5.07	1,943
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	5.21	34.4	57.5	0.07	1.45	10.9	11.4	1.33	3.69	5.02	—	17,797	17,797	0.59	1.34	1.52	18,214
2025	4.96	21.9	54.4	0.07	0.52	10.9	11.4	0.48	2.61	3.10	—	17,521	17,521	0.59	1.30	1.43	17,925

2026	4.47	20.6	51.7	0.07	0.46	10.9	11.3	0.43	2.61	3.05	—	17,248	17,248	0.57	1.30	1.32	17,651
2027	4.31	19.5	49.5	0.07	0.42	10.9	11.3	0.40	2.61	3.01	—	16,966	16,966	0.57	1.30	1.20	17,369
2028	4.17	18.4	47.3	0.07	0.39	10.9	11.2	0.36	2.61	2.98	—	16,673	16,673	0.54	1.26	1.09	17,063
2029	4.00	17.8	45.5	0.07	0.36	10.9	11.2	0.30	2.61	2.91	—	16,373	16,373	0.49	1.23	0.99	16,753
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.55	21.5	23.3	0.04	0.88	6.16	7.04	0.81	2.50	3.31	—	5,237	5,237	0.19	0.17	2.90	5,297
2025	3.53	15.2	38.0	0.05	0.37	7.60	7.97	0.34	1.83	2.17	—	12,557	12,557	0.40	0.93	17.0	12,861
2026	3.18	14.4	36.1	0.05	0.33	7.60	7.93	0.31	1.83	2.14	—	12,360	12,360	0.39	0.91	15.7	12,657
2027	3.05	13.6	34.6	0.05	0.30	7.60	7.90	0.28	1.83	2.11	—	12,158	12,158	0.39	0.91	14.3	12,454
2028	2.97	13.1	33.2	0.05	0.28	7.62	7.89	0.26	1.83	2.09	—	11,981	11,981	0.37	0.88	13.0	12,265
2029	64.3	2.90	6.94	0.01	0.08	1.21	1.29	0.07	0.29	0.36	—	1,960	1,960	0.06	0.11	1.73	1,997
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.47	3.93	4.25	0.01	0.16	1.12	1.28	0.15	0.46	0.60	—	867	867	0.03	0.03	0.48	877
2025	0.64	2.78	6.93	0.01	0.07	1.39	1.45	0.06	0.33	0.40	—	2,079	2,079	0.07	0.15	2.81	2,129
2026	0.58	2.62	6.59	0.01	0.06	1.39	1.45	0.06	0.33	0.39	—	2,046	2,046	0.06	0.15	2.59	2,096
2027	0.56	2.48	6.32	0.01	0.06	1.39	1.44	0.05	0.33	0.38	—	2,013	2,013	0.06	0.15	2.37	2,062
2028	0.54	2.39	6.06	0.01	0.05	1.39	1.44	0.05	0.33	0.38	—	1,984	1,984	0.06	0.15	2.16	2,031
2029	11.7	0.53	1.27	< 0.005	0.01	0.22	0.23	0.01	0.05	0.07	—	325	325	0.01	0.02	0.29	331

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.71	36.0	33.7	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,775	6,775	0.27	0.06	0.75	6,800
2025	5.12	20.4	59.3	0.07	0.52	10.9	11.4	0.48	2.61	3.10	—	18,217	18,217	0.52	1.28	54.9	18,665

2026	4.61	19.5	56.6	0.07	0.46	10.9	11.3	0.43	2.61	3.05	—	17,929	17,929	0.52	1.28	50.7	18,373
2027	4.42	18.4	53.7	0.07	0.42	10.9	11.3	0.40	2.61	3.01	—	17,633	17,633	0.49	1.28	46.4	18,072
2028	4.30	17.7	51.5	0.07	0.39	10.9	11.2	0.36	2.61	2.98	—	17,328	17,328	0.49	0.94	42.1	17,663
2029	311	6.48	10.4	0.01	0.24	1.85	1.86	0.22	0.43	0.44	—	1,933	1,933	0.06	0.02	5.07	1,943
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	5.21	34.4	57.5	0.07	1.45	10.9	11.4	1.33	3.69	5.02	—	17,797	17,797	0.59	1.34	1.52	18,214
2025	4.96	21.9	54.4	0.07	0.52	10.9	11.4	0.48	2.61	3.10	—	17,521	17,521	0.59	1.30	1.43	17,925
2026	4.47	20.6	51.7	0.07	0.46	10.9	11.3	0.43	2.61	3.05	—	17,248	17,248	0.57	1.30	1.32	17,651
2027	4.31	19.5	49.5	0.07	0.42	10.9	11.3	0.40	2.61	3.01	—	16,966	16,966	0.57	1.30	1.20	17,369
2028	4.17	18.4	47.3	0.07	0.39	10.9	11.2	0.36	2.61	2.98	—	16,673	16,673	0.54	1.26	1.09	17,063
2029	4.00	17.8	45.5	0.07	0.36	10.9	11.2	0.30	2.61	2.91	—	16,373	16,373	0.49	1.23	0.99	16,753
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.55	21.5	23.3	0.04	0.88	6.16	7.04	0.81	2.50	3.31	—	5,237	5,237	0.19	0.17	2.90	5,297
2025	3.53	15.2	38.0	0.05	0.37	7.60	7.97	0.34	1.83	2.17	—	12,557	12,557	0.40	0.93	17.0	12,861
2026	3.18	14.4	36.1	0.05	0.33	7.60	7.93	0.31	1.83	2.14	—	12,360	12,360	0.39	0.91	15.7	12,657
2027	3.05	13.6	34.6	0.05	0.30	7.60	7.90	0.28	1.83	2.11	—	12,158	12,158	0.39	0.91	14.3	12,454
2028	2.97	13.1	33.2	0.05	0.28	7.62	7.89	0.26	1.83	2.09	—	11,981	11,981	0.37	0.88	13.0	12,265
2029	64.3	2.90	6.94	0.01	0.08	1.21	1.29	0.07	0.29	0.36	—	1,960	1,960	0.06	0.11	1.73	1,997
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.47	3.93	4.25	0.01	0.16	1.12	1.28	0.15	0.46	0.60	—	867	867	0.03	0.03	0.48	877
2025	0.64	2.78	6.93	0.01	0.07	1.39	1.45	0.06	0.33	0.40	—	2,079	2,079	0.07	0.15	2.81	2,129
2026	0.58	2.62	6.59	0.01	0.06	1.39	1.45	0.06	0.33	0.39	—	2,046	2,046	0.06	0.15	2.59	2,096
2027	0.56	2.48	6.32	0.01	0.06	1.39	1.44	0.05	0.33	0.38	—	2,013	2,013	0.06	0.15	2.37	2,062
2028	0.54	2.39	6.06	0.01	0.05	1.39	1.44	0.05	0.33	0.38	—	1,984	1,984	0.06	0.15	2.16	2,031
2029	11.7	0.53	1.27	< 0.005	0.01	0.22	0.23	0.01	0.05	0.07	—	325	325	0.01	0.02	0.29	331

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.9	47.4	520	1.61	2.23	167	169	2.17	42.2	44.4	770	181,122	181,892	81.8	5.09	90.7	185,543
Mit.	62.9	47.4	520	1.61	2.23	167	169	2.17	42.2	44.4	205	181,079	181,285	25.3	5.04	90.7	183,509
% Reduced	—	—	—	—	—	—	—	—	—	—	73%	< 0.5%	< 0.5%	69%	1%	—	1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.1	51.0	339	1.52	2.15	167	169	2.12	42.2	44.3	770	171,776	172,546	81.7	5.42	13.7	176,217
Mit.	52.1	51.0	339	1.52	2.15	167	169	2.12	42.2	44.3	205	171,734	171,939	25.2	5.37	13.7	174,183
% Reduced	—	—	—	—	—	—	—	—	—	—	73%	< 0.5%	< 0.5%	69%	1%	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.7	37.8	390	1.45	1.22	163	164	1.17	41.3	42.5	770	157,515	158,285	81.4	5.26	45.7	161,935
Mit.	56.7	37.8	390	1.45	1.22	163	164	1.17	41.3	42.5	205	157,472	157,678	24.9	5.22	45.7	159,901
% Reduced	—	—	—	—	—	—	—	—	—	—	73%	< 0.5%	< 0.5%	69%	1%	—	1%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.3	6.89	71.1	0.26	0.22	29.8	30.0	0.21	7.55	7.76	127	26,078	26,206	13.5	0.87	7.57	26,810
Mit.	10.3	6.89	71.1	0.26	0.22	29.8	30.0	0.21	7.55	7.76	34.0	26,071	26,105	4.13	0.86	7.57	26,473
% Reduced	—	—	—	—	—	—	—	—	—	—	73%	< 0.5%	< 0.5%	69%	1%	—	1%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.8	27.3	412	1.48	0.60	167	167	0.57	42.2	42.8	—	151,339	151,339	2.59	4.62	79.1	152,861
Area	50.7	13.2	105	0.08	1.07	—	1.07	1.05	—	1.05	0.00	15,914	15,914	0.31	0.03	—	15,931
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	128	304	432	13.2	0.32	—	857
Waste	—	—	—	—	—	—	—	—	—	—	642	0.00	642	64.1	0.00	—	2,245
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	62.9	47.4	520	1.61	2.23	167	169	2.17	42.2	44.4	770	181,122	181,892	81.8	5.09	90.7	185,543
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	31.8	331	1.40	0.60	167	167	0.57	42.2	42.8	—	142,292	142,292	2.46	4.96	2.05	143,834
Area	40.3	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	128	304	432	13.2	0.32	—	857
Waste	—	—	—	—	—	—	—	—	—	—	642	0.00	642	64.1	0.00	—	2,245
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	52.1	51.0	339	1.52	2.15	167	169	2.12	42.2	44.3	770	171,776	172,546	81.7	5.42	13.7	176,217
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	30.1	337	1.40	0.60	163	164	0.57	41.3	41.9	—	143,114	143,114	2.51	4.83	34.1	144,651
Area	44.7	0.75	49.2	< 0.005	0.06	—	0.06	0.05	—	0.05	0.00	532	532	0.01	< 0.005	—	533
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	128	304	432	13.2	0.32	—	8

Waste	—	—	—	—	—	—	—	—	—	—	642	0.00	642	64.1	0.00	—	2,245
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	56.7	37.8	390	1.45	1.22	163	164	1.17	41.3	42.5	770	157,515	158,285	81.4	5.26	45.7	161,935
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	5.49	61.5	0.26	0.11	29.8	29.9	0.10	7.55	7.65	—	23,694	23,694	0.42	0.80	5.65	23,949
Area	8.16	0.14	8.98	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	88.1	88.1	< 0.005	< 0.005	—	88.3
Energy	0.07	1.26	0.57	0.01	0.10	—	0.10	0.10	—	0.10	—	2,246	2,246	0.26	0.02	—	2,258
Water	—	—	—	—	—	—	—	—	—	—	21.2	50.4	71.6	2.19	0.05	—	142
Waste	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	372
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.92	1.92
Total	10.3	6.89	71.1	0.26	0.22	29.8	30.0	0.21	7.55	7.76	127	26,078	26,206	13.5	0.87	7.57	26,810

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.8	27.3	412	1.48	0.60	167	167	0.57	42.2	42.8	—	151,339	151,339	2.59	4.62	79.1	152,861
Area	50.7	13.2	105	0.08	1.07	—	1.07	1.05	—	1.05	0.00	15,914	15,914	0.31	0.03	—	15,931
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	109	262	371	11.2	0.27	—	732
Waste	—	—	—	—	—	—	—	—	—	—	96.3	0.00	96.3	9.62	0.00	—	337
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	62.9	47.4	520	1.61	2.23	167	169	2.17	42.2	44.4	205	181,079	181,285	25.3	5.04	90.7	183,509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	31.8	331	1.40	0.60	167	167	0.57	42.2	42.8	—	142,292	142,292	2.46	4.96	2.05	1

Area	40.3	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	109	262	371	11.2	0.27	—	732
Waste	—	—	—	—	—	—	—	—	—	—	96.3	0.00	96.3	9.62	0.00	—	337
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	52.1	51.0	339	1.52	2.15	167	169	2.12	42.2	44.3	205	171,734	171,939	25.2	5.37	13.7	174,183
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	30.1	337	1.40	0.60	163	164	0.57	41.3	41.9	—	143,114	143,114	2.51	4.83	34.1	144,651
Area	44.7	0.75	49.2	< 0.005	0.06	—	0.06	0.05	—	0.05	0.00	532	532	0.01	< 0.005	—	533
Energy	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	13,565	13,565	1.56	0.11	—	13,637
Water	—	—	—	—	—	—	—	—	—	—	109	262	371	11.2	0.27	—	732
Waste	—	—	—	—	—	—	—	—	—	—	96.3	0.00	96.3	9.62	0.00	—	337
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Total	56.7	37.8	390	1.45	1.22	163	164	1.17	41.3	42.5	205	157,472	157,678	24.9	5.22	45.7	159,901
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	5.49	61.5	0.26	0.11	29.8	29.9	0.10	7.55	7.65	—	23,694	23,694	0.42	0.80	5.65	23,949
Area	8.16	0.14	8.98	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	88.1	88.1	< 0.005	< 0.005	—	88.3
Energy	0.07	1.26	0.57	0.01	0.10	—	0.10	0.10	—	0.10	—	2,246	2,246	0.26	0.02	—	2,258
Water	—	—	—	—	—	—	—	—	—	—	18.1	43.3	61.4	1.86	0.04	—	121
Waste	—	—	—	—	—	—	—	—	—	—	15.9	0.00	15.9	1.59	0.00	—	55.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.92	1.92
Total	10.3	6.89	71.1	0.26	0.22	29.8	30.0	0.21	7.55	7.76	34.0	26,071	26,105	4.13	0.86	7.57	26,473

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	4.77	4.17	0.01	0.20	—	0.20	0.19	—	0.19	—	657	657	0.03	0.01	—	659
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.87	0.76	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.62	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	132	132	< 0.005	< 0.005	0.56	135
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.55	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.7	23.7	< 0.005	< 0.005	0.05	24.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	0.01	3.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	4.77	4.17	0.01	0.20	—	0.20	0.19	—	0.19	—	657	657	0.03	0.01	—	659
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.87	0.76	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.62	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	132	132	< 0.005	< 0.005	0.56	135
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.55	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.7	23.7	< 0.005	< 0.005	0.05	24.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	0.01	3.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.94	3.61	0.01	0.18	—	0.18	0.16	—	0.16	—	580	580	0.02	< 0.005	—	582
Dust From Material Movement	—	—	—	—	—	2.15	2.15	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.72	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03	—	96.1	96.1	< 0.005	< 0.005	—	96.4
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.73	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	0.01	0.66	157

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.62	2.62	< 0.005	< 0.005	0.01	2.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.94	3.61	0.01	0.18	—	0.18	0.16	—	0.16	—	580	580	0.02	< 0.005	—	582
Dust From Material Movement	—	—	—	—	—	2.15	2.15	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.72	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03	—	96.1	96.1	< 0.005	< 0.005	—	96.4
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.73	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	0.01	0.66	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.62	2.62	< 0.005	< 0.005	0.01	2.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	10.3	9.09	0.02	0.44	—	0.44	0.40	—	0.40	—	1,988	1,988	0.08	0.02	—	1,995
Dust From Material Movement	—	—	—	—	—	2.77	2.77	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.89	1.66	< 0.005	0.08	—	0.08	0.07	—	0.07	—	329	329	0.01	< 0.005	—	330
Dust From Material Movement	—	—	—	—	—	0.51	0.51	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.75	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.7	49.7	< 0.005	< 0.005	0.10	50.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.02	8.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	10.3	9.09	0.02	0.44	—	0.44	0.40	—	0.40	—	1,988	1,988	0.08	0.02	—	1,995
Dust From Material Movement	—	—	—	—	—	2.77	2.77	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.89	1.66	< 0.005	0.08	—	0.08	0.07	—	0.07	—	329	329	0.01	< 0.005	—	330
Dust From Material Movement	—	—	—	—	—	0.51	0.51	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.75	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.7	49.7	< 0.005	< 0.005	0.10	50.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.02	8.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	1.21	1.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	258	258	0.01	< 0.005	—	259
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.7	42.7	< 0.005	< 0.005	—	42.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.83	3.53	40.8	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,154	9,154	0.25	0.39	1.09	9,277
Vendor	0.18	8.25	3.54	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,245	6,245	0.25	0.94	0.43	6,531
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	4.25	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	992	992	0.02	0.04	1.95	1,007
Vendor	0.02	0.87	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	672	672	0.03	0.10	0.77	703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.32	167
Vendor	< 0.005	0.16	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	111	111	< 0.005	0.02	0.13	116
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.21	1.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	258	258	0.01	< 0.005	—	259
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.7	42.7	< 0.005	< 0.005	—	42.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.83	3.53	40.8	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,154	9,154	0.25	0.39	1.09	9,277
Vendor	0.18	8.25	3.54	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,245	6,245	0.25	0.94	0.43	6,531

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	4.25	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	992	992	0.02	0.04	1.95	1,007
Vendor	0.02	0.87	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	672	672	0.03	0.10	0.77	703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.32	167
Vendor	< 0.005	0.16	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	111	111	< 0.005	0.02	0.13	116
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.80	2.44	42.9	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,677	9,677	0.17	0.36	38.4	9,828
Vendor	0.19	7.53	3.29	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,143	6,143	0.25	0.89	16.5	6,432
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.66	3.48	38.0	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,976	8,976	0.25	0.39	1.00	9,099
Vendor	0.18	7.94	3.39	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,147	6,147	0.25	0.89	0.43	6,421
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.59	2.23	26.3	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,455	6,455	0.16	0.28	11.9	6,553
Vendor	0.13	5.56	2.39	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,389	4,389	0.18	0.64	5.10	4,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	4.80	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,069	1,069	0.03	0.05	1.96	1,085
Vendor	0.02	1.01	0.44	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	727	727	0.03	0.11	0.85	760
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.80	2.44	42.9	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,677	9,677	0.17	0.36	38.4	9,828
Vendor	0.19	7.53	3.29	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,143	6,143	0.25	0.89	16.5	6,432
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.66	3.48	38.0	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,976	8,976	0.25	0.39	1.00	9,099
Vendor	0.18	7.94	3.39	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,147	6,147	0.25	0.89	0.43	6,421
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.59	2.23	26.3	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,455	6,455	0.16	0.28	11.9	6,553
Vendor	0.13	5.56	2.39	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,389	4,389	0.18	0.64	5.10	4,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	4.80	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,069	1,069	0.03	0.05	1.96	1,085
Vendor	0.02	1.01	0.44	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	727	727	0.03	0.11	0.85	760
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.34	2.39	40.5	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,493	9,493	0.17	0.36	34.9	9,640
Vendor	0.19	7.21	3.19	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,038	6,038	0.25	0.89	15.8	6,327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.22	3.14	35.5	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,807	8,807	0.22	0.39	0.91	8,929

Vendor	0.18	7.62	3.25	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,043	6,043	0.25	0.89	0.41	6,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.28	1.99	24.6	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,333	6,333	0.14	0.26	10.8	6,425
Vendor	0.13	5.34	2.28	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,315	4,315	0.18	0.64	4.89	4,514
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	4.49	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,049	1,049	0.02	0.04	1.78	1,064
Vendor	0.02	0.97	0.42	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	714	714	0.03	0.11	0.81	747
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.34	2.39	40.5	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,493	9,493	0.17	0.36	34.9	9,640
Vendor	0.19	7.21	3.19	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,038	6,038	0.25	0.89	15.8	6,327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.22	3.14	35.5	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,807	8,807	0.22	0.39	0.91	8,929
Vendor	0.18	7.62	3.25	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	6,043	6,043	0.25	0.89	0.41	6,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.28	1.99	24.6	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,333	6,333	0.14	0.26	10.8	6,425
Vendor	0.13	5.34	2.28	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,315	4,315	0.18	0.64	4.89	4,514
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	4.49	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,049	1,049	0.02	0.04	1.78	1,064

Vendor	0.02	0.97	0.42	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	714	714	0.03	0.11	0.81	747
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.08	37.7	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,318	9,318	0.15	0.36	31.6	9,461
Vendor	0.19	6.92	3.06	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,919	5,919	0.25	0.89	14.8	6,206
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.10	2.81	33.4	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,645	8,645	0.22	0.39	0.82	8,766
Vendor	0.18	7.35	3.15	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,924	5,924	0.25	0.89	0.38	6,197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	1.75	23.2	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,217	6,217	0.14	0.26	9.75	6,307
Vendor	0.13	5.14	2.22	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,229	4,229	0.18	0.64	4.58	4,429
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.32	4.23	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,029	1,029	0.02	0.04	1.61	1,044
Vendor	0.02	0.94	0.40	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	700	700	0.03	0.11	0.76	733
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.08	37.7	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,318	9,318	0.15	0.36	31.6	9,461
Vendor	0.19	6.92	3.06	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,919	5,919	0.25	0.89	14.8	6,206
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.10	2.81	33.4	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,645	8,645	0.22	0.39	0.82	8,766

Vendor	0.18	7.35	3.15	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,924	5,924	0.25	0.89	0.38	6,197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	1.75	23.2	0.00	0.00	6.46	6.46	0.00	1.51	1.51	—	6,217	6,217	0.14	0.26	9.75	6,307
Vendor	0.13	5.14	2.22	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,229	4,229	0.18	0.64	4.58	4,429
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.32	4.23	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,029	1,029	0.02	0.04	1.61	1,044
Vendor	0.02	0.94	0.40	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	700	700	0.03	0.11	0.76	733
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.39	9.26	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.17	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.12	2.06	35.6	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,152	9,152	0.15	0.07	28.4	9,206
Vendor	0.19	6.68	2.96	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,779	5,779	0.24	0.85	13.7	6,051
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.47	31.4	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,492	8,492	0.20	0.39	0.73	8,613
Vendor	0.18	7.05	3.05	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,784	5,784	0.24	0.85	0.36	6,044
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.13	1.73	21.8	0.00	0.00	6.48	6.48	0.00	1.52	1.52	—	6,123	6,123	0.12	0.26	8.77	6,213
Vendor	0.13	4.94	2.15	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,141	4,141	0.17	0.61	4.26	4,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.32	3.98	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,014	1,014	0.02	0.04	1.45	1,029

Vendor	0.02	0.90	0.39	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	686	686	0.03	0.10	0.71	717
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.39	9.26	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.17	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.12	2.06	35.6	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	9,152	9,152	0.15	0.07	28.4	9,206
Vendor	0.19	6.68	2.96	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,779	5,779	0.24	0.85	13.7	6,051
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.47	31.4	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,492	8,492	0.20	0.39	0.73	8,613
Vendor	0.18	7.05	3.05	0.04	0.09	1.62	1.71	0.09	0.45	0.53	—	5,784	5,784	0.24	0.85	0.36	6,044
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.13	1.73	21.8	0.00	0.00	6.48	6.48	0.00	1.52	1.52	—	6,123	6,123	0.12	0.26	8.77	6,213
Vendor	0.13	4.94	2.15	0.03	0.06	1.14	1.20	0.06	0.32	0.38	—	4,141	4,141	0.17	0.61	4.26	4,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.32	3.98	0.00	0.00	1.18	1.18	0.00	0.28	0.28	—	1,014	1,014	0.02	0.04	1.45	1,029
Vendor	0.02	0.90	0.39	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	686	686	0.03	0.10	0.71	717
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.98	< 0.005	0.02	—	0.02	0.02	—	0.02	—	183	183	0.01	< 0.005	—	184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.3	30.3	< 0.005	< 0.005	—	30.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.90	2.44	29.6	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,347	8,347	0.20	0.36	0.66	8,461
Vendor	0.14	6.76	2.95	0.04	0.09	1.62	1.71	0.04	0.45	0.49	—	5,629	5,629	0.20	0.85	0.33	5,887
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.16	2.20	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	641	641	0.01	0.03	0.83	651
Vendor	0.01	0.50	0.22	< 0.005	0.01	0.12	0.13	< 0.005	0.03	0.04	—	429	429	0.02	0.06	0.42	449
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.40	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	106	106	< 0.005	< 0.005	0.14	108
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.1	71.1	< 0.005	0.01	0.07	74.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.98	< 0.005	0.02	—	0.02	0.02	—	0.02	—	183	183	0.01	< 0.005	—	184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.3	30.3	< 0.005	< 0.005	—	30.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.90	2.44	29.6	0.00	0.00	9.24	9.24	0.00	2.17	2.17	—	8,347	8,347	0.20	0.36	0.66	8,461
Vendor	0.14	6.76	2.95	0.04	0.09	1.62	1.71	0.04	0.45	0.49	—	5,629	5,629	0.20	0.85	0.33	5,887
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.16	2.20	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	641	641	0.01	0.03	0.83	651
Vendor	0.01	0.50	0.22	< 0.005	0.01	0.12	0.13	< 0.005	0.03	0.04	—	429	429	0.02	0.06	0.42	449
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.40	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	106	106	< 0.005	< 0.005	0.14	108
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.1	71.1	< 0.005	0.01	0.07	74.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.33	2.04	< 0.005	0.05	—	0.05	0.05	—	0.05	—	310	310	0.01	< 0.005	—	311
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.4	51.4	< 0.005	< 0.005	—	51.6
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.45	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.34	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.2	23.2	< 0.005	< 0.005	0.03	23.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.84	3.84	< 0.005	< 0.005	< 0.005	3.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Paving (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516

Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.33	2.04	< 0.005	0.05	—	0.05	0.05	—	0.05	—	310	310	0.01	< 0.005	—	311
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.4	51.4	< 0.005	< 0.005	—	51.6
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.45	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.34	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.2	23.2	< 0.005	< 0.005	0.03	2:

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.84	3.84	< 0.005	< 0.005	< 0.005	3.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	310	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Architectural Coatings	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.54	4.54	< 0.005	< 0.005	—	4.56
Architectural Coatings	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.34	6.76	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,799	1,799	0.03	0.01	5.07	1,809
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	1.18	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	345	345	0.01	0.01	0.45	350
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57.2	57.2	< 0.005	< 0.005	0.07	58.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	310	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Architectural Coatings	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.54	4.54	< 0.005	< 0.005	—	4.56
Architectural Coatings	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.34	6.76	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,799	1,799	0.03	0.01	5.07	1,809
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	1.18	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	345	345	0.01	0.01	0.45	350
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57.2	57.2	< 0.005	< 0.005	0.07	58.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	477	477	0.08	0.01	—	482
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	860	860	0.14	0.02	—	868
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,570	1,570	0.25	0.03	—	1,585
General Office Building	—	—	—	—	—	—	—	—	—	—	—	469	469	0.08	0.01	—	474
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	798	798	0.13	0.02	—	806
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	676	676	0.11	0.01	—	683
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,850	4,850	0.78	0.10	—	4,898
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	477	477	0.08	0.01	—	482
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	860	860	0.14	0.02	—	868
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,570	1,570	0.25	0.03	—	1,585
General Office Building	—	—	—	—	—	—	—	—	—	—	—	469	469	0.08	0.01	—	474
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	798	798	0.13	0.02	—	806
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	676	676	0.11	0.01	—	683
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,850	4,850	0.78	0.10	—	4,898
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	79.0	79.0	0.01	< 0.005	—	79.8
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	142	142	0.02	< 0.005	—	144
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	260	260	0.04	0.01	—	262

General Office Building	—	—	—	—	—	—	—	—	—	—	—	77.6	77.6	0.01	< 0.005	—	78.4
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	132	132	0.02	< 0.005	—	133
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	112	112	0.02	< 0.005	—	113
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	803	803	0.13	0.02	—	811

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	477	477	0.08	0.01	—	482
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	860	860	0.14	0.02	—	868
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,570	1,570	0.25	0.03	—	1,585
General Office Building	—	—	—	—	—	—	—	—	—	—	—	469	469	0.08	0.01	—	474

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	798	798	0.13	0.02	—	806
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	676	676	0.11	0.01	—	683
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,850	4,850	0.78	0.10	—	4,898
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	477	477	0.08	0.01	—	482
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	860	860	0.14	0.02	—	868
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,570	1,570	0.25	0.03	—	1,585
General Office Building	—	—	—	—	—	—	—	—	—	—	—	469	469	0.08	0.01	—	474
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	798	798	0.13	0.02	—	806
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	676	676	0.11	0.01	—	683

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,850	4,850	0.78	0.10	—	4,898
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	79.0	79.0	0.01	< 0.005	—	79.8
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	142	142	0.02	< 0.005	—	144
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	260	260	0.04	0.01	—	262
General Office Building	—	—	—	—	—	—	—	—	—	—	—	77.6	77.6	0.01	< 0.005	—	78.4
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	132	132	0.02	< 0.005	—	133
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	112	112	0.02	< 0.005	—	113
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	803	803	0.13	0.02	—	811

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.09	1.61	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,044	2,044	0.18	< 0.005	—	2,050
Apartments Mid Rise	0.06	1.00	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,273	1,273	0.11	< 0.005	—	1,276
Apartments Low Rise	0.22	3.77	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,791	4,791	0.42	0.01	—	4,804
General Office Building	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	302	302	0.03	< 0.005	—	303
Regional Shopping Center	0.01	0.26	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	305	305	0.03	< 0.005	—	306
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	8,715	8,715	0.77	0.02	—	8,739
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.09	1.61	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,044	2,044	0.18	< 0.005	—	2,050

Apartments Mid Rise	0.06	1.00	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,273	1,273	0.11	< 0.005	—	1,276
Apartments Low Rise	0.22	3.77	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,791	4,791	0.42	0.01	—	4,804
General Office Building	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	302	302	0.03	< 0.005	—	303
Regional Shopping Center	0.01	0.26	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	305	305	0.03	< 0.005	—	306
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	8,715	8,715	0.77	0.02	—	8,739
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.29	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	338	338	0.03	< 0.005	—	339
Apartments Mid Rise	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	211	211	0.02	< 0.005	—	211
Apartments Low Rise	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06	—	793	793	0.07	< 0.005	—	795
General Office Building	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.0	50.0	< 0.005	< 0.005	—	50.1

Regional Shopping Center	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.6	50.6	< 0.005	< 0.005	—	50.7
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	1.26	0.57	0.01	0.10	—	0.10	0.10	—	0.10	—	1,443	1,443	0.13	< 0.005	—	1,447

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.09	1.61	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,044	2,044	0.18	< 0.005	—	2,050
Apartments Mid Rise	0.06	1.00	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,273	1,273	0.11	< 0.005	—	1,276
Apartments Low Rise	0.22	3.77	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,791	4,791	0.42	0.01	—	4,804
General Office Building	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	302	302	0.03	< 0.005	—	303
Regional Shopping Center	0.01	0.26	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	305	305	0.03	< 0.005	—	306

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	8,715	8,715	0.77	0.02	—	8,739
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.09	1.61	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,044	2,044	0.18	< 0.005	—	2,050
Apartments Mid Rise	0.06	1.00	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,273	1,273	0.11	< 0.005	—	1,276
Apartments Low Rise	0.22	3.77	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,791	4,791	0.42	0.01	—	4,804
General Office Building	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	302	302	0.03	< 0.005	—	303
Regional Shopping Center	0.01	0.26	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	305	305	0.03	< 0.005	—	306
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.40	6.90	3.15	0.04	0.56	—	0.56	0.56	—	0.56	—	8,715	8,715	0.77	0.02	—	8,739
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.29	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	338	338	0.03	< 0.005	—	339
Apartments Mid Rise	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	211	211	0.02	< 0.005	—	211
Apartments Low Rise	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06	—	793	793	0.07	< 0.005	—	795
General Office Building	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.0	50.0	< 0.005	< 0.005	—	50.1
Regional Shopping Center	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.6	50.6	< 0.005	< 0.005	—	50.7
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	1.26	0.57	0.01	0.10	—	0.10	0.10	—	0.10	—	1,443	1,443	0.13	< 0.005	—	1,447

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.72	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Consumer Products	36.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.4	0.90	99.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	299	299	0.01	< 0.005	—	300
Total	50.7	13.2	105	0.08	1.07	—	1.07	1.05	—	1.05	0.00	15,914	15,914	0.31	0.03	—	15,931
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.72	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Consumer Products	36.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	40.3	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	63.7	63.7	< 0.005	< 0.005	—	63.8
Consumer Products	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.94	0.08	8.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	8.16	0.14	8.98	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	88.1	88.1	< 0.005	< 0.005	—	88.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.72	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Consumer Products	36.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.4	0.90	99.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	299	299	0.01	< 0.005	—	300
Total	50.7	13.2	105	0.08	1.07	—	1.07	1.05	—	1.05	0.00	15,914	15,914	0.31	0.03	—	15,931
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.72	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Consumer Products	36.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	3.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	40.3	12.3	5.23	0.08	0.99	—	0.99	0.99	—	0.99	0.00	15,615	15,615	0.29	0.03	—	15,631
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	63.7	63.7	< 0.005	< 0.005	—	63.8
Consumer Products	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.94	0.08	8.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	8.16	0.14	8.98	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	88.1	88.1	< 0.005	< 0.005	—	88.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.39	79.6	89.0	0.98	0.02	—	121
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	30.7	58.0	88.6	3.16	0.08	—	190

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	51.0	96.3	147	5.24	0.13	—	316
General Office Building	—	—	—	—	—	—	—	—	—	—	13.5	25.5	39.0	1.39	0.03	—	83.7
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	23.7	44.8	68.5	2.44	0.06	—	147
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	128	304	432	13.2	0.32	—	857
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.39	79.6	89.0	0.98	0.02	—	121
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	30.7	58.0	88.6	3.16	0.08	—	190
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	51.0	96.3	147	5.24	0.13	—	316
General Office Building	—	—	—	—	—	—	—	—	—	—	13.5	25.5	39.0	1.39	0.03	—	83.7

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	23.7	44.8	68.5	2.44	0.06	—	147
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	128	304	432	13.2	0.32	—	857
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.55	13.2	14.7	0.16	< 0.005	—	20.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	5.08	9.60	14.7	0.52	0.01	—	31.5
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	8.44	15.9	24.4	0.87	0.02	—	52.3
General Office Building	—	—	—	—	—	—	—	—	—	—	2.24	4.22	6.46	0.23	0.01	—	13.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	3.93	7.42	11.3	0.40	0.01	—	24.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	21.2	50.4	71.6	2.19	0.05	—	142

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	7.98	70.8	78.8	0.83	0.02	—	106
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	26.1	49.3	75.4	2.68	0.06	—	162
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	43.3	81.8	125	4.46	0.11	—	268
General Office Building	—	—	—	—	—	—	—	—	—	—	11.5	21.7	33.1	1.18	0.03	—	71.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	20.2	38.1	58.3	2.07	0.05	—	125
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	109	262	371	11.2	0.27	—	732
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	7.98	70.8	78.8	0.83	0.02	—	106
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	26.1	49.3	75.4	2.68	0.06	—	162
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	43.3	81.8	125	4.46	0.11	—	268
General Office Building	—	—	—	—	—	—	—	—	—	—	11.5	21.7	33.1	1.18	0.03	—	71.1
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	20.2	38.1	58.3	2.07	0.05	—	125
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	109	262	371	11.2	0.27	—	732
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.32	11.7	13.0	0.14	< 0.005	—	17.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.32	8.16	12.5	0.44	0.01	—	26.8

Apartment Low Rise	—	—	—	—	—	—	—	—	—	—	7.17	13.5	20.7	0.74	0.02	—	44.4
General Office Building	—	—	—	—	—	—	—	—	—	—	1.90	3.59	5.49	0.20	< 0.005	—	11.8
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	3.34	6.31	9.65	0.34	0.01	—	20.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	18.1	43.3	61.4	1.86	0.04	—	121

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	49.0	0.00	49.0	4.90	0.00	—	171
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	180	0.00	180	18.0	0.00	—	629

Apartments	—	—	—	—	—	—	—	—	—	—	298	0.00	298	29.8	0.00	—	1,044
General Office Building	—	—	—	—	—	—	—	—	—	—	19.9	0.00	19.9	1.99	0.00	—	69.5
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	94.6	0.00	94.6	9.46	0.00	—	331
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	642	0.00	642	64.1	0.00	—	2,245
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	49.0	0.00	49.0	4.90	0.00	—	171
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	180	0.00	180	18.0	0.00	—	629
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	298	0.00	298	29.8	0.00	—	1,044
General Office Building	—	—	—	—	—	—	—	—	—	—	19.9	0.00	19.9	1.99	0.00	—	69.5
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	94.6	0.00	94.6	9.46	0.00	—	331

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	642	0.00	642	64.1	0.00	—	2,245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.11	0.00	8.11	0.81	0.00	—	28.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	29.8	0.00	29.8	2.97	0.00	—	104
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	49.4	0.00	49.4	4.94	0.00	—	173
General Office Building	—	—	—	—	—	—	—	—	—	—	3.29	0.00	3.29	0.33	0.00	—	11.5
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	15.7	0.00	15.7	1.57	0.00	—	54.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	3

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	7.35	0.00	7.35	0.73	0.00	—	25.7
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	27.0	0.00	27.0	2.69	0.00	—	94.3
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	44.8	0.00	44.8	4.47	0.00	—	157
General Office Building	—	—	—	—	—	—	—	—	—	—	2.98	0.00	2.98	0.30	0.00	—	10.4
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	14.2	0.00	14.2	1.42	0.00	—	49.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	96.3	0.00	96.3	9.62	0.00	—	337
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	7.35	0.00	7.35	0.73	0.00	—	25.7
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	27.0	0.00	27.0	2.69	0.00	—	94.3
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	44.8	0.00	44.8	4.47	0.00	—	157
General Office Building	—	—	—	—	—	—	—	—	—	—	2.98	0.00	2.98	0.30	0.00	—	10.4
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	14.2	0.00	14.2	1.42	0.00	—	49.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	96.3	0.00	96.3	9.62	0.00	—	337
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.22	0.00	1.22	0.12	0.00	—	4.26
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.46	0.00	4.46	0.45	0.00	—	15.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	7.41	0.00	7.41	0.74	0.00	—	25.9

General Office Building	—	—	—	—	—	—	—	—	—	—	0.49	0.00	0.49	0.05	0.00	—	1.73
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	2.35	0.00	2.35	0.23	0.00	—	8.22
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	15.9	0.00	15.9	1.59	0.00	—	55.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.93	1.93
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.10	3.10
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.69	5.69

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.93	1.93
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.10	3.10
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.69	5.69
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.94	0.94

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.92	1.92

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.93	1.93
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.10	3.10
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.69	5.69
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.93	1.93
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.10	3.10
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.69	5.69
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.94	0.94
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.92	1.92

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2024	4/8/2024	5.00	70.0	—
Site Preparation	Site Preparation	4/9/2024	6/4/2024	5.00	40.0	—
Grading	Grading	6/5/2024	11/6/2024	5.00	110	—

Building Construction	Building Construction	11/7/2024	2/8/2029	5.00	1,110	—
Paving	Paving	2/9/2029	5/25/2029	5.00	75.0	—
Architectural Coating	Architectural Coating	5/26/2029	9/8/2029	5.00	75.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,117	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	231	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	223	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,117	11.7	LDA,LDT1,LDT2

Building Construction	Vendor	231	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	223	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,029,400	1,009,800	310,245	103,415	5,672

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	60.0	0.00	—
Grading	—	—	330	0.00	—
Paving	0.00	0.00	0.00	0.00	3.69

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.52	0%
Apartments Mid Rise	—	0%
Apartments Low Rise	—	0%
General Office Building	0.00	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.00	100%
Parking Lot	0.00	100%
Other Asphalt Surfaces	2.17	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

2029	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	235,940	235,940	235,940	86,118,100

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	227,340	227,340	227,340	82,978,947

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	28
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	110
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	230
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	221
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	382
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	367
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	28

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	110
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	230
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	221
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	382
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	367
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3029400	1,009,800	310,245	103,415	5,672

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	853,510	204	0.0330	0.0040	6,378,625
Apartments Mid Rise	1,538,564	204	0.0330	0.0040	3,970,636
Apartments Low Rise	2,809,115	204	0.0330	0.0040	14,949,521
General Office Building	839,125	204	0.0330	0.0040	941,461
Regional Shopping Center	1,428,634	204	0.0330	0.0040	952,745
Enclosed Parking with Elevator	1,209,313	204	0.0330	0.0040	0.00

Parking Lot	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	853,510	204	0.0330	0.0040	6,378,625
Apartments Mid Rise	1,538,564	204	0.0330	0.0040	3,970,636
Apartments Low Rise	2,809,115	204	0.0330	0.0040	14,949,521
General Office Building	839,125	204	0.0330	0.0040	941,461
Regional Shopping Center	1,428,634	204	0.0330	0.0040	952,745
Enclosed Parking with Elevator	1,209,313	204	0.0330	0.0040	0.00
Parking Lot	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	4,900,497	22,445,036
Apartments Mid Rise	16,015,393	0.00
Apartments Low Rise	26,597,627	0.00
General Office Building	7,045,366	0.00
Regional Shopping Center	12,384,185	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	4,165,423	20,200,532
Apartments Mid Rise	13,613,084	0.00
Apartments Low Rise	22,607,983	0.00
General Office Building	5,988,561	0.00
Regional Shopping Center	10,526,557	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	90.9	—
Apartments Mid Rise	334	—
Apartments Low Rise	554	—
General Office Building	36.9	—
Regional Shopping Center	176	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Single Family Housing	13.6	—
Apartments Mid Rise	50.0	—
Apartments Low Rise	83.1	—
General Office Building	5.53	—
Regional Shopping Center	26.3	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	16.2	annual days of extreme heat

Extreme Precipitation	2.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	20.1
AQ-DPM	8.90
Drinking Water	54.0
Lead Risk Housing	4.86
Pesticides	52.7

Toxic Releases	31.9
Traffic	89.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	7.19
Haz Waste Facilities/Generators	76.8
Impaired Water Bodies	23.9
Solid Waste	83.3
Sensitive Population	—
Asthma	24.3
Cardio-vascular	34.2
Low Birth Weights	40.9
Socioeconomic Factor Indicators	—
Education	12.0
Housing	1.29
Linguistic	30.7
Poverty	8.68
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	88.28435776
Employed	88.70781471
Median HI	88.66931862
Education	—

Bachelor's or higher	64.48094444
High school enrollment	13.5249583
Preschool enrollment	95.7141024
Transportation	—
Auto Access	67.17567047
Active commuting	50.09624022
Social	—
2-parent households	97.21544976
Voting	59.77158989
Neighborhood	—
Alcohol availability	97.0101373
Park access	44.4629796
Retail density	7.442576671
Supermarket access	10.58642371
Tree canopy	22.91800334
Housing	—
Homeownership	95.99640703
Housing habitability	93.16052868
Low-inc homeowner severe housing cost burden	71.74387271
Low-inc renter severe housing cost burden	74.51559091
Uncrowded housing	79.21211344
Health Outcomes	—
Insured adults	80.68779674
Arthritis	73.2
Asthma ER Admissions	67.9
High Blood Pressure	95.4
Cancer (excluding skin)	45.0

Asthma	61.7
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	91.2
Life Expectancy at Birth	21.4
Cognitively Disabled	80.8
Physically Disabled	85.5
Heart Attack ER Admissions	58.5
Mental Health Not Good	68.6
Chronic Kidney Disease	85.5
Obesity	69.5
Pedestrian Injuries	19.6
Physical Health Not Good	82.3
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	5.9
Current Smoker	64.6
No Leisure Time for Physical Activity	85.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	88.9
English Speaking	71.6
Foreign-born	23.2
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—

Impervious Surface Cover	69.4
Traffic Density	76.5
Traffic Access	23.0
Other Indices	—
Hardship	15.1
Other Decision Support	—
2016 Voting	60.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	88.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Based on applicant provided information
Operations: Architectural Coatings	Based on BAAQMD Reg 8 Rule 3

Appendix B-2

Isabel Crossing Parcels – Proposed Isabel Crossing Project

Harridge Development Project Operations Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Harridge Development Project Operations
Construction Start Date	1/1/2024
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	33.2
Location	37.70623392502735, -121.79859974891373
County	Alameda
City	Livermore
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1677
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Condo/Townhouse High Rise	545	Dwelling Unit	25.8	865,072	0.00	—	1,537	—
Apartments Mid Rise	716	Dwelling Unit	9.07	941,692	0.00	—	2,019	—
Regional Shopping Center	81.9	1000sqft	0.00	81,897	0.00	—	—	—
Enclosed Parking with Elevator	1,023	Space	0.00	0.00	0.00	—	—	—
Parking Lot	237	Space	0.00	0.00	0.00	—	—	—
Other Asphalt Surfaces	10.5	Acre	10.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	566	36.0	54.1	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	14,659	14,659	0.42	0.92	45.8	14,991
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	566	36.0	49.5	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	14,064	14,064	0.46	0.95	1.19	14,358
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	86.7	19.0	32.8	0.04	0.73	6.13	6.75	0.67	2.18	2.86	—	9,929	9,929	0.32	0.66	13.2	10,146
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.8	3.46	5.99	0.01	0.13	1.12	1.23	0.12	0.40	0.52	—	1,644	1,644	0.05	0.11	2.19	1,680

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.67	36.0	54.1	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	14,659	14,659	0.42	0.92	45.8	14,991
2025	4.43	17.3	51.1	0.05	0.49	8.77	9.25	0.45	2.10	2.55	—	14,435	14,435	0.40	0.90	42.7	14,755
2026	3.99	16.5	48.8	0.05	0.43	8.77	9.20	0.40	2.10	2.50	—	14,214	14,214	0.40	0.90	39.4	14,531
2027	566	15.6	46.5	0.05	0.39	8.77	9.16	0.36	2.10	2.46	—	13,990	13,990	0.38	0.90	35.9	14,303
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.52	36.0	49.5	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	14,064	14,064	0.46	0.95	1.19	14,358
2025	4.30	18.5	47.0	0.05	0.49	8.77	9.25	0.45	2.10	2.55	—	13,852	13,852	0.46	0.92	1.11	14,139
2026	3.88	17.4	44.7	0.05	0.43	8.77	9.20	0.40	2.10	2.50	—	13,644	13,644	0.44	0.92	1.02	13,929
2027	566	16.5	42.9	0.05	0.39	8.77	9.16	0.36	2.10	2.46	—	13,431	13,431	0.44	0.92	0.93	13,716
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.69	19.0	26.0	0.04	0.73	6.02	6.75	0.67	2.18	2.86	—	6,356	6,356	0.22	0.29	5.77	6,454
2025	3.06	12.9	32.8	0.04	0.35	6.13	6.48	0.32	1.47	1.79	—	9,929	9,929	0.32	0.66	13.2	10,146

2026	2.76	12.1	31.3	0.04	0.31	6.13	6.44	0.29	1.47	1.75	—	9,780	9,780	0.30	0.64	12.1	9,990
2027	86.7	6.30	15.8	0.02	0.17	2.95	3.12	0.16	0.70	0.86	—	4,731	4,731	0.15	0.29	5.26	4,828
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.49	3.46	4.74	0.01	0.13	1.10	1.23	0.12	0.40	0.52	—	1,052	1,052	0.04	0.05	0.95	1,068
2025	0.56	2.35	5.99	0.01	0.06	1.12	1.18	0.06	0.27	0.33	—	1,644	1,644	0.05	0.11	2.19	1,680
2026	0.50	2.21	5.71	0.01	0.06	1.12	1.18	0.05	0.27	0.32	—	1,619	1,619	0.05	0.11	2.01	1,654
2027	15.8	1.15	2.88	< 0.005	0.03	0.54	0.57	0.03	0.13	0.16	—	783	783	0.02	0.05	0.87	799

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.67	36.0	54.1	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	14,659	14,659	0.42	0.92	45.8	14,991
2025	4.43	17.3	51.1	0.05	0.49	8.77	9.25	0.45	2.10	2.55	—	14,435	14,435	0.40	0.90	42.7	14,755
2026	3.99	16.5	48.8	0.05	0.43	8.77	9.20	0.40	2.10	2.50	—	14,214	14,214	0.40	0.90	39.4	14,531
2027	566	15.6	46.5	0.05	0.39	8.77	9.16	0.36	2.10	2.46	—	13,990	13,990	0.38	0.90	35.9	14,303
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.52	36.0	49.5	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	14,064	14,064	0.46	0.95	1.19	14,358
2025	4.30	18.5	47.0	0.05	0.49	8.77	9.25	0.45	2.10	2.55	—	13,852	13,852	0.46	0.92	1.11	14,139
2026	3.88	17.4	44.7	0.05	0.43	8.77	9.20	0.40	2.10	2.50	—	13,644	13,644	0.44	0.92	1.02	13,929
2027	566	16.5	42.9	0.05	0.39	8.77	9.16	0.36	2.10	2.46	—	13,431	13,431	0.44	0.92	0.93	13,716
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.69	19.0	26.0	0.04	0.73	6.02	6.75	0.67	2.18	2.86	—	6,356	6,356	0.22	0.29	5.77	6,454
2025	3.06	12.9	32.8	0.04	0.35	6.13	6.48	0.32	1.47	1.79	—	9,929	9,929	0.32	0.66	13.2	10,146

2026	2.76	12.1	31.3	0.04	0.31	6.13	6.44	0.29	1.47	1.75	—	9,780	9,780	0.30	0.64	12.1	9,990
2027	86.7	6.30	15.8	0.02	0.17	2.95	3.12	0.16	0.70	0.86	—	4,731	4,731	0.15	0.29	5.26	4,828
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.49	3.46	4.74	0.01	0.13	1.10	1.23	0.12	0.40	0.52	—	1,052	1,052	0.04	0.05	0.95	1,068
2025	0.56	2.35	5.99	0.01	0.06	1.12	1.18	0.06	0.27	0.33	—	1,644	1,644	0.05	0.11	2.19	1,680
2026	0.50	2.21	5.71	0.01	0.06	1.12	1.18	0.05	0.27	0.32	—	1,619	1,619	0.05	0.11	2.01	1,654
2027	15.8	1.15	2.88	< 0.005	0.03	0.54	0.57	0.03	0.13	0.16	—	783	783	0.02	0.05	0.87	799

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.9	38.4	420	1.32	1.77	136	138	1.73	34.6	36.3	646	146,586	147,233	68.1	4.12	78.0	150,241
Mit.	62.9	38.4	420	1.32	1.77	136	138	1.73	34.6	36.3	165	146,559	146,724	20.0	4.08	78.0	148,518
% Reduced	—	—	—	—	—	—	—	—	—	—	74%	< 0.5%	< 0.5%	71%	1%	—	1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.8	41.4	277	1.24	1.74	136	138	1.71	34.6	36.3	646	138,974	139,621	68.0	4.39	15.0	142,644
Mit.	55.8	41.4	277	1.24	1.74	136	138	1.71	34.6	36.3	165	138,947	139,112	19.8	4.36	15.0	140,921
% Reduced	—	—	—	—	—	—	—	—	—	—	74%	< 0.5%	< 0.5%	71%	1%	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	58.5	28.2	315	1.17	0.77	133	134	0.74	33.8	34.6	646	124,340	124,986	67.7	4.26	41.3	127,990
Mit.	58.5	28.2	315	1.17	0.77	133	134	0.74	33.8	34.6	165	124,312	124,477	19.6	4.22	41.3	126,267

% Reduced	—	—	—	—	—	—	—	—	—	—	74%	< 0.5%	< 0.5%	71%	1%	—	1%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	5.15	57.4	0.21	0.14	24.4	24.5	0.13	6.18	6.31	107	20,586	20,693	11.2	0.71	6.83	21,190
Mit.	10.7	5.15	57.4	0.21	0.14	24.4	24.5	0.13	6.18	6.31	27.3	20,581	20,609	3.24	0.70	6.83	20,905
% Reduced	—	—	—	—	—	—	—	—	—	—	74%	< 0.5%	< 0.5%	71%	1%	—	1%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.70	22.4	338	1.22	0.49	136	137	0.46	34.6	35.0	—	123,896	123,896	2.12	3.79	64.7	125,141
Area	53.1	13.1	80.8	0.08	1.04	—	1.04	1.04	—	1.04	0.00	16,004	16,004	0.31	0.03	—	16,021
Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	604
Waste	—	—	—	—	—	—	—	—	—	—	549	0.00	549	54.9	0.00	—	1,920
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	62.9	38.4	420	1.32	1.77	136	138	1.73	34.6	36.3	646	146,586	147,233	68.1	4.12	78.0	150,241
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.35	26.0	271	1.14	0.49	136	137	0.46	34.6	35.0	—	116,489	116,489	2.02	4.06	1.68	117,752
Area	46.3	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	604
Waste	—	—	—	—	—	—	—	—	—	—	549	0.00	549	54.9	0.00	—	1,

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	55.8	41.4	277	1.24	1.74	136	138	1.71	34.6	36.3	646	138,974	139,621	68.0	4.39	15.0	142,644
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.46	24.6	276	1.15	0.49	133	134	0.46	33.8	34.3	—	117,162	117,162	2.05	3.96	27.9	118,420
Area	48.9	0.65	37.3	< 0.005	0.04	—	0.04	0.04	—	0.04	0.00	491	491	0.01	< 0.005	—	492
Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	604
Waste	—	—	—	—	—	—	—	—	—	—	549	0.00	549	54.9	0.00	—	1,920
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	58.5	28.2	315	1.17	0.77	133	134	0.74	33.8	34.6	646	124,340	124,986	67.7	4.26	41.3	127,990
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	4.50	50.4	0.21	0.09	24.4	24.4	0.08	6.18	6.26	—	19,397	19,397	0.34	0.66	4.63	19,606
Area	8.92	0.12	6.82	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	81.3	81.3	< 0.005	< 0.005	—	81.4
Energy	0.03	0.53	0.24	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,077	1,077	0.13	0.01	—	1,083
Water	—	—	—	—	—	—	—	—	—	—	16.1	30.5	46.6	1.66	0.04	—	100.0
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21
Total	10.7	5.15	57.4	0.21	0.14	24.4	24.5	0.13	6.18	6.31	107	20,586	20,693	11.2	0.71	6.83	21,190

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.70	22.4	338	1.22	0.49	136	137	0.46	34.6	35.0	—	123,896	123,896	2.12	3.79	64.7	125,141
Area	53.1	13.1	80.8	0.08	1.04	—	1.04	1.04	—	1.04	0.00	16,004	16,004	0.31	0.03	—	16,021

Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.52	0.20	—	513
Waste	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	62.9	38.4	420	1.32	1.77	136	138	1.73	34.6	36.3	165	146,559	146,724	20.0	4.08	78.0	148,518
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.35	26.0	271	1.14	0.49	136	137	0.46	34.6	35.0	—	116,489	116,489	2.02	4.06	1.68	117,752
Area	46.3	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.52	0.20	—	513
Waste	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	55.8	41.4	277	1.24	1.74	136	138	1.71	34.6	36.3	165	138,947	139,112	19.8	4.36	15.0	140,921
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.46	24.6	276	1.15	0.49	133	134	0.46	33.8	34.3	—	117,162	117,162	2.05	3.96	27.9	118,420
Area	48.9	0.65	37.3	< 0.005	0.04	—	0.04	0.04	—	0.04	0.00	491	491	0.01	< 0.005	—	492
Energy	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	6,503	6,503	0.78	0.06	—	6,541
Water	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.52	0.20	—	513
Waste	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Total	58.5	28.2	315	1.17	0.77	133	134	0.74	33.8	34.6	165	124,312	124,477	19.6	4.22	41.3	126,267
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	4.50	50.4	0.21	0.09	24.4	24.4	0.08	6.18	6.26	—	19,397	19,397	0.34	0.66	4.63	19,606
Area	8.92	0.12	6.82	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	81.3	81.3	< 0.005	< 0.005	—	81.4
Energy	0.03	0.53	0.24	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,077	1,077	0.13	0.01	—	1,083
Water	—	—	—	—	—	—	—	—	—	—	13.7	25.9	39.6	1.41	0.03	—	8!

Waste	—	—	—	—	—	—	—	—	—	—	13.6	0.00	13.6	1.36	0.00	—	47.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21
Total	10.7	5.15	57.4	0.21	0.14	24.4	24.5	0.13	6.18	6.31	27.3	20,581	20,609	3.24	0.70	6.83	20,905

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.41	2.98	< 0.005	0.15	—	0.15	0.13	—	0.13	—	469	469	0.02	< 0.005	—	471
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.62	0.54	< 0.005	0.03	—	0.03	0.02	—	0.02	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.55	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.03	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.41	2.98	< 0.005	0.15	—	0.15	0.13	—	0.13	—	469	469	0.02	< 0.005	—	471
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.62	0.54	< 0.005	0.03	—	0.03	0.02	—	0.02	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.55	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.03	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.96	2.71	< 0.005	0.13	—	0.13	0.12	—	0.12	—	435	435	0.02	< 0.005	—	437
Dust From Material Movement	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.54	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.1	72.1	< 0.005	< 0.005	—	72.3
Dust From Material Movement	—	—	—	—	—	0.29	0.29	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.73	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	0.01	0.66	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.64	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.02	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.96	2.71	< 0.005	0.13	—	0.13	0.12	—	0.12	—	435	435	0.02	< 0.005	—	437
Dust From Material Movement	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.54	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.1	72.1	< 0.005	< 0.005	—	72.3
Dust From Material Movement	—	—	—	—	—	0.29	0.29	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.73	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	0.01	0.66	157

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.64	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.02	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	7.05	6.20	0.01	0.30	—	0.30	0.27	—	0.27	—	1,356	1,356	0.05	0.01	—	1,360
Dust From Material Movement	—	—	—	—	—	1.89	1.89	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.29	1.13	< 0.005	0.05	—	0.05	0.05	—	0.05	—	224	224	0.01	< 0.005	—	225
Dust From Material Movement	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.75	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.9	33.9	< 0.005	< 0.005	0.07	34.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.61	5.61	< 0.005	< 0.005	0.01	5.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	7.05	6.20	0.01	0.30	—	0.30	0.27	—	0.27	—	1,356	1,356	0.05	0.01	—	1,360
Dust From Material Movement	—	—	—	—	—	1.89	1.89	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.29	1.13	< 0.005	0.05	—	0.05	0.05	—	0.05	—	224	224	0.01	< 0.005	—	225
Dust From Material Movement	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.75	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.9	33.9	< 0.005	< 0.005	0.07	34.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.61	5.61	< 0.005	< 0.005	0.01	5.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	3.21	3.75	0.01	0.14	—	0.14	0.13	—	0.13	—	685	685	0.03	0.01	—	687
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.59	0.68	< 0.005	0.03	—	0.03	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	114
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.34	2.30	38.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	8,251	8,251	0.16	0.30	35.1	8,380
Vendor	0.12	5.04	2.21	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	4,011	4,011	0.16	0.60	10.7	4,205
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.95	34.1	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,652	7,652	0.21	0.32	0.91	7,755
Vendor	0.12	5.30	2.28	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	4,014	4,014	0.16	0.60	0.28	4,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.90	0.83	9.43	0.00	0.00	2.16	2.16	0.00	0.51	0.51	—	2,201	2,201	0.05	0.09	4.33	2,234
Vendor	0.03	1.49	0.64	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,146	1,146	0.05	0.17	1.31	1,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	1.72	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	364	364	0.01	0.02	0.72	370
Vendor	0.01	0.27	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.22	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	3.21	3.75	0.01	0.14	—	0.14	0.13	—	0.13	—	685	685	0.03	0.01	—	687
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.59	0.68	< 0.005	0.03	—	0.03	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	114
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.34	2.30	38.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	8,251	8,251	0.16	0.30	35.1	8,380
Vendor	0.12	5.04	2.21	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	4,011	4,011	0.16	0.60	10.7	4,205
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.95	34.1	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,652	7,652	0.21	0.32	0.91	7,755
Vendor	0.12	5.30	2.28	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	4,014	4,014	0.16	0.60	0.28	4,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.90	0.83	9.43	0.00	0.00	2.16	2.16	0.00	0.51	0.51	—	2,201	2,201	0.05	0.09	4.33	2,234
Vendor	0.03	1.49	0.64	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,146	1,146	0.05	0.17	1.31	1,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	1.72	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	364	364	0.01	0.02	0.72	370
Vendor	0.01	0.27	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.22	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.18	2.04	35.9	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	8,089	8,089	0.14	0.30	32.1	8,215
Vendor	0.12	4.84	2.12	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,948	3,948	0.16	0.58	10.6	4,134
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.06	2.91	31.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,504	7,504	0.21	0.32	0.83	7,606
Vendor	0.12	5.10	2.18	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,951	3,951	0.16	0.58	0.28	4,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.17	1.86	22.0	0.00	0.00	5.40	5.40	0.00	1.26	1.26	—	5,396	5,396	0.13	0.23	9.92	5,478
Vendor	0.09	3.57	1.53	0.02	0.04	0.73	0.77	0.04	0.20	0.24	—	2,821	2,821	0.11	0.41	3.28	2,949

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.34	4.01	0.00	0.00	0.99	0.99	0.00	0.23	0.23	—	893	893	0.02	0.04	1.64	907
Vendor	0.02	0.65	0.28	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	467	467	0.02	0.07	0.54	488
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.18	2.04	35.9	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	8,089	8,089	0.14	0.30	32.1	8,215
Vendor	0.12	4.84	2.12	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,948	3,948	0.16	0.58	10.6	4,134
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.06	2.91	31.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,504	7,504	0.21	0.32	0.83	7,606
Vendor	0.12	5.10	2.18	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,951	3,951	0.16	0.58	0.28	4,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.17	1.86	22.0	0.00	0.00	5.40	5.40	0.00	1.26	1.26	—	5,396	5,396	0.13	0.23	9.92	5,478
Vendor	0.09	3.57	1.53	0.02	0.04	0.73	0.77	0.04	0.20	0.24	—	2,821	2,821	0.11	0.41	3.28	2,949
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.34	4.01	0.00	0.00	0.99	0.99	0.00	0.23	0.23	—	893	893	0.02	0.04	1.64	907
Vendor	0.02	0.65	0.28	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	467	467	0.02	0.07	0.54	488
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.00	33.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,936	7,936	0.14	0.30	29.2	8,059
Vendor	0.12	4.63	2.05	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,881	3,881	0.16	0.58	10.2	4,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.69	2.63	29.7	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,362	7,362	0.19	0.32	0.76	7,464
Vendor	0.12	4.90	2.09	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,884	3,884	0.16	0.58	0.26	4,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.91	1.66	20.6	0.00	0.00	5.40	5.40	0.00	1.26	1.26	—	5,294	5,294	0.12	0.22	9.01	5,371
Vendor	0.09	3.43	1.47	0.02	0.04	0.73	0.77	0.04	0.20	0.24	—	2,773	2,773	0.11	0.41	3.14	2,901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.30	3.75	0.00	0.00	0.99	0.99	0.00	0.23	0.23	—	877	877	0.02	0.04	1.49	889
Vendor	0.02	0.63	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	459	459	0.02	0.07	0.52	480
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.00	33.8	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,936	7,936	0.14	0.30	29.2	8,059
Vendor	0.12	4.63	2.05	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,881	3,881	0.16	0.58	10.2	4,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.69	2.63	29.7	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,362	7,362	0.19	0.32	0.76	7,464
Vendor	0.12	4.90	2.09	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,884	3,884	0.16	0.58	0.26	4,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.91	1.66	20.6	0.00	0.00	5.40	5.40	0.00	1.26	1.26	—	5,294	5,294	0.12	0.22	9.01	5,371
Vendor	0.09	3.43	1.47	0.02	0.04	0.73	0.77	0.04	0.20	0.24	—	2,773	2,773	0.11	0.41	3.14	2,901

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.30	3.75	0.00	0.00	0.99	0.99	0.00	0.23	0.23	—	877	877	0.02	0.04	1.49	889
Vendor	0.02	0.63	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	459	459	0.02	0.07	0.52	480
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.96	4.08	0.01	0.11	—	0.11	0.10	—	0.10	—	755	755	0.03	0.01	—	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.54	0.74	< 0.005	0.02	—	0.02	0.02	—	0.02	—	125	125	0.01	< 0.005	—	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	1.74	31.5	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,789	7,789	0.12	0.30	26.4	7,909
Vendor	0.12	4.45	1.97	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,804	3,804	0.16	0.58	9.50	3,989
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.59	2.35	27.9	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,227	7,227	0.19	0.32	0.69	7,328
Vendor	0.12	4.72	2.02	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,807	3,807	0.16	0.58	0.25	3,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.64	8.54	0.00	0.00	2.38	2.38	0.00	0.56	0.56	—	2,292	2,292	0.05	0.10	3.59	2,326
Vendor	0.04	1.46	0.63	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,199	1,199	0.05	0.18	1.30	1,256
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	1.56	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	380	380	0.01	0.02	0.59	385
Vendor	0.01	0.27	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	199	199	0.01	0.03	0.21	208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.96	4.08	0.01	0.11	—	0.11	0.10	—	0.10	—	755	755	0.03	0.01	—	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.54	0.74	< 0.005	0.02	—	0.02	0.02	—	0.02	—	125	125	0.01	< 0.005	—	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	1.74	31.5	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,789	7,789	0.12	0.30	26.4	7,909
Vendor	0.12	4.45	1.97	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,804	3,804	0.16	0.58	9.50	3,989
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.59	2.35	27.9	0.00	0.00	7.72	7.72	0.00	1.81	1.81	—	7,227	7,227	0.19	0.32	0.69	7,328
Vendor	0.12	4.72	2.02	0.03	0.05	1.04	1.10	0.05	0.29	0.34	—	3,807	3,807	0.16	0.58	0.25	3,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.64	8.54	0.00	0.00	2.38	2.38	0.00	0.56	0.56	—	2,292	2,292	0.05	0.10	3.59	2,326
Vendor	0.04	1.46	0.63	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,199	1,199	0.05	0.18	1.30	1,256
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	1.56	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	380	380	0.01	0.02	0.59	385
Vendor	0.01	0.27	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	199	199	0.01	0.03	0.21	208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.05	1.50	< 0.005	0.04	—	0.04	0.04	—	0.04	—	228	228	0.01	< 0.005	—	228
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.7	37.7	< 0.005	< 0.005	—	37.8
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.42	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.03	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	2.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.05	1.50	< 0.005	0.04	—	0.04	0.04	—	0.04	—	228	228	0.01	< 0.005	—	228
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.7	37.7	< 0.005	< 0.005	—	37.8
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.42	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.03	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	2.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	565	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	565	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Architectural Coatings	85.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.33	3.33	< 0.005	< 0.005	—	3.34
Architectural Coatings	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.35	6.31	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,558	1,558	0.02	0.06	5.28	1,582
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.47	5.59	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,445	1,445	0.04	0.06	0.14	1,466
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.82	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	219	219	< 0.005	0.01	0.34	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	0.06	36.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	565	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	565	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Architectural Coatings	85.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.33	3.33	< 0.005	< 0.005	—	3.34
Architectural Coatings	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.35	6.31	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,558	1,558	0.02	0.06	5.28	1,582
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.47	5.59	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,445	1,445	0.04	0.06	0.14	1,466
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.82	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	219	219	< 0.005	0.01	0.34	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	0.06	36.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	1,039	1,039	0.17	0.02	—	1,049
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,365	1,365	0.22	0.03	—	1,379
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	391	391	0.06	0.01	—	395
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,795	2,795	0.45	0.05	—	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	1,039	1,039	0.17	0.02	—	1,049

Apartmen Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,365	1,365	0.22	0.03	—	1,379
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	391	391	0.06	0.01	—	395
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,795	2,795	0.45	0.05	—	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	172	172	0.03	< 0.005	—	174
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	226	226	0.04	< 0.005	—	228
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	64.7	64.7	0.01	< 0.005	—	65.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	463	463	0.07	0.01	—	467

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	1,039	1,039	0.17	0.02	—	1,049
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,365	1,365	0.22	0.03	—	1,379
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	391	391	0.06	0.01	—	395
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,795	2,795	0.45	0.05	—	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	1,039	1,039	0.17	0.02	—	1,049
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,365	1,365	0.22	0.03	—	1,379

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	391	391	0.06	0.01	—	395
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,795	2,795	0.45	0.05	—	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	172	172	0.03	< 0.005	—	174
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	226	226	0.04	< 0.005	—	228
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	64.7	64.7	0.01	< 0.005	—	65.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	463	463	0.07	0.01	—	467

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.07	1.21	0.52	0.01	0.10	—	0.10	0.10	—	0.10	—	1,538	1,538	0.14	< 0.005	—	1,542
Apartments Mid Rise	0.09	1.59	0.68	0.01	0.13	—	0.13	0.13	—	0.13	—	2,020	2,020	0.18	< 0.005	—	2,026
Regional Shopping Center	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	150	150	0.01	< 0.005	—	150
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	3,708	3,708	0.33	0.01	—	3,718
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.07	1.21	0.52	0.01	0.10	—	0.10	0.10	—	0.10	—	1,538	1,538	0.14	< 0.005	—	1,542
Apartments Mid Rise	0.09	1.59	0.68	0.01	0.13	—	0.13	0.13	—	0.13	—	2,020	2,020	0.18	< 0.005	—	2,026
Regional Shopping Center	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	150	150	0.01	< 0.005	—	150

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	3,708	3,708	0.33	0.01	—	3,718
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.01	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	255	255	0.02	< 0.005	—	255
Apartments Mid Rise	0.02	0.29	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	334	334	0.03	< 0.005	—	335
Regional Shopping Center	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8	24.8	< 0.005	< 0.005	—	24.8
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.53	0.24	< 0.005	0.04	—	0.04	0.04	—	0.04	—	614	614	0.05	< 0.005	—	616

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.07	1.21	0.52	0.01	0.10	—	0.10	0.10	—	0.10	—	1,538	1,538	0.14	< 0.005	—	1,542
Apartments Mid Rise	0.09	1.59	0.68	0.01	0.13	—	0.13	0.13	—	0.13	—	2,020	2,020	0.18	< 0.005	—	2,026
Regional Shopping Center	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	150	150	0.01	< 0.005	—	150
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	3,708	3,708	0.33	0.01	—	3,718
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.07	1.21	0.52	0.01	0.10	—	0.10	0.10	—	0.10	—	1,538	1,538	0.14	< 0.005	—	1,542
Apartments Mid Rise	0.09	1.59	0.68	0.01	0.13	—	0.13	0.13	—	0.13	—	2,020	2,020	0.18	< 0.005	—	2,026
Regional Shopping Center	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	150	150	0.01	< 0.005	—	150

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	2.93	1.30	0.02	0.24	—	0.24	0.24	—	0.24	—	3,708	3,708	0.33	0.01	—	3,718
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.01	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	255	255	0.02	< 0.005	—	255
Apartments Mid Rise	0.02	0.29	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	334	334	0.03	< 0.005	—	335
Regional Shopping Center	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8	24.8	< 0.005	< 0.005	—	24.8
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.53	0.24	< 0.005	0.04	—	0.04	0.04	—	0.04	—	614	614	0.05	< 0.005	—	616

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.73	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Consumer Products	40.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	6.79	0.69	75.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	206	206	0.01	< 0.005	—	207
Total	53.1	13.1	80.8	0.08	1.04	—	1.04	1.04	—	1.04	0.00	16,004	16,004	0.31	0.03	—	16,021
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.73	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Consumer Products	40.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	46.3	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	64.5	64.5	< 0.005	< 0.005	—	64.6
Consumer Products	7.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.61	0.06	6.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Total	8.92	0.12	6.82	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	81.3	81.3	< 0.005	< 0.005	—	81.4

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.73	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Consumer Products	40.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	6.79	0.69	75.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	206	206	0.01	< 0.005	—	207
Total	53.1	13.1	80.8	0.08	1.04	—	1.04	1.04	—	1.04	0.00	16,004	16,004	0.31	0.03	—	16,021
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.73	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Consumer Products	40.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	5.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	46.3	12.4	5.30	0.08	1.01	—	1.01	1.01	—	1.01	0.00	15,798	15,798	0.30	0.03	—	15,814
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	64.5	64.5	< 0.005	< 0.005	—	64.6
Consumer Products	7.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.61	0.06	6.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Total	8.92	0.12	6.82	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	81.3	81.3	< 0.005	< 0.005	—	81.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	37.1	70.0	107	3.81	0.09	—	230
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	48.7	92.0	141	5.01	0.12	—	302

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	11.6	22.0	33.6	1.20	0.03	—	72.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	604
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	37.1	70.0	107	3.81	0.09	—	230
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	48.7	92.0	141	5.01	0.12	—	302
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	11.6	22.0	33.6	1.20	0.03	—	72.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	604
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/To High Rise	—	—	—	—	—	—	—	—	—	—	6.14	11.6	17.7	0.63	0.02	—	38.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	8.07	15.2	23.3	0.83	0.02	—	50.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	1.92	3.63	5.56	0.20	< 0.005	—	11.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	16.1	30.5	46.6	1.66	0.04	—	100.0

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	31.5	59.5	91.1	3.24	0.08	—	195
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	41.4	78.2	120	4.26	0.10	—	257
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	9.88	18.7	28.5	1.02	0.02	—	61.2

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.52	0.20	—	513
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	31.5	59.5	91.1	3.24	0.08	—	195
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	41.4	78.2	120	4.26	0.10	—	257
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	9.88	18.7	28.5	1.02	0.02	—	61.2
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.52	0.20	—	513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	5.22	9.86	15.1	0.54	0.01	—	32.3

Apartment Mid Rise	—	—	—	—	—	—	—	—	—	—	6.86	12.9	19.8	0.71	0.02	—	42.5
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	1.64	3.09	4.73	0.17	< 0.005	—	10.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	13.7	25.9	39.6	1.41	0.03	—	85.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	285	0.00	285	28.5	0.00	—	998
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	46.3	0.00	46.3	4.63	0.00	—	162

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	549	0.00	549	54.9	0.00	—	1,920
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	285	0.00	285	28.5	0.00	—	998
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	46.3	0.00	46.3	4.63	0.00	—	162
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	549	0.00	549	54.9	0.00	—	1,920
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	36.0	0.00	36.0	3.59	0.00	—	126

Apartment Mid Rise	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.72	0.00	—	165
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	7.67	0.00	7.67	0.77	0.00	—	26.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	32.6	0.00	32.6	3.26	0.00	—	114
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	42.8	0.00	42.8	4.28	0.00	—	150
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	6.95	0.00	6.95	0.69	0.00	—	24.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	32.6	0.00	32.6	3.26	0.00	—	114
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	42.8	0.00	42.8	4.28	0.00	—	150
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	6.95	0.00	6.95	0.69	0.00	—	24.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	82.3	0.00	82.3	8.23	0.00	—	288
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	5.39	0.00	5.39	0.54	0.00	—	18.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	7.09	0.00	7.09	0.71	0.00	—	24.8

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	13.6	0.00	13.6	1.36	0.00	—	47.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.20	6.20
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.20	6.20
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.03	1.03
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.20	6.20

Apartment Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.20	6.20
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.3	13.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.03	1.03
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequeste	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2024	3/11/2024	5.00	50.0	—
Site Preparation	Site Preparation	3/12/2024	4/23/2024	5.00	30.0	—
Grading	Grading	4/24/2024	8/7/2024	5.00	75.0	—
Building Construction	Building Construction	8/8/2024	6/10/2027	5.00	740	—
Paving	Paving	6/11/2027	8/27/2027	5.00	55.0	—
Architectural Coating	Architectural Coating	8/28/2027	11/13/2027	5.00	55.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	934	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	148	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	187	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	934	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	148	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2

Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	187	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	4,330,817	1,443,606	122,846	40,949	27,417

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	45.0	0.00	—
Grading	—	—	225	0.00	—
Paving	0.00	0.00	0.00	0.00	10.5

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse High Rise	—	0%
Apartments Mid Rise	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.00	100%
Parking Lot	0.00	100%
Other Asphalt Surfaces	10.5	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	193,155	193,155	193,155	70,501,575

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	189,341	189,341	189,341	69,109,311

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	278
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	267
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	365
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	351
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	278
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	267
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	365
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	351
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
5714276.625	1,904,759	122,846	40,949	27,417

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse High Rise	1,859,241	204	0.0330	0.0040	4,798,219
Apartments Mid Rise	2,442,599	204	0.0330	0.0040	6,303,715
Regional Shopping Center	699,808	204	0.0330	0.0040	466,696
Enclosed Parking with Elevator	0.00	204	0.0330	0.0040	0.00
Parking Lot	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse High Rise	1,859,241	204	0.0330	0.0040	4,798,219
Apartments Mid Rise	2,442,599	204	0.0330	0.0040	6,303,715
Regional Shopping Center	699,808	204	0.0330	0.0040	466,696
Enclosed Parking with Elevator	0.00	204	0.0330	0.0040	0.00
Parking Lot	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse High Rise	19,353,413	0.00
Apartments Mid Rise	25,425,769	0.00
Regional Shopping Center	6,066,317	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse High Rise	16,450,401	0.00
Apartments Mid Rise	21,611,903	0.00
Regional Shopping Center	5,156,370	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00

Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse High Rise	403	—
Apartments Mid Rise	529	—
Regional Shopping Center	86.0	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse High Rise	60.5	—
Apartments Mid Rise	79.4	—
Regional Shopping Center	12.9	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	16.2	annual days of extreme heat

Extreme Precipitation	2.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	20.1
AQ-DPM	8.90
Drinking Water	54.0
Lead Risk Housing	4.86
Pesticides	52.7

Toxic Releases	31.9
Traffic	89.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	7.19
Haz Waste Facilities/Generators	76.8
Impaired Water Bodies	23.9
Solid Waste	83.3
Sensitive Population	—
Asthma	24.3
Cardio-vascular	34.2
Low Birth Weights	40.9
Socioeconomic Factor Indicators	—
Education	12.0
Housing	1.29
Linguistic	30.7
Poverty	8.68
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	88.28435776
Employed	88.70781471
Median HI	88.66931862
Education	—

Bachelor's or higher	64.48094444
High school enrollment	13.5249583
Preschool enrollment	95.7141024
Transportation	—
Auto Access	67.17567047
Active commuting	50.09624022
Social	—
2-parent households	97.21544976
Voting	59.77158989
Neighborhood	—
Alcohol availability	97.0101373
Park access	44.4629796
Retail density	7.442576671
Supermarket access	10.58642371
Tree canopy	22.91800334
Housing	—
Homeownership	95.99640703
Housing habitability	93.16052868
Low-inc homeowner severe housing cost burden	71.74387271
Low-inc renter severe housing cost burden	74.51559091
Uncrowded housing	79.21211344
Health Outcomes	—
Insured adults	80.68779674
Arthritis	73.2
Asthma ER Admissions	67.9
High Blood Pressure	95.4
Cancer (excluding skin)	45.0

Asthma	61.7
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	91.2
Life Expectancy at Birth	21.4
Cognitively Disabled	80.8
Physically Disabled	85.5
Heart Attack ER Admissions	58.5
Mental Health Not Good	68.6
Chronic Kidney Disease	85.5
Obesity	69.5
Pedestrian Injuries	19.6
Physical Health Not Good	82.3
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	5.9
Current Smoker	64.6
No Leisure Time for Physical Activity	85.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	88.9
English Speaking	71.6
Foreign-born	23.2
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—

Impervious Surface Cover	69.4
Traffic Density	76.5
Traffic Access	23.0
Other Indices	—
Hardship	15.1
Other Decision Support	—
2016 Voting	60.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	88.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Based on applicant provided information
Operations: Architectural Coatings	Based on BAAQMD Reg 8 Rule 3
Operations: Vehicle Data	Based on Transportation Technical Memo. It is assumed peak hour trips would be 10 percent of total average daily trips

Appendix B-3

No Net Loss Parcels – Decrease in Commercial Use

ISNP No Net Loss Rezoning - Opt 2 Decreased Commercial Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	ISNP No Net Loss Rezoning - Opt 2 Decreased Commercial
Construction Start Date	1/1/2025
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	33.2
Location	37.70567461965193, -121.80009118943576
County	Alameda
City	Livermore
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1677
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.24

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

General Office Building	1,531	1000sqft	35.2	1,531,486	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	291	291	31.7	35.5	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,327	13,327	0.44	1.15	34.8	13,716
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	291	291	31.7	33.4	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,025	13,025	0.47	1.16	0.90	13,385
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.9	44.7	17.5	22.5	0.05	0.64	5.19	5.83	0.59	2.00	2.59	—	9,186	9,186	0.32	0.82	10.0	9,449
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.20	8.16	3.20	4.11	0.01	0.12	0.95	1.06	0.11	0.36	0.47	—	1,521	1,521	0.05	0.14	1.66	1,564

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	35.5	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,327	13,327	0.44	1.15	34.8	13,716
2026	3.39	2.75	18.7	34.2	0.07	0.47	5.82	6.29	0.44	1.44	1.88	—	13,133	13,133	0.44	1.15	32.5	13,520
2027	3.27	2.64	17.8	32.8	0.07	0.43	5.82	6.25	0.40	1.44	1.84	—	12,925	12,925	0.43	1.15	29.9	13,309
2028	291	291	17.1	31.8	0.07	0.39	5.82	6.21	0.37	1.44	1.81	—	12,701	12,701	0.43	0.97	27.4	13,029
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	33.4	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,025	13,025	0.47	1.16	0.90	13,385
2026	3.33	2.68	19.5	32.1	0.07	0.47	5.82	6.29	0.44	1.44	1.88	—	12,837	12,837	0.46	1.16	0.85	13,196
2027	3.23	2.59	18.6	31.0	0.07	0.43	5.82	6.25	0.40	1.44	1.84	—	12,636	12,636	0.46	1.16	0.78	12,995
2028	291	291	17.7	30.0	0.07	0.39	5.82	6.21	0.37	1.44	1.81	—	12,417	12,417	0.45	1.12	0.71	12,761
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.51	2.11	17.5	20.6	0.04	0.64	5.19	5.83	0.59	2.00	2.59	—	6,025	6,025	0.22	0.35	4.39	6,139
2026	2.38	1.91	13.7	22.5	0.05	0.34	4.07	4.41	0.32	1.01	1.32	—	9,186	9,186	0.32	0.82	10.0	9,449
2027	2.30	1.84	13.1	21.8	0.05	0.31	4.07	4.38	0.29	1.01	1.29	—	9,042	9,042	0.32	0.82	9.26	9,304
2028	44.9	44.7	6.70	11.5	0.02	0.17	1.95	2.11	0.15	0.48	0.63	—	4,321	4,321	0.15	0.36	3.94	4,435
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	0.39	3.20	3.76	0.01	0.12	0.95	1.06	0.11	0.36	0.47	—	997	997	0.04	0.06	0.73	1,016
2026	0.43	0.35	2.50	4.11	0.01	0.06	0.74	0.80	0.06	0.18	0.24	—	1,521	1,521	0.05	0.14	1.66	1,564
2027	0.42	0.34	2.38	3.98	0.01	0.06	0.74	0.80	0.05	0.18	0.24	—	1,497	1,497	0.05	0.14	1.53	1,540
2028	8.20	8.16	1.22	2.10	< 0.005	0.03	0.36	0.39	0.03	0.09	0.12	—	715	715	0.02	0.06	0.65	734

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	35.5	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,327	13,327	0.44	1.15	34.8	13,716
2026	3.39	2.75	18.7	34.2	0.07	0.47	5.82	6.29	0.44	1.44	1.88	—	13,133	13,133	0.44	1.15	32.5	13,520
2027	3.27	2.64	17.8	32.8	0.07	0.43	5.82	6.25	0.40	1.44	1.84	—	12,925	12,925	0.43	1.15	29.9	13,309
2028	291	291	17.1	31.8	0.07	0.39	5.82	6.21	0.37	1.44	1.81	—	12,701	12,701	0.43	0.97	27.4	13,029
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	33.4	0.07	1.37	19.8	21.2	1.26	10.1	11.4	—	13,025	13,025	0.47	1.16	0.90	13,385
2026	3.33	2.68	19.5	32.1	0.07	0.47	5.82	6.29	0.44	1.44	1.88	—	12,837	12,837	0.46	1.16	0.85	13,196
2027	3.23	2.59	18.6	31.0	0.07	0.43	5.82	6.25	0.40	1.44	1.84	—	12,636	12,636	0.46	1.16	0.78	12,995
2028	291	291	17.7	30.0	0.07	0.39	5.82	6.21	0.37	1.44	1.81	—	12,417	12,417	0.45	1.12	0.71	12,761
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.51	2.11	17.5	20.6	0.04	0.64	5.19	5.83	0.59	2.00	2.59	—	6,025	6,025	0.22	0.35	4.39	6,139
2026	2.38	1.91	13.7	22.5	0.05	0.34	4.07	4.41	0.32	1.01	1.32	—	9,186	9,186	0.32	0.82	10.0	9,449
2027	2.30	1.84	13.1	21.8	0.05	0.31	4.07	4.38	0.29	1.01	1.29	—	9,042	9,042	0.32	0.82	9.26	9,304
2028	44.9	44.7	6.70	11.5	0.02	0.17	1.95	2.11	0.15	0.48	0.63	—	4,321	4,321	0.15	0.36	3.94	4,435
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	0.39	3.20	3.76	0.01	0.12	0.95	1.06	0.11	0.36	0.47	—	997	997	0.04	0.06	0.73	1,016
2026	0.43	0.35	2.50	4.11	0.01	0.06	0.74	0.80	0.06	0.18	0.24	—	1,521	1,521	0.05	0.14	1.66	1,564
2027	0.42	0.34	2.38	3.98	0.01	0.06	0.74	0.80	0.05	0.18	0.24	—	1,497	1,497	0.05	0.14	1.53	1,540
2028	8.20	8.16	1.22	2.10	< 0.005	0.03	0.36	0.39	0.03	0.09	0.12	—	715	715	0.02	0.06	0.65	734

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	87.9	82.9	42.4	467	1.29	1.39	135	137	1.32	34.3	35.6	1,289	156,361	157,650	138	6.33	67.9	163,047
Mit.	87.9	82.9	42.4	467	1.29	1.39	135	137	1.32	34.3	35.6	558	156,213	156,771	64.5	6.13	67.9	160,279
% Reduced	—	—	—	—	—	—	—	—	—	—	—	57%	< 0.5%	1%	53%	3%	—	2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	75.2	71.0	47.1	362	1.22	1.27	135	136	1.24	34.3	35.5	1,289	148,810	150,099	138	6.73	5.39	155,559
Mit.	75.2	71.0	47.1	362	1.22	1.27	135	136	1.24	34.3	35.5	558	148,663	149,221	64.7	6.53	5.39	152,792
% Reduced	—	—	—	—	—	—	—	—	—	—	—	57%	< 0.5%	1%	53%	3%	—	2%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	70.8	67.1	36.6	302	0.94	1.20	99.5	101	1.16	25.2	26.4	1,289	120,224	121,513	137	5.36	24.6	126,560
Mit.	70.8	67.1	36.6	302	0.94	1.20	99.5	101	1.16	25.2	26.4	558	120,076	120,635	63.7	5.16	24.6	123,792
% Reduced	—	—	—	—	—	—	—	—	—	—	—	57%	< 0.5%	1%	53%	4%	—	2%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	12.2	6.67	55.2	0.17	0.22	18.2	18.4	0.21	4.61	4.82	213	19,904	20,118	22.7	0.89	4.07	20,953
Mit.	12.9	12.2	6.67	55.2	0.17	0.22	18.2	18.4	0.21	4.61	4.82	92.5	19,880	19,972	10.6	0.86	4.07	20,495
% Reduced	—	—	—	—	—	—	—	—	—	—	—	57%	< 0.5%	1%	53%	4%	—	2%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Area	45.7	44.8	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	87.9	82.9	42.4	467	1.29	1.39	135	137	1.32	34.3	35.6	1,289	156,361	157,650	138	6.33	67.9	163,047
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	119,651
Area	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	75.2	71.0	47.1	362	1.22	1.27	135	136	1.24	34.3	35.5	1,289	148,810	150,099	138	6.73	5.39	155,559
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.0	27.3	26.5	261	0.88	0.39	99.5	99.9	0.37	25.2	25.6	—	89,329	89,329	2.68	3.69	20.8	90,516
Area	39.7	39.2	0.28	32.8	< 0.005	0.06	—	0.06	0.04	—	0.04	—	135	135	0.01	< 0.005	—	136
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3

Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	70.8	67.1	36.6	302	0.94	1.20	99.5	101	1.16	25.2	26.4	1,289	120,224	121,513	137	5.36	24.6	126,560
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986
Area	7.24	7.16	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4
Energy	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	4,930	4,930	0.66	0.06	—	4,965
Water	—	—	—	—	—	—	—	—	—	—	—	86.4	163	249	8.88	0.21	—	535
Waste	—	—	—	—	—	—	—	—	—	—	—	127	0.00	127	12.7	0.00	—	445
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62
Total	12.9	12.2	6.67	55.2	0.17	0.22	18.2	18.4	0.21	4.61	4.82	213	19,904	20,118	22.7	0.89	4.07	20,953

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Area	45.7	44.8	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Waste	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	87.9	82.9	42.4	467	1.29	1.39	135	137	1.32	34.3	35.6	558	156,213	156,771	64.5	6.13	67.9	160,279
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	1

Area	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Waste	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	75.2	71.0	47.1	362	1.22	1.27	135	136	1.24	34.3	35.5	558	148,663	149,221	64.7	6.53	5.39	152,792
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.0	27.3	26.5	261	0.88	0.39	99.5	99.9	0.37	25.2	25.6	—	89,329	89,329	2.68	3.69	20.8	90,516
Area	39.7	39.2	0.28	32.8	< 0.005	0.06	—	0.06	0.04	—	0.04	—	135	135	0.01	< 0.005	—	136
Energy	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	29,775	29,775	3.96	0.38	—	29,986
Water	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Waste	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	70.8	67.1	36.6	302	0.94	1.20	99.5	101	1.16	25.2	26.4	558	120,076	120,635	63.7	5.16	24.6	123,792
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986
Area	7.24	7.16	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4
Energy	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	4,930	4,930	0.66	0.06	—	4,965
Water	—	—	—	—	—	—	—	—	—	—	—	73.4	139	212	7.55	0.18	—	455
Waste	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62
Total	12.9	12.2	6.67	55.2	0.17	0.22	18.2	18.4	0.21	4.61	4.82	92.5	19,880	19,972	10.6	0.86	4.07	20,495

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.33	3.04	2.73	< 0.005	0.13	—	0.13	0.12	—	0.12	—	469	469	0.02	< 0.005	—	471
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	0.01	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.33	3.04	2.73	< 0.005	0.13	—	0.13	0.12	—	0.12	—	469	469	0.02	< 0.005	—	471
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	0.01	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.27	2.60	2.48	< 0.005	0.11	—	0.11	0.10	—	0.10	—	435	435	0.02	< 0.005	—	437
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.1	72.1	< 0.005	< 0.005	—	72.3
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	< 0.005	0.01	0.60	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	141	141	< 0.005	0.01	0.02	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.60	2.48	< 0.005	0.11	—	0.11	0.10	—	0.10	—	435	435	0.02	< 0.005	—	437
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.1	72.1	< 0.005	< 0.005	—	72.3
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	< 0.005	0.01	0.60	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	141	141	< 0.005	0.01	0.02	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.66	6.10	5.82	0.01	0.25	—	0.25	0.23	—	0.23	—	1,356	1,356	0.06	0.01	—	1,361
Dust From Material Movement	—	—	—	—	—	—	1.89	1.89	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.06	< 0.005	0.05	—	0.05	0.04	—	0.04	—	224	224	0.01	< 0.005	—	225
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.77	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.69	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	0.01	5.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	6.10	5.82	0.01	0.25	—	0.25	0.23	—	0.23	—	1,356	1,356	0.06	0.01	—	1,361
Dust From Material Movement	—	—	—	—	—	—	1.89	1.89	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	0.12	1.11	1.06	< 0.005	0.05	—	0.05	0.04	—	0.04	—	224	224	0.01	< 0.005	—	225
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.77	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.69	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	0.01	5.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.70	0.01	0.12	—	0.12	0.11	—	0.11	—	680	680	0.03	0.01	—	683
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.70	1.67	1.07	18.8	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,244	4,244	0.08	0.16	16.8	4,310
Vendor	0.54	0.21	8.19	3.59	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,686	6,686	0.27	0.97	17.9	7,000
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.60	1.53	16.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,937	3,937	0.11	0.17	0.44	3,990
Vendor	0.48	0.20	8.64	3.69	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,691	6,691	0.27	0.97	0.47	6,988
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.39	4.58	0.00	0.00	1.13	1.13	0.00	0.26	0.26	—	1,125	1,125	0.03	0.05	2.07	1,142
Vendor	0.14	0.06	2.40	1.03	0.01	0.03	0.49	0.52	0.03	0.14	0.16	—	1,898	1,898	0.08	0.28	2.21	1,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.84	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.34	189
Vendor	0.03	0.01	0.44	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	314	314	0.01	0.05	0.37	329
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.70	0.01	0.12	—	0.12	0.11	—	0.11	—	680	680	0.03	0.01	—	683
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.70	1.67	1.07	18.8	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,244	4,244	0.08	0.16	16.8	4,310
Vendor	0.54	0.21	8.19	3.59	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,686	6,686	0.27	0.97	17.9	7,000
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.60	1.53	16.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,937	3,937	0.11	0.17	0.44	3,990
Vendor	0.48	0.20	8.64	3.69	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,691	6,691	0.27	0.97	0.47	6,988
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.39	4.58	0.00	0.00	1.13	1.13	0.00	0.26	0.26	—	1,125	1,125	0.03	0.05	2.07	1,142
Vendor	0.14	0.06	2.40	1.03	0.01	0.03	0.49	0.52	0.03	0.14	0.16	—	1,898	1,898	0.08	0.28	2.21	1,984

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.84	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.34	189
Vendor	0.03	0.01	0.44	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	314	314	0.01	0.05	0.37	329
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.62	1.47	1.05	17.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,163	4,163	0.08	0.16	15.3	4,228
Vendor	0.49	0.21	7.84	3.48	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,572	6,572	0.27	0.97	17.2	6,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.41	1.38	15.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,863	3,863	0.10	0.17	0.40	3,916
Vendor	0.47	0.20	8.29	3.54	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,578	6,578	0.27	0.97	0.45	6,875
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.12	1.00	0.87	10.8	0.00	0.00	2.83	2.83	0.00	0.66	0.66	—	2,778	2,778	0.06	0.11	4.73	2,818
Vendor	0.35	0.15	5.81	2.49	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,696	4,696	0.19	0.70	5.32	4,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.16	1.97	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	460	460	0.01	0.02	0.78	466
Vendor	0.06	0.03	1.06	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	777	777	0.03	0.12	0.88	813
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.62	1.47	1.05	17.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,163	4,163	0.08	0.16	15.3	4,228
Vendor	0.49	0.21	7.84	3.48	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,572	6,572	0.27	0.97	17.2	6,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.41	1.38	15.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,863	3,863	0.10	0.17	0.40	3,916
Vendor	0.47	0.20	8.29	3.54	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,578	6,578	0.27	0.97	0.45	6,875
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.12	1.00	0.87	10.8	0.00	0.00	2.83	2.83	0.00	0.66	0.66	—	2,778	2,778	0.06	0.11	4.73	2,818
Vendor	0.35	0.15	5.81	2.49	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,696	4,696	0.19	0.70	5.32	4,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.16	1.97	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	460	460	0.01	0.02	0.78	466
Vendor	0.06	0.03	1.06	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	777	777	0.03	0.12	0.88	813
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.56	1.40	0.91	16.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,086	4,086	0.06	0.16	13.8	4,149
Vendor	0.48	0.21	7.54	3.33	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,442	6,442	0.27	0.97	16.1	6,755
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.36	1.23	14.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,791	3,791	0.10	0.17	0.36	3,845
Vendor	0.47	0.20	8.00	3.43	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,447	6,447	0.27	0.97	0.42	6,745
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.08	0.95	0.77	10.2	0.00	0.00	2.83	2.83	0.00	0.66	0.66	—	2,726	2,726	0.06	0.11	4.27	2,766
Vendor	0.34	0.15	5.59	2.41	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,603	4,603	0.19	0.70	4.99	4,820

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.14	1.85	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	451	451	0.01	0.02	0.71	458
Vendor	0.06	0.03	1.02	0.44	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	762	762	0.03	0.12	0.83	798
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.56	1.40	0.91	16.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,086	4,086	0.06	0.16	13.8	4,149
Vendor	0.48	0.21	7.54	3.33	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,442	6,442	0.27	0.97	16.1	6,755
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.36	1.23	14.7	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,791	3,791	0.10	0.17	0.36	3,845
Vendor	0.47	0.20	8.00	3.43	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,447	6,447	0.27	0.97	0.42	6,745
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.08	0.95	0.77	10.2	0.00	0.00	2.83	2.83	0.00	0.66	0.66	—	2,726	2,726	0.06	0.11	4.27	2,766
Vendor	0.34	0.15	5.59	2.41	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,603	4,603	0.19	0.70	4.99	4,820
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.14	1.85	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	451	451	0.01	0.02	0.71	458
Vendor	0.06	0.03	1.02	0.44	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	762	762	0.03	0.12	0.83	798
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	C

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.31	2.83	4.10	0.01	0.10	—	0.10	0.09	—	0.09	—	760	760	0.03	0.01	—	763
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.75	< 0.005	0.02	—	0.02	0.02	—	0.02	—	126	126	0.01	< 0.005	—	126
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.37	0.90	15.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,014	4,014	0.06	0.03	12.4	4,038
Vendor	0.44	0.20	7.27	3.22	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,289	6,289	0.26	0.92	15.0	6,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.48	1.31	1.08	13.8	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,724	3,724	0.09	0.17	0.32	3,777
Vendor	0.43	0.20	7.68	3.32	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,295	6,295	0.26	0.93	0.39	6,578
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	0.34	4.23	0.00	0.00	1.26	1.26	0.00	0.29	0.29	—	1,189	1,189	0.02	0.05	1.70	1,206
Vendor	0.14	0.06	2.38	1.04	0.01	0.03	0.55	0.58	0.03	0.15	0.18	—	1,995	1,995	0.08	0.29	2.05	2,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.77	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	197	197	< 0.005	0.01	0.28	200
Vendor	0.02	0.01	0.43	0.19	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	330	330	0.01	0.05	0.34	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.31	2.83	4.10	0.01	0.10	—	0.10	0.09	—	0.09	—	760	760	0.03	0.01	—	763
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.75	< 0.005	0.02	—	0.02	0.02	—	0.02	—	126	126	0.01	< 0.005	—	126
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.37	0.90	15.6	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	4,014	4,014	0.06	0.03	12.4	4,038
Vendor	0.44	0.20	7.27	3.22	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,289	6,289	0.26	0.92	15.0	6,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.48	1.31	1.08	13.8	0.00	0.00	4.05	4.05	0.00	0.95	0.95	—	3,724	3,724	0.09	0.17	0.32	3,777
Vendor	0.43	0.20	7.68	3.32	0.05	0.09	1.77	1.86	0.09	0.49	0.58	—	6,295	6,295	0.26	0.93	0.39	6,578
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	0.34	4.23	0.00	0.00	1.26	1.26	0.00	0.29	0.29	—	1,189	1,189	0.02	0.05	1.70	1,206
Vendor	0.14	0.06	2.38	1.04	0.01	0.03	0.55	0.58	0.03	0.15	0.18	—	1,995	1,995	0.08	0.29	2.05	2,086

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	0.77	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	197	197	< 0.005	0.01	0.28	200
Vendor	0.02	0.01	0.43	0.19	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	330	330	0.01	0.05	0.34	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	1.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	228	228	0.01	< 0.005	—	228
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.7	37.7	< 0.005	< 0.005	—	37.8

Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	< 0.005	0.38	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	17.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	1.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	228	228	0.01	< 0.005	—	228
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.7	37.7	< 0.005	< 0.005	—	37.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	< 0.005	0.38	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	17.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	290	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	290	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Architectural Coatings	43.8	43.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.33	3.33	< 0.005	< 0.005	—	3.34
Architectural Coatings	7.99	7.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.18	3.12	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	803	803	0.01	0.01	2.49	808
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.26	0.22	2.75	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	745	745	0.02	0.03	0.06	755
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.16	1

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	290	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	290	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Architectural Coatings	43.8	43.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.33	3.33	< 0.005	< 0.005	—	3.34
Architectural Coatings	7.99	7.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.18	3.12	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	803	803	0.01	0.01	2.49	808
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.26	0.22	2.75	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	745	745	0.02	0.03	0.06	755
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.16	1

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Total	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	119,651
Total	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	119,651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986
Total	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Total	41.2	37.6	32.1	393	1.23	0.52	135	136	0.49	34.3	34.8	—	125,327	125,327	3.40	4.66	64.1	126,864
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	119,651
Total	40.3	36.7	37.3	354	1.16	0.52	135	136	0.49	34.3	34.8	—	118,050	118,050	3.68	5.06	1.66	119,651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986
Total	5.48	4.99	4.84	47.7	0.16	0.07	18.2	18.2	0.07	4.61	4.67	—	14,789	14,789	0.44	0.61	3.45	14,986

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.49	0.06	—	3,029

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297

Total	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,118	18,118	2.93	0.36	—	18,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.49	0.06	—	3,029

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Total	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Total	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	1,930	1,930	0.17	< 0.005	—	1,935
Total	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	1,930	1,930	0.17	< 0.005	—	1,935

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Total	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Total	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	11,657	11,657	1.03	0.02	—	11,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	1,930	1,930	0.17	< 0.005	—	1,935
Total	0.20	0.10	1.78	1.50	0.01	0.14	—	0.14	0.14	—	0.14	—	1,930	1,930	0.17	< 0.005	—	1,935

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	11.9	10.9	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Total	45.7	44.8	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.98	5.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	1.07	0.99	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4
Total	7.24	7.16	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	11.9	10.9	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Total	45.7	44.8	0.56	66.6	< 0.005	0.12	—	0.12	0.09	—	0.09	—	274	274	0.01	< 0.005	—	275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	33.8	33.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	5.98	5.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.07	0.99	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4
Total	7.24	7.16	0.05	5.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.4	22.4	< 0.005	< 0.005	—	22.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Total	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Total	—	—	—	—	—	—	—	—	—	—	—	522	985	1,507	53.6	1.29	—	3,232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	86.4	163	249	8.88	0.21	—	535
Total	—	—	—	—	—	—	—	—	—	—	—	86.4	163	249	8.88	0.21	—	535

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Total	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Total	—	—	—	—	—	—	—	—	—	—	—	443	837	1,281	45.6	1.10	—	2,747
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	73.4	139	212	7.55	0.18	—	455
Total	—	—	—	—	—	—	—	—	—	—	—	73.4	139	212	7.55	0.18	—	455

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Total	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Total	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,686
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	127	0.00	127	12.7	0.00	—	445
Total	—	—	—	—	—	—	—	—	—	—	—	127	0.00	127	12.7	0.00	—	445

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403

Total	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Total	—	—	—	—	—	—	—	—	—	—	—	115	0.00	115	11.5	0.00	—	403
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.7
Total	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.72	3.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62	0.62

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2025	3/12/2025	5.00	50.0	—
Site Preparation	Site Preparation	3/13/2025	4/24/2025	5.00	30.0	—

Grading	Grading	4/25/2025	8/8/2025	5.00	75.0	—
Building Construction	Building Construction	8/9/2025	6/10/2028	5.00	740	—
Paving	Paving	6/11/2028	8/27/2028	5.00	55.0	—
Architectural Coating	Architectural Coating	8/28/2028	11/13/2028	5.00	55.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	490	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	251	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	98.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	490	11.7	LDA,LDT1,LDT2

Building Construction	Vendor	251	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	98.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	2,297,229	765,743	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	45.0	0.00	—
Grading	—	—	225	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	16,601	3,385	1,072	4,560,579	191,406	39,023	12,360	52,581,469

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	16,601	3,385	1,072	4,560,579	191,406	39,023	12,360	52,581,469

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1221358.5	407,120	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	32,419,465	204	0.0330	0.0040	36,373,237

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	32,419,465	204	0.0330	0.0040	36,373,237

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	272,196,747	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	231,367,235	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

General Office Building	1,424	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	214	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	16.2	annual days of extreme heat
Extreme Precipitation	2.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	20.1
AQ-DPM	8.90
Drinking Water	54.0
Lead Risk Housing	4.86
Pesticides	52.7
Toxic Releases	31.9
Traffic	89.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	7.19

Haz Waste Facilities/Generators	76.8
Impaired Water Bodies	23.9
Solid Waste	83.3
Sensitive Population	—
Asthma	24.3
Cardio-vascular	34.2
Low Birth Weights	40.9
Socioeconomic Factor Indicators	—
Education	12.0
Housing	1.29
Linguistic	30.7
Poverty	8.68
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	88.28435776
Employed	88.70781471
Median HI	88.66931862
Education	—
Bachelor's or higher	64.48094444
High school enrollment	13.5249583
Preschool enrollment	95.7141024
Transportation	—
Auto Access	67.17567047

Active commuting	50.09624022
Social	—
2-parent households	97.21544976
Voting	59.77158989
Neighborhood	—
Alcohol availability	97.0101373
Park access	44.4629796
Retail density	7.442576671
Supermarket access	10.58642371
Tree canopy	22.91800334
Housing	—
Homeownership	95.99640703
Housing habitability	93.16052868
Low-inc homeowner severe housing cost burden	71.74387271
Low-inc renter severe housing cost burden	74.51559091
Uncrowded housing	79.21211344
Health Outcomes	—
Insured adults	80.68779674
Arthritis	73.2
Asthma ER Admissions	67.9
High Blood Pressure	95.4
Cancer (excluding skin)	45.0
Asthma	61.7
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	91.2
Life Expectancy at Birth	21.4

Cognitively Disabled	80.8
Physically Disabled	85.5
Heart Attack ER Admissions	58.5
Mental Health Not Good	68.6
Chronic Kidney Disease	85.5
Obesity	69.5
Pedestrian Injuries	19.6
Physical Health Not Good	82.3
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	5.9
Current Smoker	64.6
No Leisure Time for Physical Activity	85.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	88.9
English Speaking	71.6
Foreign-born	23.2
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.4
Traffic Density	76.5
Traffic Access	23.0
Other Indices	—
Hardship	15.1

Other Decision Support	—
2016 Voting	60.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	88.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Close to rail trip rates provided by Kittelson & Assoc, Inc.
Operations: Architectural Coatings	Based on BAAQMD Reg 8 Rule 3

Appendix B-4

No Net Loss Parcels – Increase in Residential Use

ISNP No Net Loss Rezoning - Opt 2 Increased Residential Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	ISNP No Net Loss Rezoning - Opt 2 Increased Residential
Construction Start Date	1/1/2025
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	33.2
Location	37.70567461965193, -121.80009118943576
County	Alameda
City	Livermore
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1677
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.24

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Apartments Low Rise	569	Dwelling Unit	35.6	603,140	0.00	0.00	1,605	—
Apartments Low Rise	862	Dwelling Unit	53.9	913,720	0.00	0.00	2,431	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	195	195	31.7	52.4	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	15,155	15,155	0.42	0.95	42.7	15,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	195	195	29.7	47.9	0.06	1.23	9.59	10.6	1.14	3.69	4.83	—	14,526	14,526	0.47	0.97	1.11	14,828
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	58.6	58.5	19.4	32.1	0.04	0.81	6.73	7.12	0.75	2.68	3.42	—	10,249	10,249	0.32	0.68	12.0	10,471
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	10.7	10.7	3.54	5.85	0.01	0.15	1.23	1.30	0.14	0.49	0.63	—	1,697	1,697	0.05	0.11	1.99	1,734

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	30.8	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	6,772	6,772	0.27	0.06	0.69	6,797
2026	4.99	4.28	16.8	52.4	0.05	0.44	9.59	10.0	0.41	2.29	2.70	—	15,155	15,155	0.42	0.95	42.7	15,491
2027	4.81	4.10	15.9	49.8	0.05	0.39	9.59	9.99	0.37	2.29	2.66	—	14,914	14,914	0.40	0.95	38.9	15,245
2028	4.66	3.99	15.3	47.7	0.05	0.36	9.59	9.95	0.33	2.29	2.63	—	14,669	14,669	0.39	0.65	35.3	14,908
2029	4.47	3.78	14.4	46.0	0.05	0.33	9.59	9.93	0.28	2.29	2.58	—	14,422	14,422	0.37	0.65	31.8	14,656
2030	4.08	3.69	14.0	44.3	0.05	0.29	9.59	9.88	0.27	2.29	2.56	—	14,175	14,175	0.34	0.62	28.4	14,397
2031	3.89	3.53	13.6	42.8	0.05	0.27	9.59	9.87	0.25	2.29	2.55	—	13,946	13,946	0.34	0.62	25.2	14,165
2032	195	195	6.02	10.2	0.01	0.20	1.70	1.71	0.18	0.40	0.41	—	1,720	1,720	0.06	0.01	3.19	1,728
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.87	3.26	29.7	29.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83	—	6,760	6,760	0.27	0.06	0.02	6,784
2026	4.89	4.16	27.3	47.9	0.06	1.12	9.59	10.5	1.03	3.69	4.72	—	14,526	14,526	0.47	0.97	1.11	14,828
2027	4.73	4.01	16.9	45.8	0.05	0.39	9.59	9.99	0.37	2.29	2.66	—	14,297	14,297	0.47	0.97	1.01	14,599
2028	4.57	3.88	15.9	43.9	0.05	0.36	9.59	9.95	0.33	2.29	2.63	—	14,064	14,064	0.44	0.94	0.91	14,356
2029	4.15	3.73	15.3	42.2	0.05	0.33	9.59	9.93	0.28	2.29	2.58	—	13,827	13,827	0.41	0.92	0.82	14,111
2030	3.99	3.57	14.6	40.5	0.05	0.29	9.59	9.88	0.27	2.29	2.56	—	13,590	13,590	0.39	0.89	0.74	13,865
2031	3.84	3.45	14.2	39.4	0.05	0.27	9.59	9.87	0.25	2.29	2.55	—	13,369	13,369	0.39	0.62	0.66	13,565
2032	195	195	13.5	38.1	0.05	0.25	9.59	9.85	0.23	2.29	2.53	—	13,148	13,148	0.39	0.59	0.58	13,335
2033	195	195	1.09	5.57	< 0.005	0.01	1.70	1.71	0.01	0.40	0.41	—	1,586	1,586	0.03	0.01	0.07	1,592

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.51	2.11	19.4	18.5	0.03	0.81	5.84	6.65	0.75	2.68	3.42	—	3,704	3,704	0.15	0.03	0.18	3,718
2026	3.30	2.80	13.9	30.6	0.04	0.42	6.71	7.12	0.39	1.83	2.21	—	9,204	9,204	0.29	0.54	10.4	9,383
2027	3.35	2.83	11.7	32.1	0.04	0.28	6.71	6.99	0.26	1.60	1.86	—	10,249	10,249	0.32	0.68	12.0	10,471
2028	3.24	2.76	11.3	30.8	0.04	0.26	6.73	6.98	0.24	1.61	1.85	—	10,109	10,109	0.30	0.66	10.9	10,323
2029	2.94	2.62	10.6	29.6	0.04	0.24	6.71	6.95	0.20	1.60	1.80	—	9,912	9,912	0.28	0.65	9.79	10,124
2030	2.83	2.53	10.4	28.5	0.04	0.21	6.71	6.92	0.19	1.60	1.79	—	9,743	9,743	0.28	0.44	8.76	9,890
2031	2.69	2.42	9.84	27.5	0.04	0.19	6.71	6.90	0.18	1.60	1.78	—	9,584	9,584	0.26	0.44	7.77	9,731
2032	58.6	58.5	3.69	9.06	0.01	0.09	1.62	1.71	0.08	0.38	0.47	—	2,492	2,492	0.07	0.08	1.55	2,518
2033	1.14	1.14	0.01	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	9.37	9.37	< 0.005	< 0.005	0.01	9.41
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	0.39	3.54	3.38	0.01	0.15	1.06	1.21	0.14	0.49	0.63	—	613	613	0.02	0.01	0.03	616
2026	0.60	0.51	2.54	5.58	0.01	0.08	1.22	1.30	0.07	0.33	0.40	—	1,524	1,524	0.05	0.09	1.72	1,553
2027	0.61	0.52	2.14	5.85	0.01	0.05	1.22	1.28	0.05	0.29	0.34	—	1,697	1,697	0.05	0.11	1.99	1,734
2028	0.59	0.50	2.06	5.62	0.01	0.05	1.23	1.27	0.04	0.29	0.34	—	1,674	1,674	0.05	0.11	1.81	1,709
2029	0.54	0.48	1.94	5.40	0.01	0.04	1.22	1.27	0.04	0.29	0.33	—	1,641	1,641	0.05	0.11	1.62	1,676
2030	0.52	0.46	1.89	5.19	0.01	0.04	1.22	1.26	0.03	0.29	0.33	—	1,613	1,613	0.05	0.07	1.45	1,637
2031	0.49	0.44	1.80	5.02	0.01	0.04	1.22	1.26	0.03	0.29	0.33	—	1,587	1,587	0.04	0.07	1.29	1,611
2032	10.7	10.7	0.67	1.65	< 0.005	0.02	0.30	0.31	0.02	0.07	0.09	—	413	413	0.01	0.01	0.26	417
2033	0.21	0.21	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.55	1.55	< 0.005	< 0.005	< 0.005	1.56

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	4.00	3.37	31.7	30.8	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	6,772	6,772	0.27	0.06	0.69	6,797
2026	4.99	4.28	16.8	52.4	0.05	0.44	9.59	10.0	0.41	2.29	2.70	—	15,155	15,155	0.42	0.95	42.7	15,491
2027	4.81	4.10	15.9	49.8	0.05	0.39	9.59	9.99	0.37	2.29	2.66	—	14,914	14,914	0.40	0.95	38.9	15,245
2028	4.66	3.99	15.3	47.7	0.05	0.36	9.59	9.95	0.33	2.29	2.63	—	14,669	14,669	0.39	0.65	35.3	14,908
2029	4.47	3.78	14.4	46.0	0.05	0.33	9.59	9.93	0.28	2.29	2.58	—	14,422	14,422	0.37	0.65	31.8	14,656
2030	4.08	3.69	14.0	44.3	0.05	0.29	9.59	9.88	0.27	2.29	2.56	—	14,175	14,175	0.34	0.62	28.4	14,397
2031	3.89	3.53	13.6	42.8	0.05	0.27	9.59	9.87	0.25	2.29	2.55	—	13,946	13,946	0.34	0.62	25.2	14,165
2032	195	195	6.02	10.2	0.01	0.20	1.70	1.71	0.18	0.40	0.41	—	1,720	1,720	0.06	0.01	3.19	1,728
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.87	3.26	29.7	29.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83	—	6,760	6,760	0.27	0.06	0.02	6,784
2026	4.89	4.16	27.3	47.9	0.06	1.12	9.59	10.5	1.03	3.69	4.72	—	14,526	14,526	0.47	0.97	1.11	14,828
2027	4.73	4.01	16.9	45.8	0.05	0.39	9.59	9.99	0.37	2.29	2.66	—	14,297	14,297	0.47	0.97	1.01	14,599
2028	4.57	3.88	15.9	43.9	0.05	0.36	9.59	9.95	0.33	2.29	2.63	—	14,064	14,064	0.44	0.94	0.91	14,356
2029	4.15	3.73	15.3	42.2	0.05	0.33	9.59	9.93	0.28	2.29	2.58	—	13,827	13,827	0.41	0.92	0.82	14,111
2030	3.99	3.57	14.6	40.5	0.05	0.29	9.59	9.88	0.27	2.29	2.56	—	13,590	13,590	0.39	0.89	0.74	13,865
2031	3.84	3.45	14.2	39.4	0.05	0.27	9.59	9.87	0.25	2.29	2.55	—	13,369	13,369	0.39	0.62	0.66	13,565
2032	195	195	13.5	38.1	0.05	0.25	9.59	9.85	0.23	2.29	2.53	—	13,148	13,148	0.39	0.59	0.58	13,335
2033	195	195	1.09	5.57	< 0.005	0.01	1.70	1.71	0.01	0.40	0.41	—	1,586	1,586	0.03	0.01	0.07	1,592
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.51	2.11	19.4	18.5	0.03	0.81	5.84	6.65	0.75	2.68	3.42	—	3,704	3,704	0.15	0.03	0.18	3,718
2026	3.30	2.80	13.9	30.6	0.04	0.42	6.71	7.12	0.39	1.83	2.21	—	9,204	9,204	0.29	0.54	10.4	9,383
2027	3.35	2.83	11.7	32.1	0.04	0.28	6.71	6.99	0.26	1.60	1.86	—	10,249	10,249	0.32	0.68	12.0	10,471
2028	3.24	2.76	11.3	30.8	0.04	0.26	6.73	6.98	0.24	1.61	1.85	—	10,109	10,109	0.30	0.66	10.9	10,323
2029	2.94	2.62	10.6	29.6	0.04	0.24	6.71	6.95	0.20	1.60	1.80	—	9,912	9,912	0.28	0.65	9.79	10,124
2030	2.83	2.53	10.4	28.5	0.04	0.21	6.71	6.92	0.19	1.60	1.79	—	9,743	9,743	0.28	0.44	8.76	9,890
2031	2.69	2.42	9.84	27.5	0.04	0.19	6.71	6.90	0.18	1.60	1.78	—	9,584	9,584	0.26	0.44	7.77	9

2032	58.6	58.5	3.69	9.06	0.01	0.09	1.62	1.71	0.08	0.38	0.47	—	2,492	2,492	0.07	0.08	1.55	2,518
2033	1.14	1.14	0.01	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	9.37	9.37	< 0.005	< 0.005	0.01	9.41
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	0.39	3.54	3.38	0.01	0.15	1.06	1.21	0.14	0.49	0.63	—	613	613	0.02	0.01	0.03	616
2026	0.60	0.51	2.54	5.58	0.01	0.08	1.22	1.30	0.07	0.33	0.40	—	1,524	1,524	0.05	0.09	1.72	1,553
2027	0.61	0.52	2.14	5.85	0.01	0.05	1.22	1.28	0.05	0.29	0.34	—	1,697	1,697	0.05	0.11	1.99	1,734
2028	0.59	0.50	2.06	5.62	0.01	0.05	1.23	1.27	0.04	0.29	0.34	—	1,674	1,674	0.05	0.11	1.81	1,709
2029	0.54	0.48	1.94	5.40	0.01	0.04	1.22	1.27	0.04	0.29	0.33	—	1,641	1,641	0.05	0.11	1.62	1,676
2030	0.52	0.46	1.89	5.19	0.01	0.04	1.22	1.26	0.03	0.29	0.33	—	1,613	1,613	0.05	0.07	1.45	1,637
2031	0.49	0.44	1.80	5.02	0.01	0.04	1.22	1.26	0.03	0.29	0.33	—	1,587	1,587	0.04	0.07	1.29	1,611
2032	10.7	10.7	0.67	1.65	< 0.005	0.02	0.30	0.31	0.02	0.07	0.09	—	413	413	0.01	0.01	0.26	417
2033	0.21	0.21	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.55	1.55	< 0.005	< 0.005	< 0.005	1.56

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	64.2	60.8	38.0	284	0.74	2.02	66.1	68.1	1.99	16.8	18.8	668	91,837	92,504	70.4	2.65	42.2	95,096
Mit.	63.0	59.7	37.1	273	0.71	2.00	62.3	64.3	1.98	15.8	17.8	168	88,300	88,468	20.3	2.48	40.4	89,756
% Reduced	2%	2%	2%	4%	5%	1%	6%	6%	1%	6%	5%	75%	4%	4%	71%	6%	4%	6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.3	53.3	39.8	184	0.70	1.98	66.1	68.1	1.97	16.8	18.7	668	88,062	88,730	70.5	2.85	11.7	91,353
Mit.	55.2	52.2	38.8	174	0.67	1.97	62.3	64.3	1.95	15.8	17.8	168	84,728	84,897	20.4	2.67	11.6	86,215

% Reduced	2%	2%	3%	5%	5%	1%	6%	6%	1%	6%	5%	75%	4%	4%	71%	6%	< 0.5%	6%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.0	53.8	23.5	197	0.56	0.86	57.7	58.6	0.84	14.6	15.5	668	64,750	65,418	69.9	2.48	23.0	67,927
Mit.	55.0	52.9	22.6	188	0.53	0.85	54.4	55.3	0.83	13.8	14.6	168	61,756	61,924	19.9	2.32	22.3	63,134
% Reduced	2%	2%	4%	4%	5%	2%	6%	6%	1%	6%	5%	75%	5%	5%	72%	6%	3%	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.2	9.82	4.29	35.9	0.10	0.16	10.5	10.7	0.15	2.67	2.83	111	10,720	10,831	11.6	0.41	3.80	11,246
Mit.	10.0	9.65	4.13	34.3	0.10	0.15	9.93	10.1	0.15	2.52	2.67	27.9	10,224	10,252	3.29	0.38	3.69	10,453
% Reduced	2%	2%	4%	4%	5%	2%	6%	6%	1%	6%	5%	75%	5%	5%	72%	6%	3%	7%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.8	19.0	15.9	193	0.60	0.26	66.1	66.4	0.24	16.8	17.0	—	61,355	61,355	1.69	2.30	31.4	62,113
Area	42.6	41.4	14.9	87.6	0.09	1.18	—	1.18	1.17	—	1.17	0.00	18,145	18,145	0.35	0.04	—	18,164
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Waste	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	64.2	60.8	38.0	284	0.74	2.02	66.1	68.1	1.99	16.8	18.8	668	91,837	92,504	70.4	2.65	42.2	95,096

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.3	18.6	18.5	175	0.57	0.26	66.1	66.4	0.24	16.8	17.0	—	57,797	57,797	1.84	2.50	0.81	58,588
Area	35.1	34.3	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Waste	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	56.3	53.3	39.8	184	0.70	1.98	66.1	68.1	1.97	16.8	18.7	668	88,062	88,730	70.5	2.85	11.7	91,353
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.0	16.4	15.6	153	0.51	0.23	57.7	58.0	0.22	14.6	14.9	—	51,864	51,864	1.58	2.16	12.1	52,560
Area	37.2	37.0	0.72	40.4	< 0.005	0.05	—	0.05	0.04	—	0.04	0.00	549	549	0.01	< 0.005	—	550
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Waste	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	56.0	53.8	23.5	197	0.56	0.86	57.7	58.6	0.84	14.6	15.5	668	64,750	65,418	69.9	2.48	23.0	67,927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.28	2.99	2.85	27.9	0.09	0.04	10.5	10.6	0.04	2.67	2.71	—	8,587	8,587	0.26	0.36	2.00	8,702
Area	6.79	6.75	0.13	7.37	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	90.9	90.9	< 0.005	< 0.005	—	91.0
Energy	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	2,012	2,012	0.21	0.01	—	2,021
Water	—	—	—	—	—	—	—	—	—	—	—	16.1	30.4	46.6	1.66	0.04	—	99.9
Waste	—	—	—	—	—	—	—	—	—	—	—	94.4	0.00	94.4	9.44	0.00	—	330
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80
Total	10.2	9.82	4.29	35.9	0.10	0.16	10.5	10.7	0.15	2.67	2.83	111	10,720	10,831	11.6	0.41	3.80	11,246

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.6	17.9	15.0	182	0.57	0.24	62.3	62.6	0.23	15.8	16.0	—	57,845	57,845	1.59	2.17	29.6	58,561
Area	42.6	41.4	14.9	87.6	0.09	1.18	—	1.18	1.17	—	1.17	0.00	18,145	18,145	0.35	0.04	—	18,164
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513
Waste	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	63.0	59.7	37.1	273	0.71	2.00	62.3	64.3	1.98	15.8	17.8	168	88,300	88,468	20.3	2.48	40.4	89,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.5	17.4	165	0.53	0.24	62.3	62.6	0.23	15.8	16.0	—	54,491	54,491	1.73	2.35	0.77	55,237
Area	35.1	34.3	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513
Waste	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	55.2	52.2	38.8	174	0.67	1.97	62.3	64.3	1.95	15.8	17.8	168	84,728	84,897	20.4	2.67	11.6	86,215
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.9	15.5	14.7	144	0.48	0.22	54.4	54.6	0.20	13.8	14.0	—	48,898	48,898	1.49	2.04	11.4	49,553
Area	37.2	37.0	0.72	40.4	< 0.005	0.05	—	0.05	0.04	—	0.04	0.00	549	549	0.01	< 0.005	—	550
Energy	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	12,153	12,153	1.30	0.08	—	12,208
Water	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	5

Waste	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	55.0	52.9	22.6	188	0.53	0.85	54.4	55.3	0.83	13.8	14.6	168	61,756	61,924	19.9	2.32	22.3	63,134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.09	2.82	2.68	26.3	0.09	0.04	9.93	9.97	0.04	2.52	2.56	—	8,096	8,096	0.25	0.34	1.89	8,204
Area	6.79	6.75	0.13	7.37	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	90.9	90.9	< 0.005	< 0.005	—	91.0
Energy	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	2,012	2,012	0.21	0.01	—	2,021
Water	—	—	—	—	—	—	—	—	—	—	—	13.7	25.9	39.6	1.41	0.03	—	84.9
Waste	—	—	—	—	—	—	—	—	—	—	—	14.2	0.00	14.2	1.42	0.00	—	49.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80
Total	10.0	9.65	4.13	34.3	0.10	0.15	9.93	10.1	0.15	2.52	2.67	27.9	10,224	10,252	3.29	0.38	3.69	10,453

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	6.08	5.46	0.01	0.25	—	0.25	0.23	—	0.23	—	938	938	0.04	0.01	—	942
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.00	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	156
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.52	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	0.01	5.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	6.08	5.46	0.01	0.25	—	0.25	0.23	—	0.23	—	938	938	0.04	0.01	—	942
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.00	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	156
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.52	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.50	5.50	< 0.005	< 0.005	0.01	5.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.20	4.96	0.01	0.22	—	0.22	0.21	—	0.21	—	870	870	0.04	0.01	—	873

Dust From Material Movement	—	—	—	—	—	—	3.23	3.23	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.95	0.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	144	144	0.01	< 0.005	—	145
Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	< 0.005	0.01	0.60	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.3	23.3	< 0.005	< 0.005	0.04	23.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.85	3.85	< 0.005	< 0.005	0.01	3.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.20	4.96	0.01	0.22	—	0.22	0.21	—	0.21	—	870	870	0.04	0.01	—	873
Dust From Material Movement	—	—	—	—	—	—	3.23	3.23	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.95	0.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	144	144	0.01	< 0.005	—	145

Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	< 0.005	0.01	0.60	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.3	23.3	< 0.005	< 0.005	0.04	23.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.85	3.85	< 0.005	< 0.005	0.01	3.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.87	8.07	7.70	0.02	0.34	—	0.34	0.31	—	0.31	—	1,795	1,795	0.07	0.01	—	1,801
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	1.41	< 0.005	0.06	—	0.06	0.06	—	0.06	—	297	297	0.01	< 0.005	—	298

Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.77	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.69	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.02	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	44.0	44.0	< 0.005	< 0.005	0.08	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.28	7.28	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.87	8.07	7.70	0.02	0.34	—	0.34	0.31	—	0.31	—	1,795	1,795	0.07	0.01	—	1,801
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	1.41	< 0.005	0.06	—	0.06	0.06	—	0.06	—	297	297	0.01	< 0.005	—	298
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.77	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.69	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.02	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	44.0	44.0	< 0.005	< 0.005	0.08	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.28	7.28	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.21	4.26	0.01	0.17	—	0.17	0.16	—	0.16	—	1,020	1,020	0.04	0.01	—	1,024
Dust From Material Movement	—	—	—	—	—	—	1.42	1.42	—	0.56	0.56	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.77	0.78	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	169

Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.02	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.5	24.5	< 0.005	< 0.005	0.04	24.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	0.01	4.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.21	4.26	0.01	0.17	—	0.17	0.16	—	0.16	—	1,020	1,020	0.04	0.01	—	1,024
Dust From Material Movement	—	—	—	—	—	—	1.42	1.42	—	0.56	0.56	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.77	0.78	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	169
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.02	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.5	24.5	< 0.005	< 0.005	0.04	24.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	0.01	4.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	5.52	7.26	0.01	0.21	—	0.21	0.19	—	0.19	—	1,342	1,342	0.05	0.01	—	1,346
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.01	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	222	222	0.01	< 0.005	—	223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.42	3.08	2.21	37.3	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,753	8,753	0.16	0.33	32.2	8,889
Vendor	0.30	0.13	4.78	2.12	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	4,005	4,005	0.16	0.59	10.5	4,197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.33	2.97	2.90	32.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,121	8,121	0.20	0.36	0.84	8,233
Vendor	0.29	0.12	5.05	2.15	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	4,009	4,009	0.16	0.59	0.27	4,190
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.85	1.65	1.44	17.8	0.00	0.00	4.67	4.67	0.00	1.09	1.09	—	4,576	4,576	0.10	0.19	7.78	4,642
Vendor	0.16	0.07	2.77	1.19	0.02	0.03	0.59	0.62	0.03	0.16	0.20	—	2,242	2,242	0.09	0.33	2.54	2,346
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.30	0.26	3.24	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	758	758	0.02	0.03	1.29	768
Vendor	0.03	0.01	0.51	0.22	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	371	371	0.02	0.06	0.42	388
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	5.52	7.26	0.01	0.21	—	0.21	0.19	—	0.19	—	1,342	1,342	0.05	0.01	—	1,346

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.01	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	222	222	0.01	< 0.005	—	223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.42	3.08	2.21	37.3	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,753	8,753	0.16	0.33	32.2	8,889
Vendor	0.30	0.13	4.78	2.12	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	4,005	4,005	0.16	0.59	10.5	4,197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.33	2.97	2.90	32.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,121	8,121	0.20	0.36	0.84	8,233
Vendor	0.29	0.12	5.05	2.15	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	4,009	4,009	0.16	0.59	0.27	4,190
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.85	1.65	1.44	17.8	0.00	0.00	4.67	4.67	0.00	1.09	1.09	—	4,576	4,576	0.10	0.19	7.78	4,642
Vendor	0.16	0.07	2.77	1.19	0.02	0.03	0.59	0.62	0.03	0.16	0.20	—	2,242	2,242	0.09	0.33	2.54	2,346
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.30	0.26	3.24	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	758	758	0.02	0.03	1.29	768
Vendor	0.03	0.01	0.51	0.22	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	371	371	0.02	0.06	0.42	388
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.95	1.92	34.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,591	8,591	0.14	0.33	29.1	8,723
Vendor	0.29	0.13	4.59	2.03	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,926	3,926	0.16	0.59	9.80	4,117
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.21	2.86	2.59	30.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,971	7,971	0.20	0.36	0.76	8,083
Vendor	0.29	0.12	4.87	2.09	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,929	3,929	0.16	0.59	0.25	4,111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.01	1.61	21.3	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,732	5,732	0.13	0.24	8.99	5,815
Vendor	0.21	0.09	3.41	1.47	0.02	0.04	0.76	0.80	0.04	0.21	0.25	—	2,805	2,805	0.12	0.42	3.04	2,938
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.29	3.90	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	949	949	0.02	0.04	1.49	963
Vendor	0.04	0.02	0.62	0.27	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	464	464	0.02	0.07	0.50	486
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.95	1.92	34.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,591	8,591	0.14	0.33	29.1	8,723
Vendor	0.29	0.13	4.59	2.03	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,926	3,926	0.16	0.59	9.80	4,117
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.21	2.86	2.59	30.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,971	7,971	0.20	0.36	0.76	8,083

Vendor	0.29	0.12	4.87	2.09	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,929	3,929	0.16	0.59	0.25	4,111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.01	1.61	21.3	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,732	5,732	0.13	0.24	8.99	5,815
Vendor	0.21	0.09	3.41	1.47	0.02	0.04	0.76	0.80	0.04	0.21	0.25	—	2,805	2,805	0.12	0.42	3.04	2,938
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.29	3.90	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	949	949	0.02	0.04	1.49	963
Vendor	0.04	0.02	0.62	0.27	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	464	464	0.02	0.07	0.50	486
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.39	9.26	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.17	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.21	2.88	1.90	32.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,439	8,439	0.14	0.07	26.1	8,488
Vendor	0.27	0.12	4.43	1.96	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,833	3,833	0.16	0.56	9.11	4,014
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.12	2.76	2.28	28.9	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,830	7,830	0.18	0.36	0.68	7,941
Vendor	0.26	0.12	4.68	2.02	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,836	3,836	0.16	0.57	0.24	4,009
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.20	1.96	1.60	20.1	0.00	0.00	5.97	5.97	0.00	1.40	1.40	—	5,646	5,646	0.11	0.24	8.08	5,728
Vendor	0.19	0.09	3.28	1.43	0.02	0.04	0.76	0.80	0.04	0.21	0.25	—	2,746	2,746	0.11	0.40	2.83	2,872
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.29	3.67	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	935	935	0.02	0.04	1.34	948

Vendor	0.03	0.02	0.60	0.26	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	455	455	0.02	0.07	0.47	475
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.39	9.26	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.17	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.21	2.88	1.90	32.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,439	8,439	0.14	0.07	26.1	8,488
Vendor	0.27	0.12	4.43	1.96	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,833	3,833	0.16	0.56	9.11	4,014
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.12	2.76	2.28	28.9	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,830	7,830	0.18	0.36	0.68	7,941
Vendor	0.26	0.12	4.68	2.02	0.03	0.06	1.08	1.13	0.06	0.30	0.35	—	3,836	3,836	0.16	0.57	0.24	4,009
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.20	1.96	1.60	20.1	0.00	0.00	5.97	5.97	0.00	1.40	1.40	—	5,646	5,646	0.11	0.24	8.08	5,728
Vendor	0.19	0.09	3.28	1.43	0.02	0.04	0.76	0.80	0.04	0.21	0.25	—	2,746	2,746	0.11	0.40	2.83	2,872
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.29	3.67	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	935	935	0.02	0.04	1.34	948
Vendor	0.03	0.02	0.60	0.26	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	455	455	0.02	0.07	0.47	475
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.13	9.22	0.02	0.20	—	0.20	0.18	—	0.18	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.12	1.68	< 0.005	0.04	—	0.04	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.05	2.72	1.59	31.2	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,295	8,295	0.14	0.07	23.4	8,342
Vendor	0.26	0.10	4.24	1.90	0.03	0.06	1.08	1.13	0.03	0.30	0.33	—	3,730	3,730	0.13	0.56	8.43	3,909
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.67	2.25	27.3	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,696	7,696	0.18	0.33	0.60	7,801

Vendor	0.26	0.09	4.49	1.96	0.03	0.06	1.08	1.13	0.03	0.30	0.33	—	3,734	3,734	0.13	0.56	0.22	3,905
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.93	1.86	1.39	19.0	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,535	5,535	0.11	0.24	7.19	5,616
Vendor	0.19	0.07	3.13	1.38	0.02	0.04	0.76	0.80	0.02	0.21	0.23	—	2,665	2,665	0.09	0.40	2.60	2,790
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	3.46	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	916	916	0.02	0.04	1.19	930
Vendor	0.03	0.01	0.57	0.25	< 0.005	0.01	0.14	0.15	< 0.005	0.04	0.04	—	441	441	0.02	0.07	0.43	462
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.13	9.22	0.02	0.20	—	0.20	0.18	—	0.18	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.12	1.68	< 0.005	0.04	—	0.04	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.05	2.72	1.59	31.2	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,295	8,295	0.14	0.07	23.4	8,342
Vendor	0.26	0.10	4.24	1.90	0.03	0.06	1.08	1.13	0.03	0.30	0.33	—	3,730	3,730	0.13	0.56	8.43	3,909
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.67	2.25	27.3	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,696	7,696	0.18	0.33	0.60	7,801
Vendor	0.26	0.09	4.49	1.96	0.03	0.06	1.08	1.13	0.03	0.30	0.33	—	3,734	3,734	0.13	0.56	0.22	3,905
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.93	1.86	1.39	19.0	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,535	5,535	0.11	0.24	7.19	5,616
Vendor	0.19	0.07	3.13	1.38	0.02	0.04	0.76	0.80	0.02	0.21	0.23	—	2,665	2,665	0.09	0.40	2.60	2,790
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	3.46	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	916	916	0.02	0.04	1.19	930

Vendor	0.03	0.01	0.57	0.25	< 0.005	0.01	0.14	0.15	< 0.005	0.04	0.04	—	441	441	0.02	0.07	0.43	462
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.99	9.20	0.02	0.19	—	0.19	0.17	—	0.17	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.09	1.68	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.70	2.65	1.56	29.5	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,159	8,159	0.11	0.07	20.7	8,203
Vendor	0.26	0.10	4.07	1.84	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,619	3,619	0.13	0.53	7.70	3,789
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.54	1.96	25.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,571	7,571	0.16	0.33	0.54	7,675
Vendor	0.26	0.09	4.29	1.89	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,622	3,622	0.13	0.53	0.20	3,785
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.84	1.80	1.37	17.9	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,445	5,445	0.11	0.05	6.38	5,468
Vendor	0.18	0.07	3.01	1.33	0.02	0.02	0.76	0.78	0.02	0.21	0.23	—	2,586	2,586	0.09	0.38	2.38	2,704
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.25	3.27	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	901	901	0.02	0.01	1.06	905
Vendor	0.03	0.01	0.55	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	428	428	0.02	0.06	0.39	448
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.99	9.20	0.02	0.19	—	0.19	0.17	—	0.17	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.09	1.68	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.70	2.65	1.56	29.5	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,159	8,159	0.11	0.07	20.7	8,203
Vendor	0.26	0.10	4.07	1.84	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,619	3,619	0.13	0.53	7.70	3,789
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.54	1.96	25.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,571	7,571	0.16	0.33	0.54	7,675

Vendor	0.26	0.09	4.29	1.89	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,622	3,622	0.13	0.53	0.20	3,785
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.84	1.80	1.37	17.9	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,445	5,445	0.11	0.05	6.38	5,468
Vendor	0.18	0.07	3.01	1.33	0.02	0.02	0.76	0.78	0.02	0.21	0.23	—	2,586	2,586	0.09	0.38	2.38	2,704
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.25	3.27	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	901	901	0.02	0.01	1.06	905
Vendor	0.03	0.01	0.55	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	428	428	0.02	0.06	0.39	448
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	5.80	9.18	0.02	0.17	—	0.17	0.16	—	0.16	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.06	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.56	2.51	1.54	28.2	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,047	8,047	0.11	0.07	18.2	8,089
Vendor	0.23	0.10	3.94	1.78	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,502	3,502	0.13	0.53	6.97	3,671
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.51	2.45	1.94	24.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,467	7,467	0.16	0.07	0.48	7,492
Vendor	0.22	0.09	4.16	1.83	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,505	3,505	0.13	0.53	0.18	3,668
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.75	1.70	1.15	17.1	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,370	5,370	0.10	0.05	5.62	5,393
Vendor	0.16	0.07	2.90	1.29	0.02	0.02	0.76	0.78	0.02	0.21	0.23	—	2,502	2,502	0.09	0.38	2.16	2,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.21	3.11	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	889	889	0.02	0.01	0.93	893

Vendor	0.03	0.01	0.53	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	414	414	0.02	0.06	0.36	434
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	5.80	9.18	0.02	0.17	—	0.17	0.16	—	0.16	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.06	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.56	2.51	1.54	28.2	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	8,047	8,047	0.11	0.07	18.2	8,089
Vendor	0.23	0.10	3.94	1.78	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,502	3,502	0.13	0.53	6.97	3,671
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.51	2.45	1.94	24.8	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,467	7,467	0.16	0.07	0.48	7,492
Vendor	0.22	0.09	4.16	1.83	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,505	3,505	0.13	0.53	0.18	3,668
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.75	1.70	1.15	17.1	0.00	0.00	5.95	5.95	0.00	1.39	1.39	—	5,370	5,370	0.10	0.05	5.62	5,393
Vendor	0.16	0.07	2.90	1.29	0.02	0.02	0.76	0.78	0.02	0.21	0.23	—	2,502	2,502	0.09	0.38	2.16	2,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.21	3.11	0.00	0.00	1.09	1.09	0.00	0.25	0.25	—	889	889	0.02	0.01	0.93	893
Vendor	0.03	0.01	0.53	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	414	414	0.02	0.06	0.36	434
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.91	1.48	< 0.005	0.03	—	0.03	0.02	—	0.02	—	277	277	0.01	< 0.005	—	278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.8	45.8	< 0.005	< 0.005	—	46.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.42	2.36	1.65	23.5	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,361	7,361	0.16	0.07	0.41	7,386
Vendor	0.22	0.09	4.00	1.77	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,390	3,390	0.13	0.51	0.16	3,544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.27	0.19	2.63	0.00	0.00	0.96	0.96	0.00	0.23	0.23	—	856	856	0.02	0.01	0.79	859
Vendor	0.03	0.01	0.45	0.20	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	391	391	0.01	0.06	0.31	409
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	142	142	< 0.005	< 0.005	0.13	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.8	64.8	< 0.005	0.01	0.05	67.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.91	1.48	< 0.005	0.03	—	0.03	0.02	—	0.02	—	277	277	0.01	< 0.005	—	278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.8	45.8	< 0.005	< 0.005	—	46.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.42	2.36	1.65	23.5	0.00	0.00	8.52	8.52	0.00	2.00	2.00	—	7,361	7,361	0.16	0.07	0.41	7,386
Vendor	0.22	0.09	4.00	1.77	0.03	0.03	1.08	1.11	0.03	0.30	0.33	—	3,390	3,390	0.13	0.51	0.16	3,544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.27	0.19	2.63	0.00	0.00	0.96	0.96	0.00	0.23	0.23	—	856	856	0.02	0.01	0.79	859
Vendor	0.03	0.01	0.45	0.20	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	391	391	0.01	0.06	0.31	409
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	142	142	< 0.005	< 0.005	0.13	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.8	64.8	< 0.005	0.01	0.05	67.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Paving (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.81	2.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.39	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.23	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.01	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.5	32.5	< 0.005	< 0.005	0.03	32.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.38	5.38	< 0.005	< 0.005	< 0.005	5.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Paving (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516

Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.81	2.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.39	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.23	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.01	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.5	32.5	< 0.005	< 0.005	0.03	3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.38	5.38	< 0.005	< 0.005	< 0.005	5.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Architectural Coating (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.7	39.7	< 0.005	< 0.005	—	39.8
Architectural Coatings	57.8	57.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.57	6.57	< 0.005	< 0.005	—	6.60
Architectural Coatings	10.5	10.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.25	5.37	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,587	1,587	0.02	0.01	3.19	1,594
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.33	4.71	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,472	1,472	0.03	0.01	0.08	1,477
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.10	1.35	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	441	441	0.01	< 0.005	0.41	4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.25	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	73.0	73.0	< 0.005	< 0.005	0.07	73.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Architectural Coating (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.7	39.7	< 0.005	< 0.005	—	39.8
Architectural Coatings	57.8	57.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.57	6.57	< 0.005	< 0.005	—	6.60
Architectural Coatings	10.5	10.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.25	5.37	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,587	1,587	0.02	0.01	3.19	1,594
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.33	4.71	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,472	1,472	0.03	0.01	0.08	1,477
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.10	1.35	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	441	441	0.01	< 0.005	0.41	4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.25	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	73.0	73.0	< 0.005	< 0.005	0.07	73.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Architectural Coating (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.79
Architectural Coatings	1.14	1.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.45	0.33	4.47	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,453	1,453	0.03	0.01	0.07	1,458
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.59	8.59	< 0.005	< 0.005	0.01	8.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Architectural Coating (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	194	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.79
Architectural Coatings	1.14	1.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	–

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.45	0.33	4.47	0.00	0.00	1.70	1.70	0.00	0.40	0.40	—	1,453	1,453	0.03	0.01	0.07	1,458
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.59	8.59	< 0.005	< 0.005	0.01	8.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	20.8	19.0	15.9	193	0.60	0.26	66.1	66.4	0.24	16.8	17.0	—	61,355	61,355	1.69	2.30	31.4	62,113
Total	20.8	19.0	15.9	193	0.60	0.26	66.1	66.4	0.24	16.8	17.0	—	61,355	61,355	1.69	2.30	31.4	62,113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	20.3	18.6	18.5	175	0.57	0.26	66.1	66.4	0.24	16.8	17.0	—	57,797	57,797	1.84	2.50	0.81	58,588
Total	20.3	18.6	18.5	175	0.57	0.26	66.1	66.4	0.24	16.8	17.0	—	57,797	57,797	1.84	2.50	0.81	58,588
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.28	2.99	2.85	27.9	0.09	0.04	10.5	10.6	0.04	2.67	2.71	—	8,587	8,587	0.26	0.36	2.00	8,702
Total	3.28	2.99	2.85	27.9	0.09	0.04	10.5	10.6	0.04	2.67	2.71	—	8,587	8,587	0.26	0.36	2.00	8,702

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	19.6	17.9	15.0	182	0.57	0.24	62.3	62.6	0.23	15.8	16.0	—	57,845	57,845	1.59	2.17	29.6	58,561
Total	19.6	17.9	15.0	182	0.57	0.24	62.3	62.6	0.23	15.8	16.0	—	57,845	57,845	1.59	2.17	29.6	58,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	19.2	17.5	17.4	165	0.53	0.24	62.3	62.6	0.23	15.8	16.0	—	54,491	54,491	1.73	2.35	0.77	55,237

Total	19.2	17.5	17.4	165	0.53	0.24	62.3	62.6	0.23	15.8	16.0	—	54,491	54,491	1.73	2.35	0.77	55,237
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.09	2.82	2.68	26.3	0.09	0.04	9.93	9.97	0.04	2.52	2.56	—	8,096	8,096	0.25	0.34	1.89	8,204
Total	3.09	2.82	2.68	26.3	0.09	0.04	9.93	9.97	0.04	2.52	2.56	—	8,096	8,096	0.25	0.34	1.89	8,204

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.08	0.01	—	501
Total	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.08	0.01	—	501

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,999	2,999	0.49	0.06	—	3,029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.08	0.01	—	501
Total	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.08	0.01	—	501

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Total	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Total	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	1,515	1,515	0.13	< 0.005	—	1,520
Total	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	1,515	1,515	0.13	< 0.005	—	1,520

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Total	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179

Total	0.84	0.42	7.21	3.07	0.05	0.58	—	0.58	0.58	—	0.58	—	9,154	9,154	0.81	0.02	—	9,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	1,515	1,515	0.13	< 0.005	—	1,520
Total	0.15	0.08	1.32	0.56	0.01	0.11	—	0.11	0.11	—	0.11	—	1,515	1,515	0.13	< 0.005	—	1,520

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.65	0.83	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Consumer Products	32.5	32.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.44	7.05	0.75	81.6	< 0.005	0.04	—	0.04	0.03	—	0.03	—	217	217	0.01	< 0.005	—	218
Total	42.6	41.4	14.9	87.6	0.09	1.18	—	1.18	1.17	—	1.17	0.00	18,145	18,145	0.35	0.04	—	18,164
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.65	0.83	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946

Consumer Products	32.5	32.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.1	34.3	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	73.2	73.2	< 0.005	< 0.005	—	73.3
Consumer Products	5.92	5.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.67	0.63	0.07	7.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.7	17.7	< 0.005	< 0.005	—	17.8
Total	6.79	6.75	0.13	7.37	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	90.9	90.9	< 0.005	< 0.005	—	91.0

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.65	0.83	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Consumer Products	32.5	32.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	7.44	7.05	0.75	81.6	< 0.005	0.04	—	0.04	0.03	—	0.03	—	217	217	0.01	< 0.005	—	218
Total	42.6	41.4	14.9	87.6	0.09	1.18	—	1.18	1.17	—	1.17	0.00	18,145	18,145	0.35	0.04	—	18,164
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.65	0.83	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Consumer Products	32.5	32.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.03	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.1	34.3	14.1	6.01	0.09	1.14	—	1.14	1.14	—	1.14	0.00	17,928	17,928	0.34	0.03	—	17,946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	73.2	73.2	< 0.005	< 0.005	—	73.3
Consumer Products	5.92	5.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.67	0.63	0.07	7.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.7	17.7	< 0.005	< 0.005	—	17.8
Total	6.79	6.75	0.13	7.37	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	90.9	90.9	< 0.005	< 0.005	—	91.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Total	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Total	—	—	—	—	—	—	—	—	—	—	—	97.4	184	281	10.0	0.24	—	603
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	16.1	30.4	46.6	1.66	0.04	—	99.9
Total	—	—	—	—	—	—	—	—	—	—	—	16.1	30.4	46.6	1.66	0.04	—	99.9

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	82.8	156	239	8.51	0.20	—	513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	13.7	25.9	39.6	1.41	0.03	—	84.9
Total	—	—	—	—	—	—	—	—	—	—	—	13.7	25.9	39.6	1.41	0.03	—	84.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Total	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996
Total	—	—	—	—	—	—	—	—	—	—	—	570	0.00	570	57.0	0.00	—	1,996

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	94.4	0.00	94.4	9.44	0.00	—	330
Total	—	—	—	—	—	—	—	—	—	—	—	94.4	0.00	94.4	9.44	0.00	—	330

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Total	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Total	—	—	—	—	—	—	—	—	—	—	—	85.6	0.00	85.6	8.55	0.00	—	299
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	14.2	0.00	14.2	1.42	0.00	—	49.6
Total	—	—	—	—	—	—	—	—	—	—	—	14.2	0.00	14.2	1.42	0.00	—	49.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.80	1.80

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2025	5/21/2025	5.00	100	—
Site Preparation	Site Preparation	5/22/2025	8/14/2025	5.00	60.0	—
Grading	Grading	8/15/2025	3/20/2026	5.00	155	—
Building Construction	Building Construction	3/21/2026	2/28/2032	5.00	1,550	—
Paving	Paving	2/29/2032	8/1/2032	5.00	110	—
Architectural Coating	Architectural Coating	8/2/2032	1/3/2033	5.00	110	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT

Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,030	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	153	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	206	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,030	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	153	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	206	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,071,642	1,023,881	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	90.0	0.00	—
Grading	—	—	465	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	2,686	1,815	1,536	874,947	29,595	20,001	16,929	9,641,392
Apartments Low Rise	5,810	3,922	3,327	1,892,724	64,021	43,219	36,665	20,856,681

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	2,532	1,711	1,448	824,900	27,902	18,857	15,961	9,089,904
Apartments Low Rise	5,478	3,698	3,137	1,784,460	60,359	40,747	34,568	19,663,679

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	290
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	279
Wood Fireplaces	0
Gas Fireplaces	440
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	422
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	290
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	279
Wood Fireplaces	0
Gas Fireplaces	440
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	422
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1221358.5	407,120	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,134,028	204	0.0330	0.0040	11,356,846
Apartments Low Rise	3,232,920	204	0.0330	0.0040	17,204,923

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Apartments Low Rise	2,134,028	204	0.0330	0.0040	11,356,846
Apartments Low Rise	3,232,920	204	0.0330	0.0040	17,204,923

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	20,205,674	0.00
Apartments Low Rise	30,610,353	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	17,174,823	0.00
Apartments Low Rise	26,018,800	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	421	—
Apartments Low Rise	637	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	63.1	—
Apartments Low Rise	95.6	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	16.2	annual days of extreme heat
Extreme Precipitation	2.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	20.1
AQ-DPM	8.90
Drinking Water	54.0
Lead Risk Housing	4.86
Pesticides	52.7
Toxic Releases	31.9
Traffic	89.6
Effect Indicators	—
CleanUp Sites	0.00

Groundwater	7.19
Haz Waste Facilities/Generators	76.8
Impaired Water Bodies	23.9
Solid Waste	83.3
Sensitive Population	—
Asthma	24.3
Cardio-vascular	34.2
Low Birth Weights	40.9
Socioeconomic Factor Indicators	—
Education	12.0
Housing	1.29
Linguistic	30.7
Poverty	8.68
Unemployment	30.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	88.28435776
Employed	88.70781471
Median HI	88.66931862
Education	—
Bachelor's or higher	64.48094444
High school enrollment	13.5249583
Preschool enrollment	95.7141024
Transportation	—

Auto Access	67.17567047
Active commuting	50.09624022
Social	—
2-parent households	97.21544976
Voting	59.77158989
Neighborhood	—
Alcohol availability	97.0101373
Park access	44.4629796
Retail density	7.442576671
Supermarket access	10.58642371
Tree canopy	22.91800334
Housing	—
Homeownership	95.99640703
Housing habitability	93.16052868
Low-inc homeowner severe housing cost burden	71.74387271
Low-inc renter severe housing cost burden	74.51559091
Uncrowded housing	79.21211344
Health Outcomes	—
Insured adults	80.68779674
Arthritis	73.2
Asthma ER Admissions	67.9
High Blood Pressure	95.4
Cancer (excluding skin)	45.0
Asthma	61.7
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	91.2

Life Expectancy at Birth	21.4
Cognitively Disabled	80.8
Physically Disabled	85.5
Heart Attack ER Admissions	58.5
Mental Health Not Good	68.6
Chronic Kidney Disease	85.5
Obesity	69.5
Pedestrian Injuries	19.6
Physical Health Not Good	82.3
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	5.9
Current Smoker	64.6
No Leisure Time for Physical Activity	85.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	88.9
English Speaking	71.6
Foreign-born	23.2
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.4
Traffic Density	76.5
Traffic Access	23.0
Other Indices	—

Hardship	15.1
Other Decision Support	—
2016 Voting	60.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	88.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Close to rail trip rates provided by Kittelson & Assoc, Inc.
Operations: Architectural Coatings	Based on BAAQMD Reg 8 Rule 3

Appendix C

Biological Summary Memorandum and Peer Review

Appendix C-1

Biological Summary Memorandum

wra Environmental Consultants

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MEMORANDUM

TO:	Bill Myers	**FROM:**	Scott Batiuk
CC:	Michael Olson		
DATE:	February 15, 2023		
SUBJECT:	Summary of Biological Evaluations at the Portola Avenue/Isabel Avenue site in Livermore, Alameda County, California		

The purpose of this memorandum is to present a summary of the results of the biological evaluations that have been conducted by WRA, Inc. (WRA) within the vacant lot located southwest of the intersection of Isabel Avenue and Portola Avenue in Livermore, Alameda County, California (Study Area). This memorandum also present avoidance and mitigation measures for potential impacts to sensitive biological resources. WRA has conducted the following tasks:

- A peer review of the Delineation of Aquatic Resources report prepared by RestorCap for the Study Area
- Assessments of the presence or potential presence of special-status species within the Study Area

The peer review focused on the presence of aquatic features within the Study Area. As part of this peer review, WRA visited the Study Area on January 13, 2022, to observe site conditions. Incidental observations were also made on October 4, 2022. The Delineation of Aquatic Resources Report prepared by RestorCap was reviewed based on the site visit and an independent review of recent and historic aerial imagery, published soils data, and the U.S. Army Corps of Engineers' (Corps) Antecedent Precipitation Tool.

The special-status species assessment was based on the January 13, 2022, site visit as well as follow-up site visits conducted on February 1 and 15 and October 4, 2022. The February 1 and 15, 2022, site visits were focused surveys for the presence of actively nesting burrowing owls (*Athene cunicularia*; California Department of Fish and Wildlife [CDFW] Species of Special Concern) or native birds while simultaneously assessing potential habitat for these species. The October 4, 2022, site visit was a late-season special-status plant survey for Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*; California Rare Plant Rank 1B.1). Prior to the January 13, 2022, site visit, WRA performed a review of the following biological resources database and species occurrence resources:

- The CDFW California Natural Diversity Database
- The California Native Plant Society's Rare Plant Inventory
- The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation database
- The Consortium of California Herbaria
- The USFWS Critical Habitat Mapper
- eBird Online Database

The database searches focused on the Livermore U.S. Geological Survey 7.5-minute quadrangle maps and the surrounding eight quadrangle maps. The results of the peer review and special-status species assessment are provided below.

RESULTS

DELINEATION PEER REVIEW

WRA's January 13, 2022, site visit occurred 14 days after the most recent storm event (a negligible amount of precipitation [0.02 inches] fell 6 days prior to the site visit). Precipitation during the 3-month period prior to the site visit was normal. Except for one small area along the northern boundary, WRA observed upland conditions throughout the Study Area. WRA's investigation included the two manmade basins in the southwestern portion of the Study Area, which are not specifically addressed in the RestorCap report. In that report, the manmade basins were classified as uplands. During the January site visit, WRA observed a small, 0.003-acre (131 square feet) stand of cattails (*Typha domingensis*; Attachment A) along the northern boundary in the northeastern portion of the Study Area, adjacent to the sidewalk along Portola Avenue. This feature was not described in the RestorCap report. Cattails typically only occur in areas with prolonged inundation and/or saturation and are classified as obligate wetland species by regulatory agencies such as the U.S. Army Corps of Engineers (Corps). The location of the cattails in the Study Area was atypical. First, they were growing on sloping, non-depressional topography, and second, there were no surface structures (e.g., culvert outlets) or appropriate adjacent topography (e.g., swales, depressions, or other low spots in the landscape) present that would provide the appropriate hydrology to support a stand of cattails. In fact, no wetland hydrology indicators were observed by WRA on January 13, despite the wet season timing of the site visit. This patch of cattails was again observed during the special-status plant survey on October 4, 2022. Despite the lack of any recent precipitation, the soil was saturated at the surface throughout, and a small amount water was flowing across the sidewalk adjacent to the north of the cattails. Given the unusual landscape position, the lack of surface hydrology indicators in winter, and the presence of surface hydrology indicators in early autumn, WRA believes that the hydrology is man-induced, and likely from la leaking underground pipe or other subsurface, anthropogenic water source. The subsurface water source could be associated with irrigation from the adjacent landscaped strip. If that were the source, irrigation would not likely occur during November-April (rainy season) but would occur during May-October (dry season). Thus, the subsurface infrastructure would not leak until that time, resulting in the observed dry soils in January and the uncharacteristically wet soils observed during the October site visit.

WRA observed the soils in the cattail patch as follows: the upper 8 inches of the soil was entirely comprised of dark grayish brown (2.5Y 4/2 on the Munsell Color chart) clay. From 8 to 16 inches, the soil matrix was comprised of grayish brown (2.5Y 5/2 on the Munsell Color chart) clay, and 25 percent of this layer contained strong brown (7.5 YR 4/6 on the Munsell Color chart) iron concentrations. Thus, this soil meets the Depleted Matrix (F3) hydric soil indicator.

Although wetland hydrology indicators were not observed in January, the Surface Water (A1) and Saturation (A3) indicators were met in October. Therefore, this cattail stand meets the Corps' technical criteria for a wetland. This feature is not adjacent to a stream or other waterbody and would therefore not be regulated by the CDFW. However, because it meets the wetland definitions of the Corps and Regional Water Quality Control Board (RWQCB), it may be considered jurisdictional by those agencies.

As stated above, this cattail-dominated feature was not addressed in the RestorCap report. However, upon reviewing Google Maps Street View imagery from March 2008 through March 2021, cattails were not visible at that location. The RestorCap delineation of aquatic resources occurred in March 2021, and Google Maps Street View imagery suggests that cattails were not visible in this area at the time that RestorCap conducted its delineation and drafted their report. The fact that cattails were absent during this period of time and then colonized between March 2021 and January 2022 supports the idea that the wetland hydrology, and the associated wetland feature is man-induced. No evidence of a wetland in this location is visible on aerial photographs prior to 2020, and no substantial topographic changes to the site have occurred in more than 20 years. In conclusion, the cattail patch is a result of a leaky pipe and therefore may be exempt from jurisdiction by the Corps and RWQCB.

SPECIAL-STATUS SPECIES ASSESSMENT

A table summarizing the results of the special-status species evaluation for species included in the Isabel Neighborhood Plan Environmental Impact Report (EIR) is included as Attachment B.

Special-status Plants

Based upon a review of the biological resources database and species occurrence resources listed above, 59 special-status plant species have been documented in the vicinity of the Study Area. However, nearly all are unlikely to occur or have no potential to occur for one or more of the following reasons:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., volcanic tuff, serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., interior chaparral, tidal marsh) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Study Area were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;
- Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

Three were determined in the Isabel Neighborhood Plan EIR to have potential to occur in the Isabel Neighborhood Plan Area:

- big-scale balsamroot (*Balsamorhiza macrolepis*; California Rare Plant Rank 1B.2)
- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*; California Rare Plant Rank 1B.1)
- prostrate vernal pool navarretia (*Navarretia prostrata*; California Rare Plant Rank 1B.2)

Of those three species, WRA has determined that only Congdon's tarplant has moderate potential to occur within the Study Area. The other two species are unlikely or have no potential to occur for one or more of the reasons listed above. Potentially suitable habitat for Congdon's tarplant includes seasonally mesic areas such as shallow depressions in moderately alkaline clay

substrate. Consistent with Mitigation Measure MM-BIO-1 from the EIR, a protocol-level survey for Condgon's tarplant was conducted in the Study Area on October 4, 2022. Prior to the survey, WRA visited a reference population in Dublin, where Congdon's tarplant was blooming, evident, and identifiable, confirming that the timing of the survey was appropriate. Following the reference site visit, the Study Area was surveyed by walking meandering transects. No Congdon's tarplant was observed. Based on this protocol-level survey, WRA concludes that Congdon's tarplant is absent from the Study Area.

Special-status Wildlife

Based upon a review of the biological resources databases and species occurrence resources listed above, 29 special-status wildlife species have been documented in the vicinity of the Study Area. Most are excluded from the Study Area based on a lack of habitat features. Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools
- Perennial aquatic habitats (e.g., streams, rivers or ponds)
- Tidal marsh areas
- Old growth redwood or fir forest
- Dense riparian vegetation
- Caves, mine shafts, or abandoned buildings

The absence of aquatic habitats features eliminates components critical to the survival or movement of most special-status species found in the vicinity of the Study Area.

Twelve species documented in the vicinity of the Study Area were determined in the EIR to have potential to occur in the Isabel Neighborhood Specific Plan Area:

- Townsend's big-eared bat (*Corynorhinus townsendii*; CDFW Species of Special Concern, WBWG High Priority)
- hoary bat (*Lasiurus cinereus*; WBWG Medium Priority)
- American badger (*Taxidea taxus*; CDFW Species of Special Concern)
- San Joaquin kit fox (*Vulpes macrotis mutica*; Federal Endangered, State Threatened)
- tricolored blackbird (*Agelaius tricolor*; State Threatened, CDFW Species of Special Concern)
- burrowing owl (*Athene cunicularia*; CDFW Species of Special Concern)
- white-tailed kite (*Elanus leucurus*; CDFW Fully Protected Species)
- loggerhead shrike (*Lanius ludovicianus*; CDFW Species of Special Concern)
- western pond turtle (*Actinemys marmorata*; CDFW Species of Special Concern)
- California tiger salamander (*Ambystoma californiense*; Federal Threatened, State Threatened)
- California red-legged frog (*Rana draytonii*; Federal Threatened, CDFW Species of Special Concern)
- Callippe silverspot butterfly (*Speyeria callippe*; Federal Endangered)

Of those 12 species, WRA has determined that three have moderate potential to occur in the immediate vicinity or within the Study Area: burrowing owl, white-tailed kite, and loggerhead shrike. In addition, nesting birds with protections under the California Fish and Game Code (CFGC) may occur within the Study Area. These species or guilds are discussed in greater detail

below. The other nine species included in the EIR are unlikely to occur or have no potential to occur because of a lack of suitable habitat features, as listed above. While they are unlikely to occur or have no potential to occur in the Study Area, California tiger salamander and California red-legged frog are discussed in greater detail below due to their protection status and potential presence in the general vicinity of the Study Area.

California tiger salamander, a Federal Threatened and State Threatened species, and California red-legged frog, a Federal Threatened species and CDFW Species of Special Concern, have been documented to occur within 1 mile of the Study Area. However, the Study Area does not contain aquatic habitat to support these species. The Study Area is bordered on all sides by development, including dense commercial and residential development to the north and west and Highway 580 to the south. Isabel Avenue to the east is a four-lane road spanning greater than 100 feet in width, which is a partial barrier to dispersal from adjacent grasslands. In addition, the Study Area does not provide aquatic habitat suitable for these species and is not within a dispersal corridor between suitable aquatic habitat. As such, these species are unlikely to disperse into or through the Study Area. The evaluation of the remaining EIR species that are unlikely or have no potential to occur within the Study Area is included in Attachment B.

Burrowing owl inhabits open areas with sparse or non-existent tree or shrub canopies. This species is dependent on mammals to excavate the burrows that are characteristically used for shelter and nesting. Several burrows were observed within the site which may provide suitable habitat for this species, mainly around excavated detention basins and on the berm along the eastern site boundary. On February 1 and February 15, 2022, WRA revisited the Study Area to investigate habitat conditions as they related to burrowing owl and native nesting birds, as well as to determine if any burrowing owl or nesting birds were currently present. The site was assessed for the presence of burrowing owl in accordance with the guidelines contained within the 2012 California Department of Fish and Game Memorandum, Staff Report on Burrowing Owl Mitigation. The site was traversed on foot and periodically scrutinized with binoculars and the naked eye to determine if any burrowing owl individuals could be observed. Additionally, the site was assessed for the presence of suitable burrowing owl habitat, namely burrows of California ground squirrels and other surrogate structures in areas where vegetation was less than 6 inches in height and canopy cover was minimal. Any identified habitat features (e.g., burrows) were then additionally checked for signs of burrowing owl occupation (e.g., feathers, whitewash, or pellets). No burrowing owls were observed during the surveys. Although ground squirrel burrows have been observed within the Study Area, many of the burrow locations were on relatively steep embankments or were surrounded by dense ground vegetation greater than 6 inches in height, which are not considered hospitable conditions for burrowing owl occupation. Suitably sized burrows were most common along the eastern border of the site, within the detention basin structures on the western side of the Study Area, and along the excavated linear depression. Many of these burrows are obscured by vegetation, but some could function as a wintering or nesting burrow for dispersing burrowing owl. Although burrows of suitable size for burrowing owl were present, no sign of burrowing owl occupation was observed during either site visit. This indicates that the site has likely not recently been utilized by wintering burrowing owl and had not been occupied by breeding owls during the 2022 season up to the time of the surveys.

The white-tailed kite is a resident of open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from

shrubs to trees greater than 150 feet tall. Potential nest trees for this species are present at the periphery of the Study Area on adjacent properties, and the grasslands within the Study Area offer potential foraging opportunities for this species. As such, white-tailed kite is considered to have moderate potential to occur.

The loggerhead shrike is a year-round resident and winter visitor in lowlands and foothills throughout California. This species is associated with open country with short vegetation and scattered trees, shrubs, fences, utility lines, and/or other perches. Nests are typically found in trees and large shrubs and are usually placed from 3 to 10 feet off the ground. Potential nest trees for this species are present at the periphery of the Study Area on adjacent properties as well as in shrubs within the Study Area itself. The grasslands within the Study Area offer potential foraging opportunities for this species. As such, loggerhead shrike is considered to have moderate potential to occur.

In addition to the special-status burrowing owl, white-tailed kite, and loggerhead shrike, a variety of non-status native bird species protected under the CFGC may use the Study Area for nesting. On February 1 and February 15, 2022, WRA revisited the Study Area to investigate habitat conditions as they related to non-status native nesting birds as well as to determine if any birds were nesting. The Study Area was investigated for any evidence of avian territorial behavior (e.g., singing, chasing intruders out of territories, etc.), nesting bird behavior (e.g., adult birds carrying nesting material or food), or the presence of active nests with eggs present and/or pre-fledged juveniles. Observations were made with binoculars and the naked eye. To the extent feasible, large trees on neighboring parcels were also visually surveyed for the presence of large stick nests typical of raptor species. No active nests were observed within the Study Area or the immediate vicinity during the survey. Most bird behavior observed during the surveys was limited to short-distance movements and foraging. Bird nesting habitat is somewhat limited within the Study Area and is most likely to occur within coyote brush (*Baccharis pilularis*) shrubs located mainly in the northeast portion of the Study Area. Street trees that border the Study Area on the north and west sides could also provide nesting substrates, including for larger birds such as American crow (*Corvus brachyrhynchos*) or various raptors. However, no large stick nests typical of these types of birds were observed in these trees that would be indicative of nesting during the previous year's breeding seasons.

AVOIDANCE AND MINIMIZATION MEASURES

Aquatic Features

A small, 0.003-acre (131 square feet) stand of cattails was present along the northern boundary in the northeastern portion of the Study Area, adjacent to the sidewalk along Portola Avenue. As described above, this feature is presumed to be the result of man-induced hydrology, likely the result of a leaky, below-ground irrigation pipe. According to the Corps Wetland Delineation manual, if the cattail stand is created by an anthropogenic source, it would not be jurisdictional under either the Corps' or RWQCB's regulations. Showing that the area is not a wetland would require identifying the source of the potential leaky pipe, repairing it, and revisiting the location to verify that the area no longer meets the wetland criteria. If repair of a leaky pipe were to eliminate wetland hydrology and cause the cattail patch to die off, the area would not be considered jurisdictional, and no Corps or RWQCB permit or mitigation would be required. If the cattail stand remains after repair of a leaky pipe, it would be assumed jurisdictional, and regulatory permits and mitigation would be required for impacts to this feature.

If the feature is jurisdictional and cannot be avoided, the following mitigation approach should be implemented pursuant to MM-BIO-13. The project applicant shall acquire the appropriate applicable permit(s) (e.g., Section 404, Section 401) from the respective regulating agency(s) (i.e. Corps and/or RWQCB). A wetland mitigation plan shall be prepared that will establish suitable compensatory mitigation based on the concept of no net loss of wetland habitat values or acreages, to the satisfaction of the regulatory agencies. The wetland mitigation plan shall include measures for avoidance, minimization, and compensation for wetland impacts. Avoidance and minimization measures may include the designation of buffers around wetland features to be avoided or project design measures. Compensation measures shall include the preservation and/or creation of wetlands or other waters. The final mitigation ratio (the amount of wetlands and other water created or preserved compared to the amount impacted) shall be determined by the applicable resource agency(s) and result in no net loss of wetland habitat value or acreages. The wetland mitigation plan shall follow guidelines detailed in MM-BIO-13, and include the following:

1. At least two surveys by a qualified wetland biologist, botanist, or ecologist per monitoring year;
2. Description of the wetland type and its expected functions and values;
3. Performance standards and monitoring protocol to ensure the success of the mitigation wetland(s) over a period of time to be determined by the resource agencies;
4. Engineering plans showing the location, size and configuration of the wetland(s) to be created or preserved;
5. An implementation schedule showing the construction or preservation of mitigation areas shall commence prior to or concurrently with the initiation of construction; and
6. A description of legal protection of the preserved wetland(s) (such as dedication of fee title, conservation easement, and/or an endowment held by an approved conservation organization, government agency, or mitigation bank).

Purchase of credits at a mitigation bank approved by the relevant regulatory agency(s) (i.e., Corps, RWQCB) at a minimum of a 1:1 ratio (one wetland credit purchased for each impacted wetland acre) may serve as mitigation in-lieu of the mitigation plan described above. All wetland mitigation shall be accomplished within the hydrologic unit code (HUC)-8 boundary for the watershed encompassing the Project.

Burrowing Owl

Potentially suitable habitat for burrowing owl is present in the Study Area. Impacts to burrowing owl will require mitigation. Mitigation Measure MM-BIO-3 from the EIR provides the appropriate required measures to avoid potential impacts to burrowing owl. The measure is as follows:

> *Prior to any construction activity planned during the fall and winter non-nesting season (September 1 through January 31) or at any time during the construction process, proponents of projects proposed within the Planning Area will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. Surveys will be conducted at each area of suitable habitat that will be disturbed no more than seven days prior to ground-disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance pursuant to CDFW's Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game,*

2012). If any burrowing owls are found within the disturbance area, the project proponent will notify CDFW and will proceed under CDFW direction.

If construction is planned to occur during the nesting season (February 1 through August 31), the project proponent will retain a qualified wildlife biologist to conduct a breeding season burrowing owl survey in the year prior to construction. The survey will be conducted to determine if there is a breeding pair within approximately 500 feet of each development footprint, unless the biologist determines that a smaller survey buffer around the construction footprint is warranted based on preexisting background disturbance and conditions. Survey visits will be timed in accordance with CDFW guidelines (California Department of Fish and Game, 2012). This will provide the project team advance notice of nesting owls in the development area and allow ample time to discuss appropriate avoidance measures with CDFW. In addition, preconstruction surveys will be conducted no more than seven days prior to ground disturbance in all areas of the development footprint supporting burrowing owl habitat. If the biologist identifies the presence of a burrowing owl nest in an area scheduled to be disturbed by construction, a 660-foot no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, and buffers will be coordinated with CDFW by contacting the appropriate CDFW personnel, and will be subject to CDFW review and oversight.

White-tailed Kite, Loggerhead Shrike, and Other Native Nesting Birds

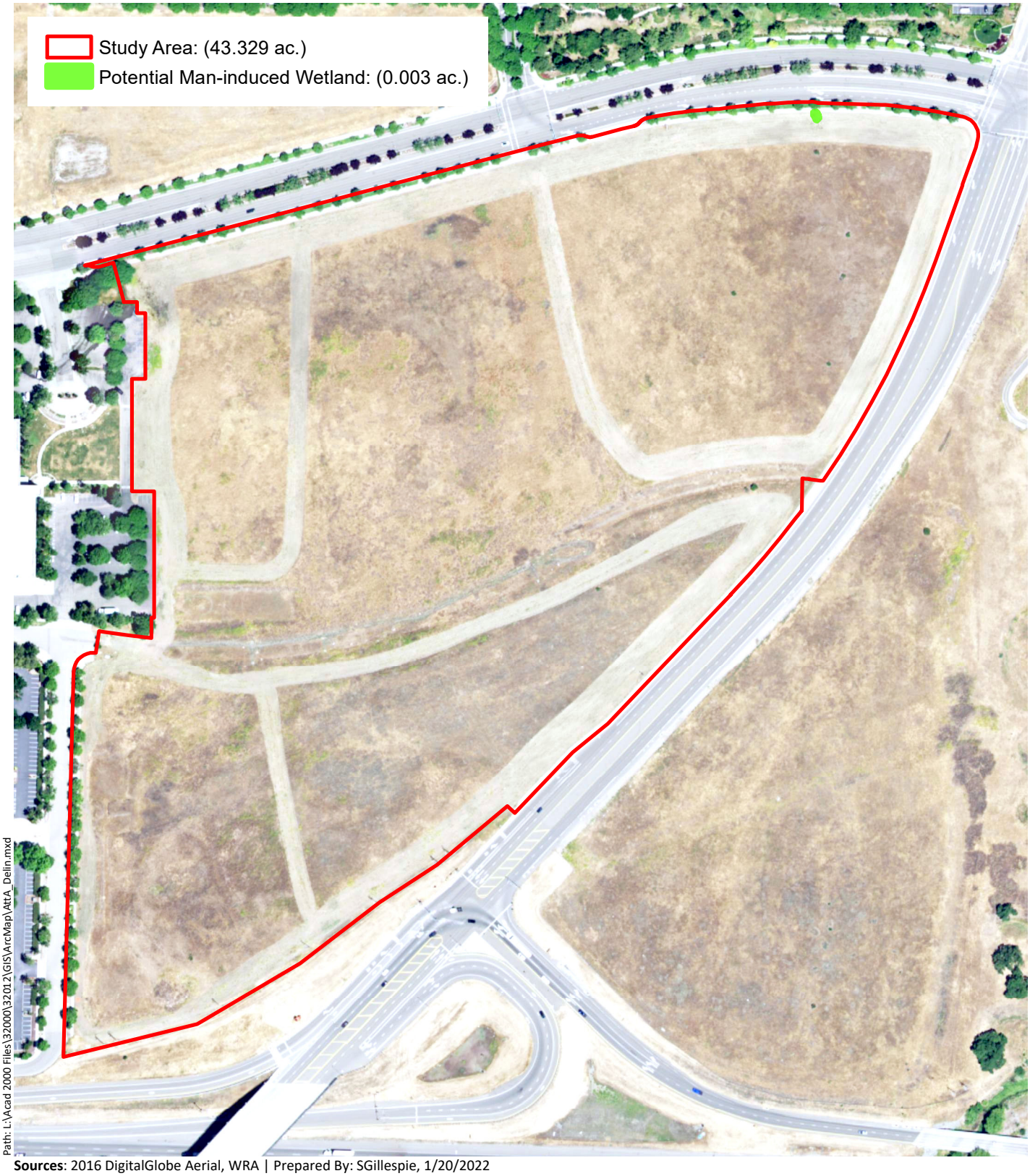
Vegetation removal or ground disturbance has the potential to impact nesting birds (including active nests with eggs or young) either directly or indirectly through noise or visual disturbance. Mitigation Measure MM-BIO-2 from the EIR provides the appropriate required measures to avoid potential impacts to white tailed kite, loggerhead shrike, and other nesting native bird species. The measure is as follows:

Proponents (or their contractors) of specific projects under the proposed Plan shall conduct construction activities outside the bird nesting season (February 1 to August 31) to the extent feasible. If construction initiation is unavoidable during this time, the project proponent or its contractor will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds (including raptors, but excluding burrowing owl) within 300 feet and including the near-term or longer-term improvements environmental footprints. Adjacent lands outside the development footprints will be scanned with binoculars from the limit of ground-disturbance and publicly accessible areas. Preconstruction surveys will occur no more than three days prior to the onset of ground-disturbing activities (including clearing, grubbing, and staging) at each development area. If active nests are found in the development footprints, the biologist will establish a no-disturbance buffer around the nest and mark the buffer perimeter with high visibility fencing, flagging, or pin flags. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in place until the nest is no longer active, as determined by the biologist. Buffers for any nests found outside but within 300 feet

of the development sites will be established based on the biologist's best professional judgment whether the work would result in nest abandonment. If a lapse in construction activities of 15 days or longer at a previously surveyed environmental footprint occurs, another preconstruction survey will be conducted.

If structure demolition activities cannot occur outside of the nesting season, the project proponent or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (e.g., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than three days prior to structure demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structures to be demolished/modified and the surrounding areas for the presence of active nests. If active nests are found on the structures or in the affected area, then demolition/modification activities will not proceed until the biologist verifies that all nests on the structures are inactive.

After all surveys and/or nest deterrence activities are completed at each development footprint, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the project proponent within seven days of survey completion.



Sources: 2016 DigitalGlobe Aerial, WRA | Prepared By: SGillespie, 1/20/2022

Attachment A. Potential Man-induced Wetland Observed

Isabel Avenue & Portola Avenue Site
Livermore, Alameda County, California

0 200 400 Feet

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ENVIRONMENTAL CONSULTANTS

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Plants				
Balsamorhiza macrolepis big-scale balsamroot	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 5100 feet (45 to 1555 meters). Blooms Mar-Jun.	**No Potential.** Chaparral and woodland habitats are absent from the Study Area. Although the Study Area contains grass-dominated habitat, the topography is flat and has been highly disturbed historically and recently and would not support this species. This species is not known from valley bottoms, instead being typically found on hillslopes. The nearest occurrence of this species is in the hills approximately 7 miles southeast of the Study Area.	No further actions are recommended for this species.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Centromadia parry ssp. *congdonii* Congdon's tarplant	Rank 1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 10 to 3970 feet (3 to 1210 meters). Blooms Apr-Jul.	**Moderate Potential. Not Observed.** The Study Area contains potentially suitable, grass-dominated habitat and moderately alkaline clay soils. Additionally, this taxon is disturbance-tolerant. There are two occurrences of this taxon within 3 miles of the Study Area (one to the west, one to the northeast).	This taxon was not observed during a protocol-level survey on October 4, 2022, and is assumed to be absent from the Study Area. No further actions are recommended.
Navarretia prostrata prostrate vernal pool navarretia	Rank 1B.2	Coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 10 to 3970 feet (3 to 1210 meters). Blooms Apr-Jul.	**No Potential.** No vernal pools or other seasonal wetland habitats are present in the Study Area	No further actions are recommended for this species.
Mammals				
Townsend's western big-eared bat *Corynorhinus townsendii townsendii*	SSC, WBWG High	Humid coastal regions of northern and central California. Roost in limestone caves, lava tubes, mines, buildings etc. Will only roost in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to disturbance	**No Potential.** No bat roost habitat is present within the Study Area.	No further actions are recommended for this species.
hoary bat *Lasiurus cinereus*	WBWG Medium	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	**No Potential.** No bat roost habitat is present within the Study Area.	No further actions are recommended for this species.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
American badger *Taxidea taxus*	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**Unlikely.** Soils are generally compacted within the Study Area and the potential prey base is limited.	No further actions are recommended for this species.
San Joaquin kit fox *Vulpes macrotis mutica*	FE, ST, RP	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Unlikely.** The Study Area is surrounded by urban development and major roadways, which isolate the Study Area from known source populations of this species.	No further actions are recommended for this species.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Birds				
tricolored blackbird *Agelaius tricolor*	ST, SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	**Unlikely.** No large swaths of emergent vegetation are present within the Study Area to support the establishment of a nesting colony for this species. May occasionally be observed foraging within the Study Area.	No further actions are recommended for this species.
burrowing owl *Athene cunicularia*	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**Moderate Potential.** Suitably sized burrows to support both breeding and wintering by this species are present in localized portions of the Study Area, mainly around excavated detention basins and on the berm along the eastern site boundary. Vegetation in these areas is sufficiently low to be considered suitable as well.	Protocol-level burrowing owl surveys should be conducted to determine if wintering or nesting birds are present. Appropriate avoidance buffers may be necessary if burrowing owl are discovered occupying suitable burrows.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
white-tailed kite *Elanus leucurus*	CFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	**Moderate Potential.** Trees and larger shrubs within or directly adjacent to the Study Area have some potential to support nesting by this species. May additionally forage within the Study Area.	A nesting bird survey should be conducted to determine if this species is nesting within the Study Area, and if so, appropriate avoidance buffers should be established.
loggerhead shrike *Lanius ludovicianus*	SSC	Year-round resident in open woodland, grassland, savannah and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	**Moderate Potential.** This species may nest in shrubs or trees located within or adjacent to the Study Area.	A nesting bird survey should be conducted to determine if this species is nesting within the Study Area, and if so, appropriate avoidance buffers should be established.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Reptiles and Amphibians				
California tiger salamander *Ambystoma californiense*	FT, ST	Occurs in grasslands, oak savannah, and open woodlands with a mosaic of vernal pools or similar seasonal wetlands. Requires vernal pools or similarly inundated waters for breeding and larvae. Adults are fossorial utilizing small mammal burrows for estivation.	**Unlikely.** No aquatic habitat with sufficient hydroperiod to support metamorphosis of this species is present within the Study Area. The Study Area is sufficiently isolated from source populations to preclude use of upland habitats within the Study Area as estivation habitat and to make use as a movement corridor unlikely.	No further actions are recommended for this species.
Pacific (western) pond turtle *Emys marmorata*	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**No Potential.** No perennial aquatic habitats are present within or in the immediate vicinity of the Study Area.	No further actions are recommended for this species.

ATTACHMENT B. SPECIAL-STATUS SPECIES ASSESSMENT TABLE

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
California red-legged frog *Rana draytonii*	FT, SSC, RP	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Unlikely.** No aquatic habitat with sufficient hydroperiod to support metamorphosis of this species is present within the Study Area. The Study Area is sufficiently isolated from source populations to preclude use of upland habitats within the Study Area as estivation habitat and to make use as a movement corridor unlikely.	No further actions are recommended for this species.
Invertebrates				
Callippe silverspot butterfly *Speyeria callippe callippe*	FE	Two populations in San Bruno Mountain and the Cordelia Hills are recognized. Hostplant is Viola pedunculata, which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**No Potential.** The Study Area is outside of the known range of this species, and no serpentine soils are present that could support host plants.	No further actions are recommended for this species.

Appendix C-2

Peer Review Letter

October 9, 2023
Project No: 23-14939

Jake Potter, MUP, Senior Planner
Community Development Department
City of Livermore
1052 South Livermore Avenue
Livermore, California 94550
Via email: japotter@livermoreca.gov

Subject: Peer Review of the Biological Resources Analysis for the Harridge Development Project, City of Livermore, Alameda County

Dear Mr. Potter:

This letter provides the results of Rincon Consultants, Inc.'s review of the Summary of Biological Evaluations (SBE) at the Portola Avenue/Isabel Avenue Site in Livermore, Alameda County, California prepared by WRA Environmental Consultants in February 2023 for the Harridge Development Project (project). This peer review was completed as part of the environmental analysis being conducted in conformance with the California Environmental Quality Act (CEQA) by the City of Livermore. This review considers if the SBE completed for the project is adequate for the purposes of preparing an Environmental Impact Report (EIR) Addendum. Rincon reviewed the SBE for completeness with respect to the following parameters:

- Methodology for conducting the SBE
- Adequate description of the project and existing conditions
- Potential project impacts to protected biological resources
- Adequacy of any mitigation measures

Summary of Biological Resources Analysis

The SBE provides a peer review of the Delineation of Aquatic Resources report (DAR) prepared by RestorCorp (May 7, 2021) for the Study Area and includes assessments of the presence or absence of special status species within the Study Area.

According to the SBE, the project would be located within the vacant lot located southwest of Isabel Avenue and Portola Avenue. The Study Area was 42.329 acres in area; however, a Project Area and buffer area are not defined in the SBE. Additional location information is provided in the DAR: the Study Area includes nine conjoined parcels (Assessor's Parcel Numbers 903-001004600, 903-001004700, 903-001004800, 903-0014900 [not included in the DAR], 903-001005000, 903-001005100, 903-001005200, 903-001005300, and 903-001005400). The DAR includes conflicting Study Area acreage amounts within itself and with the SBE. These conflicting acreages and incomplete Assessor's Parcel Numbers are not addressed in the SBE. A project description was not provided in either document. The DAR includes a description of habitat (non-native grassland) which is not referenced in the SBE and the SBE does not characterize habitat types throughout the Study Area.

The SBE determined 59 special status plants and 29 special status animal species are known within the regional vicinity of the Study Area. The Study Area was determined to lack the necessary habitat

features for presence of special status plants, except for one species: Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). A protocol-level survey for Congdon's tarplant conducted on October 4, 2022 had negative results; thus, it was concluded that the plant was absent from the Study Area. In addition to nesting birds, required habitat for special status wildlife is also present for three protected avian species within the Study Area: burrowing owl (*Athene cunicularia)*, white-tailed kite (*Elanus leucurus)*, and loggerhead shrike (*Lanius ludovicianus)*. During site visits on January 13, February 1, and February 15, 2022, there were no observations of special status plant or wildlife species. The project site was determined to not provide adequate wildlife corridors or wildlife nursery sites due to the large amount of development surrounding the site and lack of aquatic habitat with sufficient hydroperiod for metamorphosis of special status amphibian species.

The SBE concludes that a wetland exists in the Study Area, and that the wetland may be exempt from regulatory agency jurisdiction due to likely being product of a leaking pipe and no evidence of an existing wetland prior to 2020. The SBE provides recommended avoidance and minimization measures as well as mitigation measures if the wetland is determined to be jurisdictional.

The SBE also provides mitigation measures to reduce potentially significant impacts to protected species with potential to occur in the Study Area to a less than significant level.

Evaluation of Adequacy

Rincon reviewed the SBE for completeness and adequacy with emphasis on biological resources assessment methodology, description of the project and existing conditions, potential project-related impacts to biological resources, and adequacy of any mitigation measures. The following recommendations for revisions to the SBE are based on this review:

- Rincon recommends adding a brief description of the proposed project to the SBE.
- Rincon recommends adding a description of the Study Area land cover to the SBE.
- The SBE should resolve the discrepancies regarding Study Area acreage.
- Because of the urban setting, isolation caused by large roadways, and lack of suitable habitat or connectivity to habitat areas, Rincon agrees that no special status species would be expected to occur at the site; however, the full disclosure of all species known to occur in the region would result in a more defensible document. Rincon conducted a 9-quad query of the CNDDB and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database and identified an additional 18 animal species, and one sensitive habitat. Rincon recommends including a more robust table of special status species with notes on potential to occur in the Study Area, to more clearly represent sensitive wildlife species that may occur in or near the project site.
- Finally, evaluation of three CEQA checklist items for biological resources is needed:
    - CEQA biological resources checklist item (b): Note the presence or absence of sensitive natural communities in the Study Area.
    - CEQA biological resources checklist item (e): Review literature and discuss any local policies or ordinances protecting biological resources (e.g., tree ordinances).
    - CEQA biological resources checklist item (f): Determine whether any local, regional, or state habitat conservation plans apply to the project.

Rincon found that the SBE adequately assessed the potential for species presence, avoidance, and minimization measures for protected resources, and provided adequate mitigation measures if the small wetland is determined to be jurisdictional.

Conclusion

Rincon generally agrees with the findings of the SBE but recommends that revisions be made as specified above in order to address all CEQA checklist questions. Rincon finds that, with the revisions suggested in this letter, the SBE would be adequate for the purpose of preparing a legally defensible CEQA document. Rincon Consultants is available to make these SBE revisions on behalf of the City of Livermore for an additional fee, if needed.

Sincerely,
Rincon Consultants, Inc.



Jane Anfinson, Senior Biologist



Alex Hunt, Director, Natural Resources

Appendix D

Aquatic Resources Delineation

RESTORCAP

Delineation of Aquatic Resources

May 7, 2021

Travis Devan
Argent Management LLC.
2392 Morse Avenue
Irvine, CA 92614

Dear Mr. Devan,

This letter report summarizes the results of the formal jurisdictional delineation that took place on March 30, 2021 on the property (Study Area, Attachment A) located southwest of the intersection of Portola and Isabel Avenue in Livermore, Alameda County, California. The purpose of this jurisdictional delineation within the Study Area was to identify the type and extent of any jurisdictional resources as defined by the San Francisco District U.S. Army Corps of Engineers (USACE) and the San Francisco Regional Water Quality Control Board (RWQCB).

The Study Area includes nine conjoined parcels totaling approximately 45.33 acres in size, with the following assessor's parcel numbers: 903-001004600, 903-001004700, 903-001004800, 903 -001005000, 903-001005100, 903-001005200, 903-001005300, and 903-001005400. The Study Area is undeveloped, vegetated with a mixture of non-native grasses and forbs, and surrounded by urban development both residential and commercial. The Study Area is entirely within the U.S. Geological Survey's (USGS) *Livermore* 7.5-minute topographic quadrangle and Lower Arroyo Las Positas HUC8 (180500040203) Watershed (USGS, 2015).

Methods

The formal jurisdictional delineation conducted on March 30, 2021 within the Study Area followed the technical guidelines provided in the *Corps of Engineers Delineation Manual* (Environmental Laboratory, 1987) and the USACE *Arid West Regional Supplement* (USACE, 2008) that included an assessment of existing vegetation, soils, and hydrology. The Study Area was examined for the presence of "waters of the U.S." regulated under Section 404 of the Federal Clean Water Act and "waters of the State" regulated under the California Porter-Cologne Water Quality Control Act.

Prior to the jurisdictional delineation on March 30, 2021, reference materials were reviewed, including the following: the National Wetland Inventory data (U.S. Fish and Wildlife Service [USFWS], 2021), the Soil Survey of Alameda Area, California (U.S. Department of Agriculture [USDA], 1966), and historical aerial photographs (Google Earth, 2021). Biologists from RestorCap walked the entirety of the Study Area placing representative sample points into each unique habitat in addition to any areas previously identified from aerial imagery as having the potential to contain indicators of wetland conditions (vegetation, soils, and hydrology). Plant species identified in the Study Area were assigned a wetland status according to the National Wetland Plant List (Lichvar et al. 2018). Sample points were recorded using an iPad and Trimble R1 Integrated GNSS with a maximum precision of 50cm and data sheets were reported on Arid West

Supplement data forms (Attachment B). Photos were taken throughout the Study Area and are included as Attachment C.

Results

The Study Area is vegetated, undeveloped, and slightly sloping to the southwest with a large and wide depression running from east to west through the site. The surrounding area is a mixture of undeveloped parcels, residential communities, and commercial buildings, as well as associated infrastructure. The Study Area has historically been vacant apart from the installation of a 10" vitrified clay pipe prior to 2002 as part of the City of Livermore's Isabel Neighborhood Plan to support the development to the west of the Study Area, which resulted in the aforementioned low-lying area running east to west and is observable on aerial imagery (City of Livermore, 2020). Additionally, the southwestern corner of the Study Area was utilized for staging equipment for the adjacent development during the same time period as installation of the vitrified clay pipe (Google Earth, 2021).

Within the Study Area, four areas were sampled to represent the site in terms of the current conditions of vegetation, soil, and hydrology. Sampling locations were based on providing overall Study Area coverage, changes in aerial imagery signature, changes in local topography, and changes in plant species composition. One sample point was strategically placed within a low-lying area with a unique aerial signature that occurred as a result of the vitrified clay pipe installation. The rest of the points were placed in areas with distinct aerial signatures such as dark spots, denuded areas, or changes in vegetation density or composition.

Vegetation was dominated by non-native grasses and forbs such as black mustard (*Brassica nigra*, UPL), oat (*Avena* sp., UPL), rose clover (*Trifolium hirtum*, UPL), common's stork bill (*Erodium cicutarium*, UPL), hairy vetch (*Vicia villosa*), ripgut brome (*Bromus diandrus*, UPL), soft brome (*Bromus hordeaceus*, FACU), shortpod mustard (*Hirschfeldia incana*, UPL), Italian rye grass (*Festuca perennis*, FAC), and sow thistles (*Sonchus arvensis,* FACU, *S. oleraceus,* UPL). The Study Area is underlain by very dark grayish-brown to brown clay or clay loam soils, none of which are considered hydric (USDA, 2021). Hydrological inputs for the Study Area include precipitation, sheet flow, and runoff from the surrounding impervious surfaces (roads, commercial and residential development etc.).

The jurisdictional delineation occurred during precipitation conditions that placed rainfall at below the normal for the 30-year period, however,rainfall was considered normal for the prior month of February (Attachment D). Subsequently, clay soils within the Study Area contained no visible surface soil cracks and posed little resistance during excavation of sample soil pits, indicating rainfall permeated the soil profile. Despite rainfall permeating the soils during the month prior to the jurisdictional delineation, no indicators of wetland hydrology were observed within the sample points or overall Study Area. Likewise, no hydric soil indicators were observed within any of the sample points placed during the jurisdictional delineation.

Conclusion

The results of this formal jurisdictional delineation reflect the current conditions of the Study Area at the time of the jurisdictional delineation on March 30, 2021. Conditions of the Study Area may change over time due to external factors that could alter the results of this jurisdictional delineation. The Study Area contains no wetlands or other aquatic features that could be classified as potentially jurisdictional by either the USACE or SFRWQCB. No hydrophytic vegetation, hydric soils, or indicators of wetland hydrology were observed in the sample points placed within the Study Area during the jurisdictional delineation.

Sincerely,



Kari Dupler, PWS

References:

City of Livermore. Isabel Neighborhood Specific Plan. Adopted November 2020. https://www.cityoflivermore.net/citygov/cdd/bart/isabel_neighborhood_plan.htm

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.

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Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2018 wetland ratings. Phytoneuron 2016-30: 1-17. Published 18 May 2020. ISSN 2153 733X.

USACE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.

USDA. Soil Survey of Alameda Area. 1966. nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA609/0/alameda.pdf.

USDA. Natural Resources Conservation Service. 2021. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/. Accessed April 2021.

USFWS. 2018. National Wetlands Inventory website. U.S. Department of the Interior, USFWS, Washington, D.C. http://www.fws.gov/nwi/. Accessed: April 21.

USGS. 2015. Livermore, California 7.5-minute quadrangle.

Attachments:

Attachment A. Delineation of Aquatic Resources Figure
Attachment B. Arid West Determination Forms
Attachment C. Study Area Photographs
Attachment D. Antecedent Precipitation Tool Results

Attachment A. Delineation of Aquatic Resources Figure

EXHIBIT D



Attachment A. Delineation of Aquatic Resources

Livermore
Alameda County, California

Feet
0 350 700

N
W E
S

Map Prepared Date: 4/23/2021
Map Prepared By: Ra'am Akiba-Hajim
Base Source: NAIP 2018
Data Source(s): RestorCap LLC.

RESTORCAP

Attachment B. Arid West Determination Forms

EXHIBIT D

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Livermore Property Development Project City/County: Livermore/Alameda Sampling Date: 03-30-2021

Applicant/Owner: Argent Management LLC State: CA Sampling Point: SP01

Investigator(s): K. Dupler, R. Akiba-Hajim, RestorCap Section, Township, Range: T3S R2E

Landform (hillslope, terrace, etc.): slight depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): C- Mediterranean California Lat: 37.70556 Long: -121.8006 Datum: WSGS84

Soil Map Unit Name: Diablo clay, very deep, 3 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

SP01 is located within the north central portion of the Study Area and was selected based on a difference in aerial signature. SP01 did not contain hydrophytic vegetation, hydric soils, or wetland hydrology. Vegetation and soils were considered significantly disturbed, disturbance occurring in the late 1990s during the placement of sewer lines that support adjacent developments. Rainfall was considered drier than normal, with a majority of rainfall in the last three months falling in late February.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
	- = Total Cover		
Sapling/Shrub Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
5.			
	- = Total Cover		
Herb Stratum (Plot size: 5')			
1. Avena barbata	35	Yes	UPL
2. Brassica nigra	20	Yes	UPL
3. Trifolium hirtum	10	Yes	UPL
4. Geranium sp.	5	No	UPL
5.			
6.			
7.			
8.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: -)			
1.			
2.			
	- = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SP01 did not pass the dominance test and therefore hydrophytic vegetation was not present.

EXHIBIT D

SOIL

Sampling Point: SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					clay loam	
7-12	10YR 3/2	90					clay loam	
7-12	10YR 4/2	10					clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

SP01 did not contain any indicators of hydric soil and therefore hydric soil was not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Google Earth (2021)

Remarks:

SP01 did not contain indicators of wetland hydrology and therefore wetland hydrology was not present.

EXHIBIT D

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Livermore Property Development Project City/County: Livermore/Alameda Sampling Date: 03-30-2021

Applicant/Owner: Argent Management LLC State: CA Sampling Point: SP01

Investigator(s): K. Dupler, R. Akiba-Hajim, RestorCap Section, Township, Range: T3S R2E

Landform (hillslope, terrace, etc.): slight depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): C- Mediterranean California Lat: 37.70556 Long: -121.8006 Datum: WSGS84

Soil Map Unit Name: Diablo clay, very deep, 3 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

SP01 is located within the north central portion of the Study Area and was selected based on a difference in aerial signature. SP01 did not contain hydrophytic vegetation, hydric soils, or wetland hydrology. Vegetation and soils were considered significantly disturbed, disturbance occurring in the late 1990s during the placement of sewer lines that support adjacent developments. Rainfall was considered drier than normal, with a majority of rainfall in the last three months falling in late February.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
	- = Total Cover		
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1.			
2.			
3.			
4.			
5.			
	- = Total Cover		
Herb Stratum (Plot size: 5')			
1. Avena barbata	35	Yes	UPL
2. Brassica nigra	20	Yes	UPL
3. Trifolium hirtum	10	Yes	UPL
4. Geranium sp.	5	No	UPL
5.			
6.			
7.			
8.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: -)			
1.			
2.			
	- = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SP01 did not pass the dominance test and therefore hydrophytic vegetation was not present.

EXHIBIT D

SOIL

Sampling Point: SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
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7-12	10YR 3/2	90					clay loam	
7-12	10YR 4/2	10					clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

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- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
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- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

SP01 did not contain any indicators of hydric soil and therefore hydric soil was not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
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- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
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- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
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- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Google Earth (2021)

Remarks:

SP01 did not contain indicators of wetland hydrology and therefore wetland hydrology was not present.

EXHIBIT D

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Livermore Property Development Project City/County: Livermore/Alameda Sampling Date: 03-30-2021

Applicant/Owner: Argent Management LLC State: CA Sampling Point: SP01

Investigator(s): K. Dupler, R. Akiba-Hajim, RestorCap Section, Township, Range: T3S R2E

Landform (hillslope, terrace, etc.): slight depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): C- Mediterranean California Lat: 37.70556 Long: -121.8006 Datum: WSGS84

Soil Map Unit Name: Diablo clay, very deep, 3 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

SP01 is located within the north central portion of the Study Area and was selected based on a difference in aerial signature. SP01 did not contain hydrophytic vegetation, hydric soils, or wetland hydrology. Vegetation and soils were considered significantly disturbed, disturbance occurring in the late 1990s during the placement of sewer lines that support adjacent developments. Rainfall was considered drier than normal, with a majority of rainfall in the last three months falling in late February.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
	-	= Total Cover	
Sapling/Shrub Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
5.			
	-	= Total Cover	
Herb Stratum (Plot size: 5')			
1. Avena barbata	35	Yes	UPL
2. Brassica nigra	20	Yes	UPL
3. Trifolium hirtum	10	Yes	UPL
4. Geranium sp.	5	No	UPL
5.			
6.			
7.			
8.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: -)			
1.			
2.			
	-	= Total Cover	

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SP01 did not pass the dominance test and therefore hydrophytic vegetation was not present.

EXHIBIT D

SOIL

Sampling Point: SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					clay loam	
7-12	10YR 3/2	90					clay loam	
7-12	10YR 4/2	10					clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

SP01 did not contain any indicators of hydric soil and therefore hydric soil was not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Google Earth (2021)

Remarks:

SP01 did not contain indicators of wetland hydrology and therefore wetland hydrology was not present.

EXHIBIT D

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Livermore Property Development Project City/County: Livermore/Alameda Sampling Date: 03-30-2021

Applicant/Owner: Argent Management LLC State: CA Sampling Point: SP01

Investigator(s): K. Dupler, R. Akiba-Hajim, RestorCap Section, Township, Range: T3S R2E

Landform (hillslope, terrace, etc.): slight depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): C- Mediterranean California Lat: 37.70556 Long: -121.8006 Datum: WSGS84

Soil Map Unit Name: Diablo clay, very deep, 3 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

SP01 is located within the north central portion of the Study Area and was selected based on a difference in aerial signature. SP01 did not contain hydrophytic vegetation, hydric soils, or wetland hydrology. Vegetation and soils were considered significantly disturbed, disturbance occurring in the late 1990s during the placement of sewer lines that support adjacent developments. Rainfall was considered drier than normal, with a majority of rainfall in the last three months falling in late February.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
	-	= Total Cover	
Sapling/Shrub Stratum (Plot size: -)			
1.			
2.			
3.			
4.			
5.			
	-	= Total Cover	
Herb Stratum (Plot size: 5')			
1. Avena barbata	35	Yes	UPL
2. Brassica nigra	20	Yes	UPL
3. Trifolium hirtum	10	Yes	UPL
4. Geranium sp.	5	No	UPL
5.			
6.			
7.			
8.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: -)			
1.			
2.			
	-	= Total Cover	

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SP01 did not pass the dominance test and therefore hydrophytic vegetation was not present.

EXHIBIT D

SOIL

Sampling Point: SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					clay loam	
7-12	10YR 3/2	90					clay loam	
7-12	10YR 4/2	10					clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

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- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
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- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

SP01 did not contain any indicators of hydric soil and therefore hydric soil was not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Google Earth (2021)

Remarks:

SP01 did not contain indicators of wetland hydrology and therefore wetland hydrology was not present.

Attachment C. Study Area Photographs



Photograph 1. Visual of upland sample point (SP01) within non-native vegetation in the Study Area, facing south. Taken March 30, 2021.



Photograph 2. Visual of upland sample point (SP01) within non-native vegetation in the Study Area, facing north. Taken March 30, 2021.



Photograph 3. Visual of upland sample point (SP02) within depression running east to west through the Study Area, facing northeast. Taken March 30, 2021.



Photograph 4. Visual of upland sample point (SP02) within depression running east to west through the Study Area, facing southwest. Taken March 30, 2021.



Photograph 5. Visual of upland sample point (SP03) within non-native vegetation in the Study Area, facing north. Taken March 30, 2021.



Photograph 6. Visual of sample point (SP03) within non-native vegetation in uplands in the Study Area, facing northwest. Taken March 30, 2021.



Photograph 7. Visual of upland sample point (SP04) within non-native vegetation in the Study Area, facing northeast. Taken March 30, 2021.



Photograph 8. Visual of upland sample point (SP04) within non-native vegetation in the Study Area, facing southeast. Taken March 30, 2021.



Photograph 9. Visual of very dark grayish brown clay loam soils observed within SP01. Taken March 30, 2021.



Photograph 10. Visual of brown to dark grayish silty brown clay loam soils observed within SP02. Taken March 30, 2021.



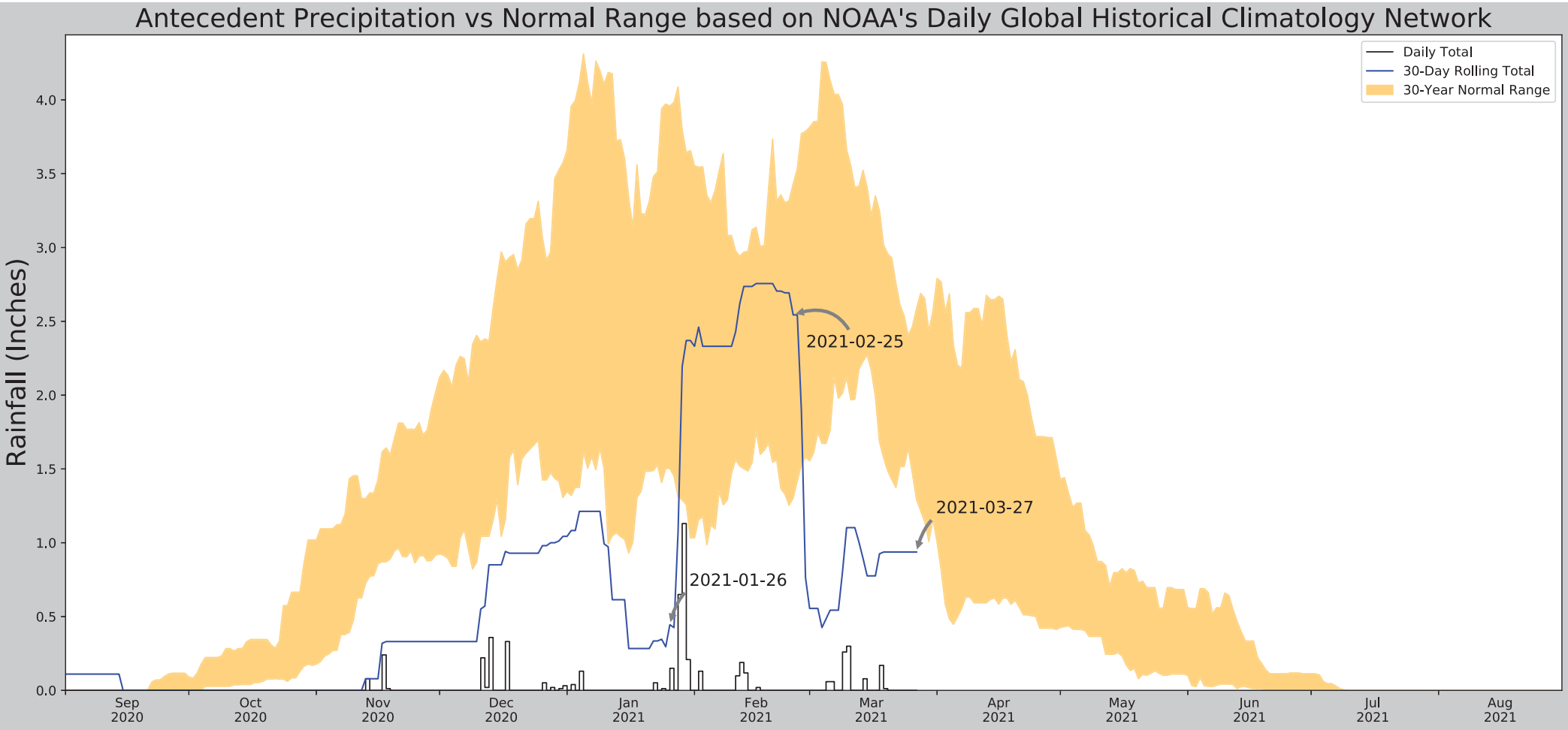
Photograph 11. Visual of brown clay loam soils observed within SP03. Taken March 30, 2021.



Photograph 12. Visual of brown to black clay loam soils observed within SP04. Taken March 30, 2021.

Attachment D. Antecedent Precipitation Tool Results

EXHIBIT D



Coordinates	37.704279, -121.800399
Observation Date	2021-03-27
Elevation (ft)	430.93
Drought Index (PDSI)	Moderate drought (2021-02)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-03-27	1.294488	2.585039	0.937008	Dry	1	3	3
2021-02-25	1.302362	3.430709	2.543307	Normal	2	2	4
2021-01-26	1.50315	3.958268	0.444882	Dry	1	1	1
Result							Drier than Normal - 8

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
LIVERMORE	37.6928, -121.8144	393.045	1.102	37.885	0.538	11170	81
LIVERMORE MUNI AP	37.6928, -121.8144	393.045	1.102	37.885	0.538	153	9
UPPER SAN LEANDRO FILTERS	37.7719, -122.1675	394.029	20.595	36.901	10.028	30	0

Appendix E

Transportation and VMT Analysis Memorandums

Appendix E-1

Isabel Crossing Project – Focused Transportation Analysis

EXHIBIT D

Focused Transportation Analysis

Isabel Crossings



June 24, 2024

1891

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APPENDICES

Appendix A: Livermore Isabel Transit Village Modified Project Analysis dated December 6, 2023 (revised May 14, 2024)

Appendix B: Traffic Signal Warrant Analysis Worksheets

Appendix C: Synchro LOS Analysis

Appendix D: Simtraffic Queue Analysis

INTRODUCTION

The purpose of this report is to provide a design-focused traffic analysis of the proposed mixed-use project, called Isabel Crossings (the Project).

The Project is located within a greater planning area called the Isabel Neighborhood, located within the City of Livermore. The Isabel Neighborhood Specific Plan (INSP) differs from the City's General Plan and allows for an increased intensity of land uses near the proposed Isabel Valley Link transit station. The INSP included a detailed traffic analysis as part of the Draft Environmental Impact Report dated January 12, 2018.

Since the INSP included a thorough traffic impact analysis of the planning area, and the Project aligns with the land uses identified in the INSP, this traffic analysis is focused on evaluating the proposed project's design elements such as site access, on-site circulation, parking, and conformance with transportation aspects of the INSP.

The scope of this focused traffic study was approved by City of Livermore staff on November 22, 2022 and was developed in response to a letter of incompletion dated October 25, 2022 by the City of Livermore in response to the Project's submittal for a Development Agreement.

Isabel Neighborhood Specific Plan

The Isabel Neighborhood Specific Plan (INSP) is a regulatory framework that supersedes the City of Livermore General Plan with more specific goals and policies that guide the development of the surrounding area. The INSP was adopted in November 2020 and amended in November 2022. The INSP is of particular importance to allow for development that supports and complements the future Isabel Station for the Valley Link rail system.

The INSP allows development of 4,095 new multi-family housing units and approximately 2.1 million square feet of new office and commercial development focused on the intensity of land uses near the future Isabel Valley Link transit station. The INSP included a detailed traffic analysis to support the land use framework for the Isabel Neighborhood.

The INSP planning area covers 1,138 acres, which includes the 45 acres of the Livermore Isabel Project. The project is located within the core area of the INSP with an objective of creating a vibrant neighborhood that supports a viable retail center and generates transit ridership. The INSP has identified a preliminary roadway network and land uses within the project area, as well as standards and requirements for development.

The INSP has conducted a thorough analysis of traffic impacts of the proposed land use changes, including intersection level of service (LOS). It has identified improvements that are needed to support

the developments as identified in the plan. Since the land uses proposed in the Project generate less traffic than what is proposed in the INSP, additional traffic impact analyses on the surrounding network is not necessary.

Project Description

The Isabel Crossings project is a proposed mixed-used development located on 45 acres at the southwest corner of Isabel Avenue and Portola Avenue in the City of Livermore. It is bordered by Isabel Avenue to the east, Portola Avenue to the north, I-580 to the south and existing office developments to the west. A vicinity map is included in **Figure 1**.

The Project proposes to construct 1,299 dwelling units (consisting of townhomes, condos, and mid-rise multi-family apartments) and 65,635 square feet of commercial space (a mix of retail & restaurant space) as identified in the Conceptual Plan. The commercial space is designed on the street level of multi-story buildings with residential apartments located above. Amenities within this mixed-use development include a neighborhood park, a recreation center that includes a pool, and open space at the corners of the retail-lined street including a pocket plaza, and a town square. A site plan is included in **Figure 2**.

The future Isabel Station for the Valley Link railway is located southeast from the project limits. The Valley Link railway is a proposed 42-mile passenger rail project that will connect the Lathrop Altamont Commuter Express (ACE) rail station with the Dublin/Pleasanton Bay Area Rapid Transit (BART) station. The entire Isabel Crossings project is located within a half-mile radius of the Isabel Station platform, some of it within a quarter-mile, which indicates that walkability to the Isabel Station is very high.

Figure 1: Vicinity Map



LEGEND

- Project Site
- Future Isabel Valley Link Station

Figure 2: Site Plan



STUDY METHODOLOGY

The purpose of this traffic analysis is focused on evaluating the Project's site access along the boundary of the Project, on-site circulation within the Project, on-street and private parking supply, and conformance with transportation aspects of the INSP, such a bicycle, pedestrian and transit facilities.

Evaluating the Project's site access and on-site circulation includes conducting intersection analysis to determine appropriate intersection configuration, traffic control devices at the intersections and length of left-turn pockets. The four study intersections are as follows:

- Isabel Avenue at Gateway Avenue
- Isabel Avenue at A Street
- Portola Avenue at Main Street
- Main Street at Gateway Avenue
- Portola Avenue at Isabel Avenue (LOS analysis only)

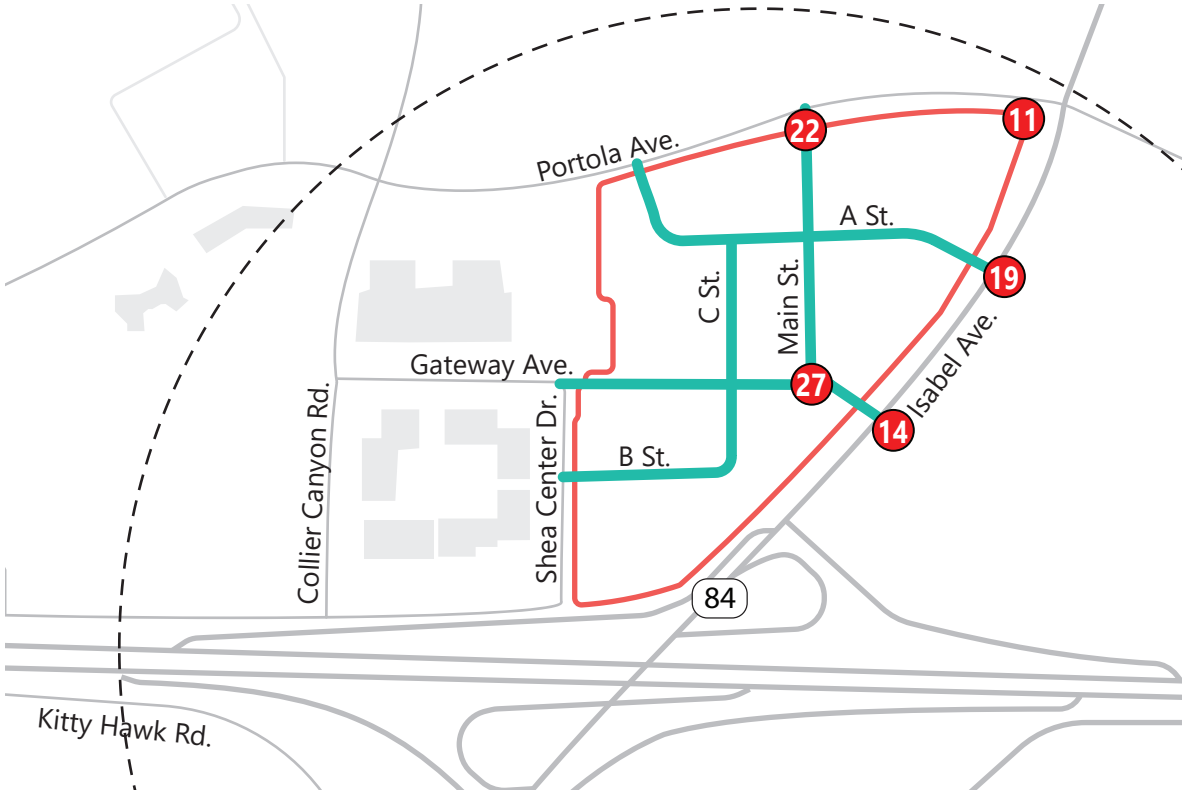
The no project scenario is developed based on a 2040 baseline condition of build-out of the INSP without development of the project site.

The build-out scenario is the 2040 Baseline plus Project. This consists of the 2040 Baseline No Project scenario described above plus project generated trips.

The trip generation for the Project was estimated based on the published trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition). The Project trips are then distributed onto the roadway network based on regional destinations and the number of trips are assigned at each intersection to provide project turning movement counts.

The 2040 Baseline plus Project turning movement volumes are used to evaluate the level of service and intersection configuration using the Highway Capacity Manual (HCM) 6th Edition within the Synchro 12 software platform. SimTraffic, a microsimulation component of the Synchro software package, was used to evaluate queuing lengths at the intersections.

Figure 3: Proposed Roadway Network



LEGEND

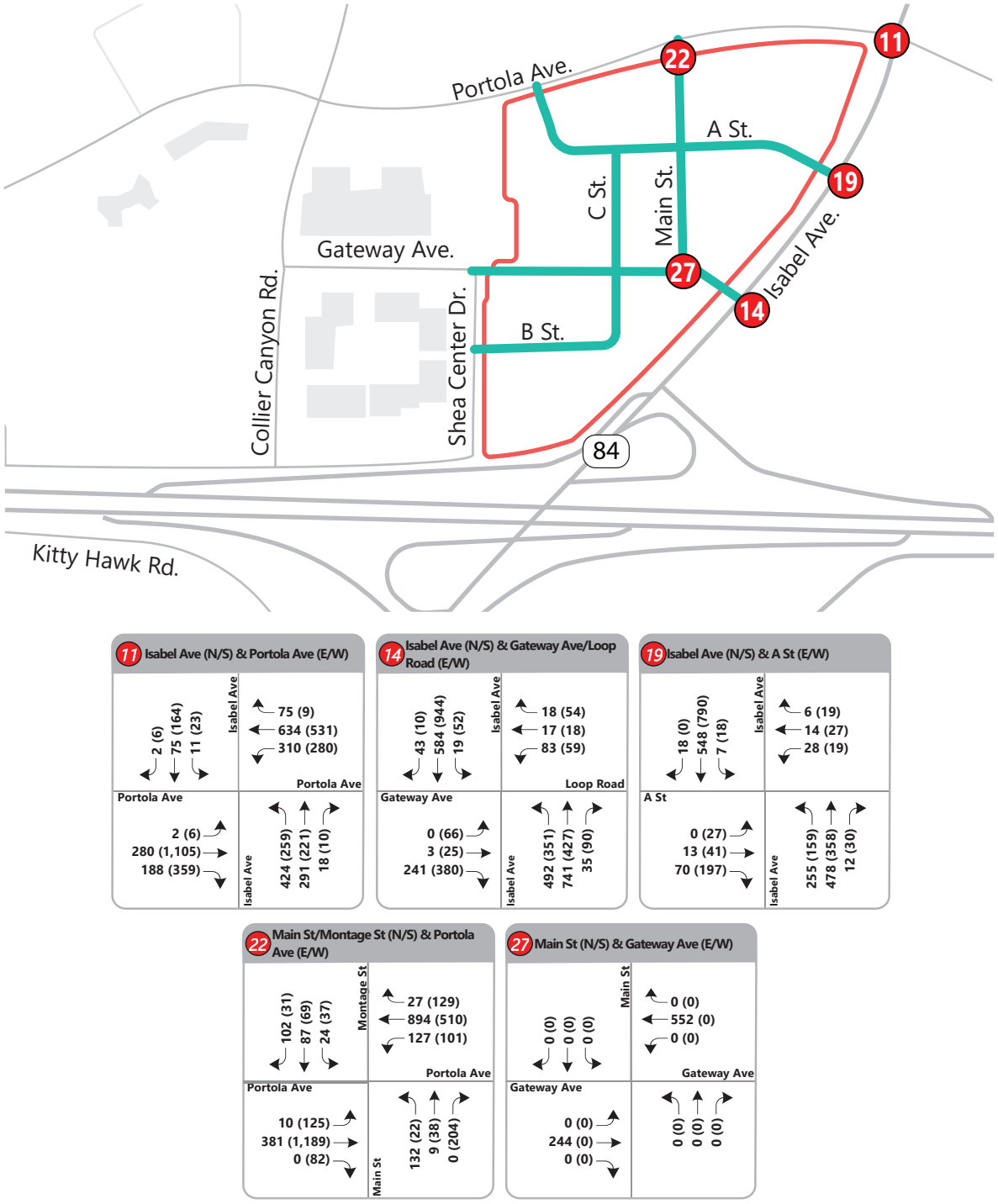
- Project Site Limits
- Study Intersection
- ½ Mile Radius from Isabel Valley Link Station
- Existing Roadway Network
- Proposed Roadway Network

2040 Baseline No Project

In order to determine the long-term impact for the Project, the analysis is based on the traffic volumes identified in the traffic study for the INSP using the 2040 Cumulative plus INSP project scenario. This scenario includes complete build-out of the INSP planning area, including the Valley Link station. However, since the Isabel Crossings project results in less traffic generation compared to the land uses proposed in the INSP, a 2040 Baseline No Project scenario was developed by subtracting the trips generated by the INSP from the 2040 Cumulative plus INSP project scenario.

The INSP trips for the Project area were identified based on a technical memo titled Livermore Isabel Transit Village Modified Project Analysis by TJKM Transportation Consultants dated December 6, 2023 and is provided in **Appendix A**. The same trip distribution used for the Project trips were applied to the INSP trips. The resulting trip assignment for the INSP trips were then subtracted from the 2040 Cumulative plus INSP project traffic volumes. The resulting trips are the 2040 Baseline No Project turning movement volumes as shown on **Figure 6**.

Figure 4: 2040 Baseline Turning Movement Volumes



LEGEND

- Project Site
- Study Intersection
- Existing Roadway Network
- Proposed Roadway Network
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

Project Trip Generation

The trips generated by the Project are shown on **Table 1**. Based on the ITE Trip Generation Manual 11th Edition and the Project's land uses, the Project is expected to generate 654 trips during the weekday morning (a.m.) peak hour and 919 trips during the weekday afternoon (p.m.) peak hour, as shown in Table 1 – Estimated Trip Generation.

Due to the close proximity of the future Valley Link Isabel Station and the walkability of the designed community, a trip reduction was applied for trips taken by residents walking to transit. Based on an article entitled *Vehicle Trip Reductions Impacts of Transit-Oriented Housing*, in the Journal of Public Transportation, Vol. 11, No. 3, 2008, transit-oriented developments generate on average 47 percent fewer trips compared to the ITE rate. To be conservative, it is assumed that 10 percent of trips from the single family attached residences and 15 percent of trips from the multi-family residences are walk-to-transit trips. Given the half-mile radius of the project to the future Valley Link Isabel Station, these assumptions are reasonable for transit trips in a transit-oriented development in a suburban environment.

The adjusted total project vehicle trips for the a.m. peak hour is 585 and 846 for the p.m. peak hour.

Table 1: Estimated Project Trip Generation

				AM PEAK HOUR						PM PEAK HOUR					
Parcel	ITE Land Use	Unit Count	Size	Generation Method	AM Trip Sub Total	Walk To Transit Percent Reduction	Adjusted AM Trip Total	In	Out	Generation Method	PM Trip Sub Total	Walk To Transit Reduction	Adjusted PM Trip Total	In	Out
				AM Rate/Equation				Split%		PM Rate/Equation				Split%	
N1	215 - Single-Family Attached Housing	Dwelling Units	98	Best Fit (LIN) T = 0.52(X) - 5.70	45	10%	41	10 25%	30 75%	Best Fit (LIN) T = 0.60(X) - 3.93	54	10%	49	29 59%	20 41%
N2	215(1) - Single-Family Attached Housing	Dwelling Units	56	Best Fit (LIN) T = 0.52(X) - 5.70	24	10%	22	5 25%	16 75%	Best Fit (LIN) T = 0.60(X) - 3.93	30	10%	27	17 59%	10 41%
N3-A	215(2) - Single-Family Attached Housing	Dwelling Units	40	Best Fit (LIN) T = 0.52(X) - 5.70	15	10%	14	3 25%	10 75%	Best Fit (LIN) T = 0.60(X) - 3.93	20	10%	18	11 59%	7 41%
C5 & C3	215(3) - Single-Family Attached Housing	Dwelling Units	129	Best Fit (LIN) T = 0.52(X) - 5.70	61	10%	55	14 25%	41 75%	Best Fit (LIN) T = 0.60(X) - 3.93	75	10%	68	40 59%	28 41%
C2-B	215(4) - Single-Family Attached Housing	Dwelling Units	17	Best Fit (LIN) T = 0.52(X) - 5.70	3	10%	3	1 25%	2 75%	Best Fit (LIN) T = 0.60(X) - 3.93	7	10%	6	5 59%	2 41%
C2-A	221(2) - Multifamily Housing (Mid-Rise)	Dwelling Units	116	Best Fit (LIN) T = 0.44(X) - 11.61	39	15%	33	8 23%	26 77%	Best Fit (LIN) T = 0.39(X) + 0.34	43	15%	37	23 61%	13 39%
C2-A	821-Shopping Plaza (40-150k) - Supermarket-No	1000 Sq. Ft. GLA	25	Average 1.73	43	0%	43	27 62%	16 38%	Average 5.19	130	0%	130	64 49%	66 51%
C1-A	215(5) - Single-Family Attached Housing	Dwelling Units	62	Best Fit (LIN) T = 0.52(X) - 5.70	27	10%	24	6 25%	18 75%	Best Fit (LIN) T = 0.60(X) - 3.93	34	10%	31	18 59%	13 41%
C1-B	221(1) - Multifamily Housing (Mid-Rise)	Dwelling Units	114	Best Fit (LIN) T = 0.44(X) - 11.61	39	15%	33	8 23%	26 77%	Best Fit (LIN) T = 0.39(X) + 0.34	59	15%	50	31 61%	20 39%
C1-B	821-Shopping Plaza (40-150k) - Supermarket-No	1000 Sq. Ft. GLA	19.61	Average 1.73	34	0%	34	21 62%	13 38%	Average 5.19	102	0%	102	50 49%	52 51%
S2 & S4	215(6) - Single-Family Attached Housing	Dwelling Units	143	Best Fit (LIN) T = 0.52(X) - 5.70	68	10%	61	15 25%	46 75%	Best Fit (LIN) T = 0.60(X) - 3.93	51	10%	46	27 59%	19 41%
S1 & S3	221(3) - Multifamily Housing (Mid-Rise)	Dwelling Units	524	Best Fit (LIN) T = 0.44(X) - 11.61	219	15%	186	50 23%	136 77%	Best Fit (LIN) T = 0.39(X) + 0.34	205	15%	174	106 61%	68 39%
S1	821-Shopping Plaza (40-150k) - Supermarket-No	1000 Sq. Ft. GLA	21.02	Average 1.73	37	0%	37	23 62%	14 38%	Average 5.19	109	0%	109	53 49%	56 51%
TOTAL					**654**		**585**	**191**	**395**		**919**		**846**	**473**	**373**

Project Trip Distribution & Assignment

According to the proposed roadway network (shown in **Figure 3**), the project proposes to construct two north-south roadways, Main Street and C Street, and three east-west roadways, A Street, B Street and Gateway Avenue. There are six proposed access points to the existing roadway network, including two new intersections on Isabel Avenue (one at Gateway Avenue and one at A Street) and two intersections on Portola Avenue (at an existing traffic signal at Montage Drive / Main Street, and a right-in/right-out intersection at A Street), an extension of the existing Gateway Avenue from Shea Center Drive, and a new intersection of B Street at Shea Center Drive.

Trip distribution is a process that determines in what proportion vehicles are expected to travel between the project site and various destinations outside the project study area based on land use and regional and local travel patterns. Assignment determines the various routes that vehicles would take from the project site to each destination using the estimated trip distribution.

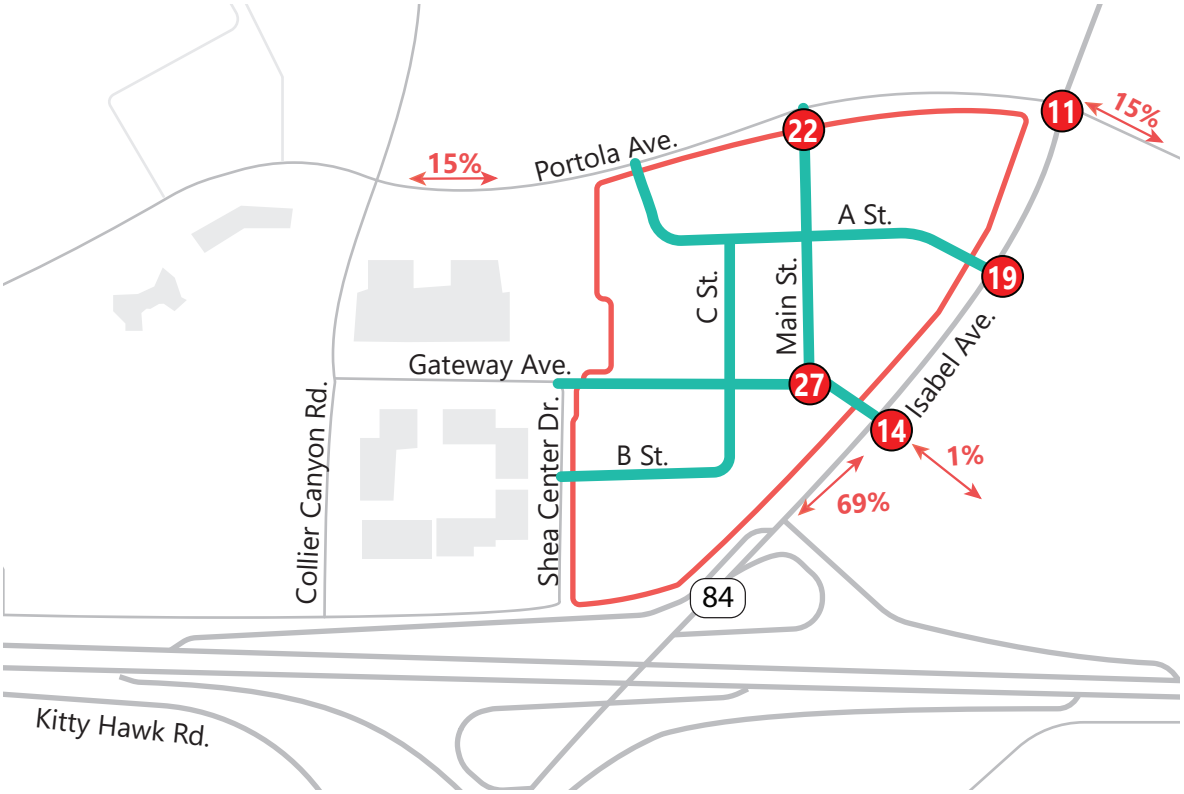
Figure 4 illustrates the overall trip distribution percentages developed for the proposed project. Net new trips associated with the proposed project were distributed as follows:

- 15 percent to/from Portola Avenue to the east,
- 15 percent to/from Portola Avenue/Airway Boulevard to the west, and
- 69 percent to/from I-580 and SR-84 to the south of the project.
- 1 percent to/from the future Valley Link station

Although an extremely small percentage of project trips may travel to/from Gateway Avenue to the west, for the purposes of this analysis, all the project trips were routed through the new intersections to evaluate a full-impact scenario.

Based on this distribution pattern, the trips were assigned through the proposed internal network to determine turning movement counts for the study intersections. See **Figure 5** for the project trips peak hour assignment.

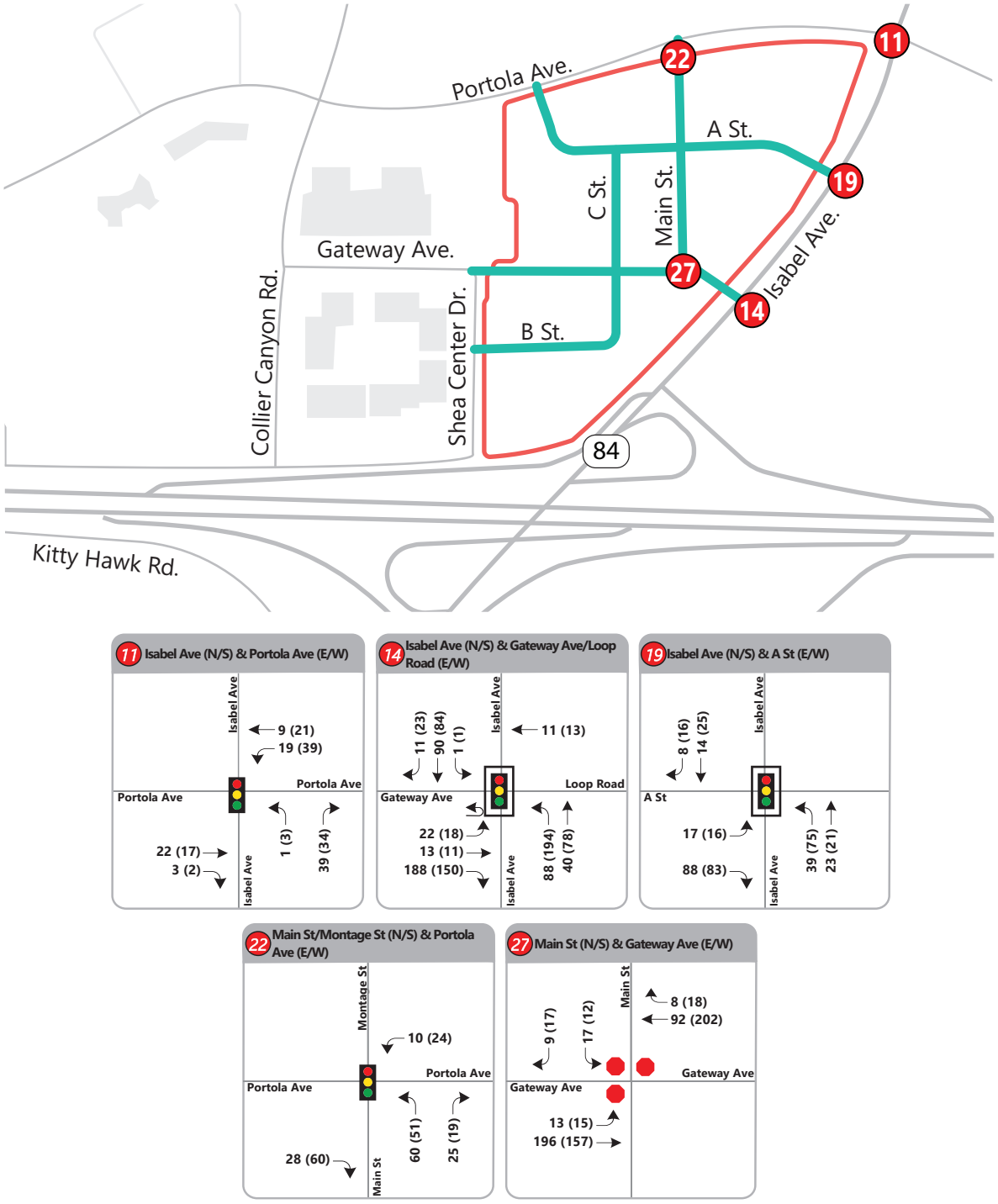
Figure 5: Project Trip Distribution



LEGEND

- Project Site
- Study Intersection
- XX% Trip Distribution
- Existing Roadway Network
- Proposed Roadway Network

Figure 6: Project Trip Assignment



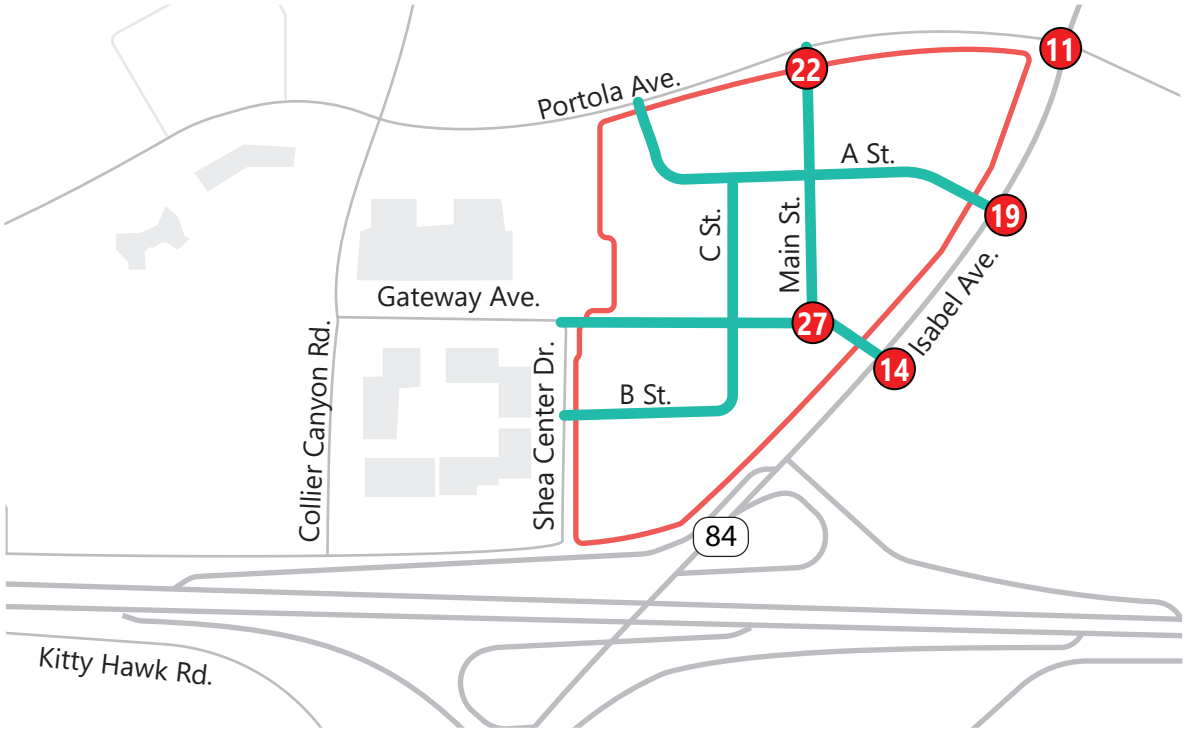
LEGEND

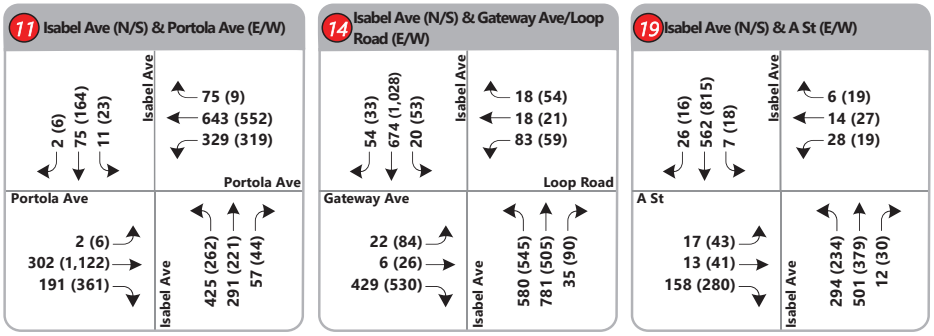
Project Site	Proposed Traffic Signal	Existing Traffic Signal
Study Intersection	Existing Roadway Network	XX	AM Peak Hour Trips
Proposed Stop Sign	Proposed Roadway Network	(XX)	PM Peak Hour Trips

2040 Baseline plus Project

The build-out scenario is the 2040 Baseline plus Project. This consists of the 2040 Baseline No Project scenario described above plus Project generated trips. **Figure 7** illustrates the Future plus Project traffic volumes for the a.m. and p.m. peak hours.

Figure 7: 2040 Baseline Plus Project Turning Movement Volumes





LEGEND

- Project Site
- Study Intersection
- Existing Roadway Network
- Proposed Roadway Network
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

LEVEL OF SERVICE ANALYSIS

Level of Service (LOS) is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience and safety. The operational LOS are given letter designations from A to F, with A representing the free-flow operating conditions and F representing the severely congested flow with high delays. Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets. The LOS analysis is provided as information only to determine how well the intersection operates. The following sections provide detailed study methodology based on the type of intersections.

Signalized Intersections

The study intersections were analyzed using the Highway Capacity Manual 6th Edition for signalized intersections (HCM 6th) which determines LOS based on average control delay per vehicle for the overall intersection during peak hour intersection operating conditions. **Table 2** summarizes the relationship between the control delay and LOS for signalized intersections. The LOS assessment under all scenarios is based on proposed traffic controls and optimized signal timing including parameters for the pedestrian crossings.

Table 2: Level of Service Definitions for Signalized Intersections

Level of Service	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: Transportation Research Board's (TRB) Highway Capacity Manual, 6th Edition

Unsignalized Intersections

LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At one- or two-way stop controlled intersections, the control delay is calculated for each movement, not for the intersection as a whole. **Table 3** summarizes the relationship between delay and LOS for stop-controlled intersections. The delay ranges for unsignalized intersections are lower than for signalized intersections, as drivers expect less delay at stop-controlled intersections.

Each of the study intersections were analyzed using Synchro Version 12 software. The LOS assessment under all scenarios is based on current traffic controls unless otherwise noted.

Table 3: Level of Service Definitions for Stop Controlled Intersections

Level of Service	Description
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: Transportation Research Board's (TRB) Highway Capacity Manual, 6th Edition

Level of Service Results

The intersection level of service was calculated for the five study intersections for the 2040 Baseline No Project scenario and two 2040 Baseline plus Project scenarios. The two Project scenarios evaluated was with one lane and with two lanes westbound on Gateway Avenue between Isabel Avenue and C Street. The results are shown on **Table 4**.

Additionally, these LOS results were compared to the LOS results in the original INSP Traffic Study for informational purposes. Due to difference in signal timing parameters, the LOS analysis in the INSP study are not a direct match to the LOS analysis in this study.

All intersections are project to operate within acceptable LOS based on City adopted LOS standards. The City of Livermore General Plan policy for LOS is mid-level D except in the Downtown Area and near freeway interchanges. For intersections near freeway interchanges, the upper limit of acceptable level of service is LOS E. It is noted that Isabel Avenue at Gateway Avenue is projected to operate at LOS E and this is acceptable for intersections near freeway interchanges.

Table 4: Intersection Level of Service Results

Study Inter-section Number	Intersection Name	Peak Hour	2040 Cumulative plus Project (INSP[1])		2040 Baseline No Project		2040 Baseline plus Project - 2 WB Lane Gateway		2040 Baseline plus Project - 1 WB Lane Gateway	
			Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
27	Gateway Ave @ Main St	AM	*	*	9	A	14.9	B	34.7	D
		PM	*	*	11.5	B	30.7	D	38.9	E
11	Isabel Ave & Portola Ave	AM	28.2	C	20.9	C	20.9	C	20.9	C
		PM	45.4	D	24.2	C	24.5	C	24.5	C
14	Isabel Ave @ Gateway Ave	AM	34.4	C	18.9	B	29.9	C	58.2	E
		PM	52.1	D	24.4	C	74.1	E	78.9	E
19	Isabel Ave @ A St	AM	27.4	C	13.3	B	17.1	B	17.1	B
		PM	52.0	D	19.1	B	27.7	C	27.7	C
22	Portola Ave @ Main St	AM	29.8	C[2]	21.2	C	25.9	C	25.9	C
		PM	21.0	C[2]	44.6	D	50.2	D	50.2	D

[1] As reported in the Traffic Study for the DEIR for INSP dated January 12, 2018 prepared by Kittleson & Associates

[2] LOS result is based on three eastbound and westbound travel lanes, compared to two lanes in the other scenarios

* Not studied in the Traffic Study for the DEIR for INSP

INTERSECTION FUNCTIONALITY

Four key intersections were analyzed in depth to determine appropriate traffic control types, number of travel lanes, and appropriate lengths of left turn pockets. Three of the intersections are access points to the project, and one of the intersections is the busiest internal intersection within the project. The 2040 Baseline plus Project traffic volumes, as shown in **Figure 7,** were used for this analysis.

A traffic signal warrant analysis is an evaluation of traffic conditions, including geometry, speed limit, and traffic volumes, to determine if a traffic signal is an appropriate traffic control device for an intersection. If a traffic signal is not warranted, then an alternative is for a stop sign controlled intersection, either an all-way stop or side street stop control.

Traffic signal warrant criteria are provided in the California Manual on Uniform Traffic Control Devices (CAMUTCD) and there are nine criteria known as warrants. Since these intersections do not yet exist, some data is not available yet, such as four-hour and eight-hour traffic volumes, number of pedestrians, number of collisions, etc. Therefore, the peak hour warrant (Warrant 3) was used to evaluate three of the

four study intersections, since one of the intersections is already controlled by a traffic signal. The warrant analysis is located in **Appendix B**.

To determine appropriate lane configurations and turn pocket lengths, the AM and PM peak hour analysis was conducted using Simtraffic component of the Synchro 12 software to determine the 95th percentile vehicular queues. Simtraffic is a microsimulation model whereas Synchro is a macrosimulation model, thus Simtraffic has the ability to be more realistic by evaluating the impact of queuing and blocking. The 95th percentile queue is the length of the line of vehicles that will not be exceeded 95 percent of the time during the peak hour. The Simtraffic analysis for the 95th percentile are provided in **Appendix C**.

Isabel Avenue at Gateway Avenue (#14)

Gateway Avenue is a proposed east-west street within the project, south of A Street that will intersect Isabel Avenue with a proposed traffic signal. This intersection is proposed to be 550 feet north of the existing signalized intersection of Isabel Avenue at I-580 westbound off-ramps, and 650 feet south of the proposed signalized intersection of Isabel Avenue at A Street. Gateway Avenue at the intersection approach is proposed to have three eastbound lanes, two which are right turn lanes, and one is a left turn lane. Isabel Avenue is proposed to have two through lanes, two left turn lanes, and a buffered bike lane in the northbound direction. In the southbound direction, two through lanes, one right turn lane and a buffered bike lane is proposed. There is a solid median as well as portion of painted median for a future southbound left turn lane. See **Figure 8** for the proposed intersection configuration.

Based on the Warrant 3 analysis, a warrant for traffic signal is satisfied for both the a.m. and p.m. peak hours at this intersection. ***It is recommended that the intersection of Isabel Avenue at Gateway Avenue be controlled by a traffic signal.*** Signal warrant analysis worksheets are provided in Appendix B.

A Simtraffic analysis was conducted to determine the appropriate length of the turn pockets at the intersection. **Table 5** shows the 95th percentile queue lengths for the approaches to the Isabel Avenue at Gateway Avenue intersection for the 2040 Baseline scenario and the 2040 Baseline plus Project scenario with one westbound through lane on Gateway Avenue and with two westbound through lanes on Gateway Avenue.

Table 5: 95th Percentile Queue Lengths at Isabel Avenue at Gateway Avenue

Study Intersection	Lane Group	Peak Hour	95th Queue (ft) 2040 Baseline	95th Queue (ft) 2040 Baseline Plus Project - One Lane Gateway*	95th Queue (ft) 2040 Baseline Plus Project - Two Lane Gateway*	Proposed Turn Bay Length (ft)
Isabel Ave @ Gateway Ave	Northbound Left	AM	196	**484**	**241**	205
		PM	157	**462**	**243**	
	Southbound Left	AM	67	**91**	91	120
		PM	**88**	**138**	**153**	
	Eastbound Left	AM	0	**55**	**49**	44
		PM	**83**	**88**	**90**	
	Eastbound Right	AM	**72**	**88**	**91**	41
		PM	**219**	**90**	**87**	

BOLD indicates that the 95th percentile queue length is estimated to exceed the proposed turn bay length

The project proposes to provide two northbound left turn pockets approximately 205 feet long. The Simtraffic analysis shows that for the 2040 Baseline plus Project with one westbound lane on Gateway Avenue, the calculated 95th percentile queue for the northbound left turn lane is 484 feet in the a.m. and 462 feet in the p.m. peak hours, which would drastically exceed the proposed turn pocket lengths. A lane utilization factor of 0.52 was utilized for the northbound left turn movement to account for the high proportion of westbound through volumes at Gateway. The westbound receiving lanes on Gateway Avenue are identified as one through lane and one right turn lane. Therefore, more vehicles will stack in the leftmost northbound left turn lane with the anticipation of continuing westbound on Gateway. Therefore, one lane on Gateway Avenue is not recommended.

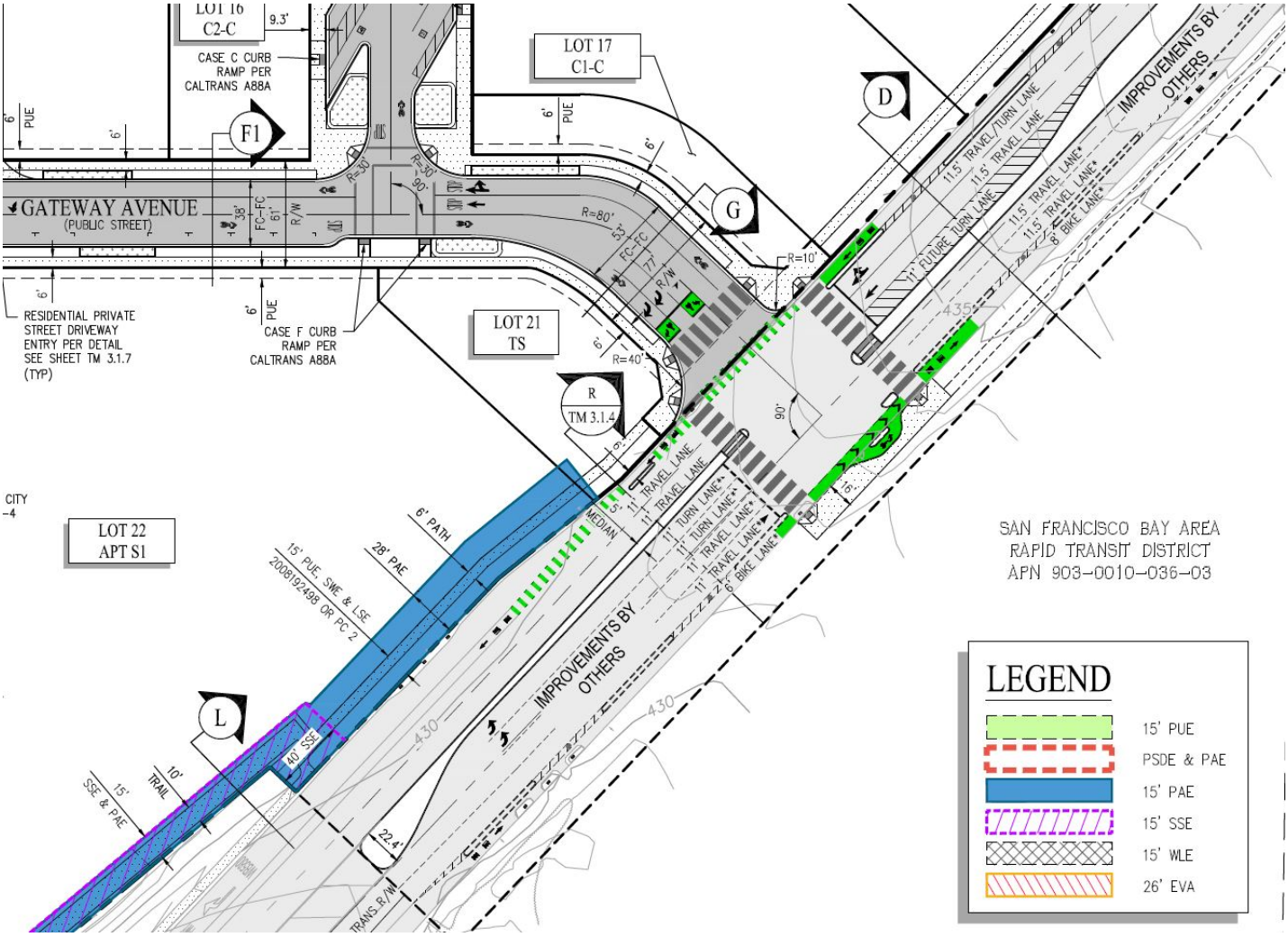
In order to appropriately accommodate the queue for the northbound left turn movement, an additional westbound through lane on Gateway Avenue, from Isabel Avenue to C Street, was evaluated. With two westbound through lanes, both northbound left-turn lanes will be more evenly utilized, and thus a 0.90 lane utilization factor was used in the analysis. The Simtraffic analysis shows that the calculated 95th percentile queue is 241 feet in the a.m. and 243 feet in the p.m. peak hours. This would still exceed the proposed turn pocket length by approximately two vehicles, and these two vehicles can be accommodated within the transitional taper so the queue would not block through traffic. **It is recommended that the project provide two westbound lanes on Gateway Avenue between Isabel Avenue and C Street**. At the C Street intersection, the recommended lane configuration based on the turning movement volumes is one through lane and one left-turn only lane onto southbound C Street.

For the eastbound leg of the intersection, the 95th percentile queue is calculated to be 55 feet for the left lane and 88 feet for the right lane during the a.m. peak hour and 88 feet for the left lane and 90 feet for the right lane during the p.m. peak hour. Although the eastbound queues exceed the turn pocket length, they do not extend past the proposed all-way stop intersection of Main Street. Given the low speed and low volume characteristics of Main Street and Gateway Avenue, as well as the physical constraints, this is an acceptable condition.

For the southbound left turn, the 95th percentile queue is calculated to be 153 feet during the p.m. peak hour. The proposed 120 foot long turn pocket will accommodate this peak queue within the turn pocket and the taper length.

With the recommended configuration with two westbound lanes on Gateway, the intersection operates at LOS C during the a.m. peak period and LOS E during the p.m. peak periods. Based on the City's General Plan policy, intersections adjacent to I-580 are required to maintain a LOS of E or better.

Figure 8: Isabel Ave & Gateway Avenue Intersection Configuration



Isabel Avenue at A Street (#19)

A Street is a proposed east-west street within the project that will intersect Isabel Avenue with a new traffic signal, approximately 720 feet south of the signalized intersection of Portola Avenue. A Street at this intersection is proposed to have two eastbound lanes, one right turn and one left turn and a bike lane. Isabel Avenue at this intersection is proposed to have two through lanes and bike lanes for both the northbound and southbound directions with one southbound right turn lane and one northbound left turn lane. There is a painted median for a future southbound left turn lane. See **Figure 9** for the proposed intersection configuration. This intersection is expected to operate at LOS B and LOS C in the AM and PM peak period, respectively.

Based on the Warrant 3 analysis, a warrant for traffic signal is satisfied for both the a.m. and p.m. peak hours. Isabel Avenue north of I-580 is functionally classified as a major street in the City's General Plan and south of I-580, Isabel Avenue is classified as a highway, as it is identified as State Route 84. Based on the major roadway classification, the 45 mile per hour speed limit and the goal of organizing traffic flow and prioritizing walkability and pedestrian access, ***a traffic signal is the recommended traffic control device at Isabel Avenue at A Street.***

A Simtraffic analysis was conducted to determine the appropriate length of the turn pockets at the intersection. **Table 6** shows the 95th percentile queue lengths for the approaches to the Isabel Avenue at A Street intersection for the 2040 Baseline scenario and the 2040 Baseline plus Project scenario, along with the queue length that is added by the project and the proposed turn bay length.

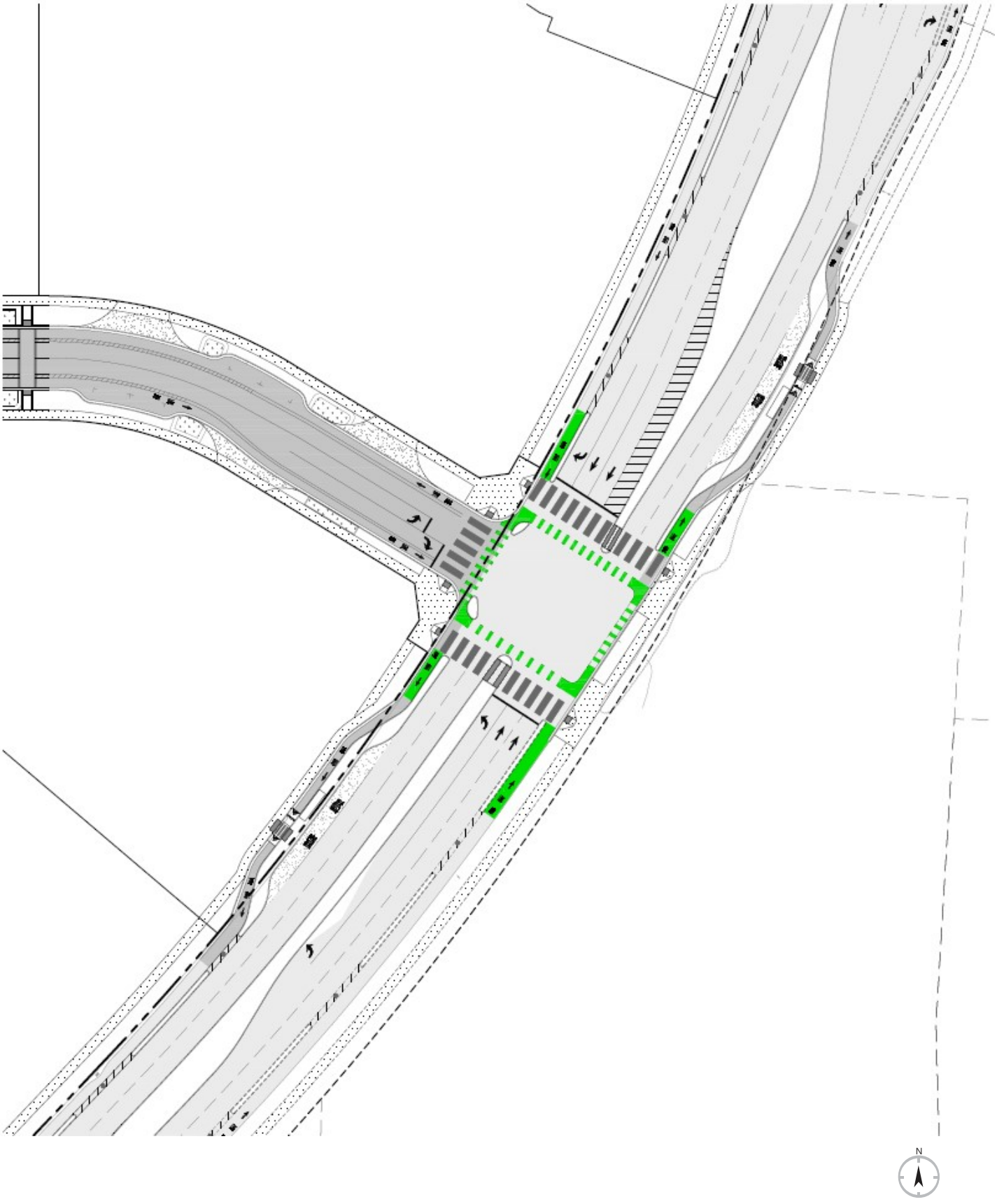
Table 6: 95th Percentile Queue Lengths at Isabel Avenue at A Street

Study Intersection	Lane Group	Peak Hour	95th Queue (ft) 2040 Baseline	95th Queue (ft) 2040 Baseline Plus Project - Two Lane Gateway*	Proposed Turn Bay Length (ft)
Isabel Ave @ A St	Northbound Left	AM	169	**215**	200
		PM	151	186	
	Southbound Left	AM	24	24	101
		PM	38	37	
	Eastbound Left	AM	26	43	95
		PM	53	67	

BOLD indicates that the queue length is estimated to exceed the proposed turn bay length

The project proposes to provide one northbound left turn pocket approximately 200 feet long, which can in total accommodate approximately eight vehicles. The calculated 95th percentile queue is 215 feet during the a.m. peak hour and 186 feet during the p.m. peak hour. The northbound left turn queue can be accommodated when the transitional taper of the turn pocket is included. The northbound left turn pocket is an appropriate length.

Figure 9: Isabel Avenue & A Street Intersection Configuration



Main Street at Gateway Avenue (#27)

Main Street is a proposed north-south street within the project that intersects both A Street and Gateway Avenue. Both streets are proposed with one lane in each direction with Class III bicycle routes, except the east leg of Gateway Avenue has two westbound lanes, one right-turn and one through lane. See **Figure 10** for the proposed intersection configuration.

The peak hour traffic signal warrant analysis, Warrant #3, was conducted at this intersection. This analysis determined that a traffic signal is not warranted at this location based on the projected turning movements during the a.m. and p.m. peak hours.

This intersection was evaluated with all-way stop sign control. With two westbound through lanes on Gateway Avenue, this intersection operates at LOS B with 14.9 seconds average delay during the AM peak hour and LOS D with 30.7 seconds of average delay during the PM peak hour. With only one westbound through on Gateway Avenue, the LOS degrades to LOS D during the a.m. peak hour and LOS E during the p.m. peak hour.

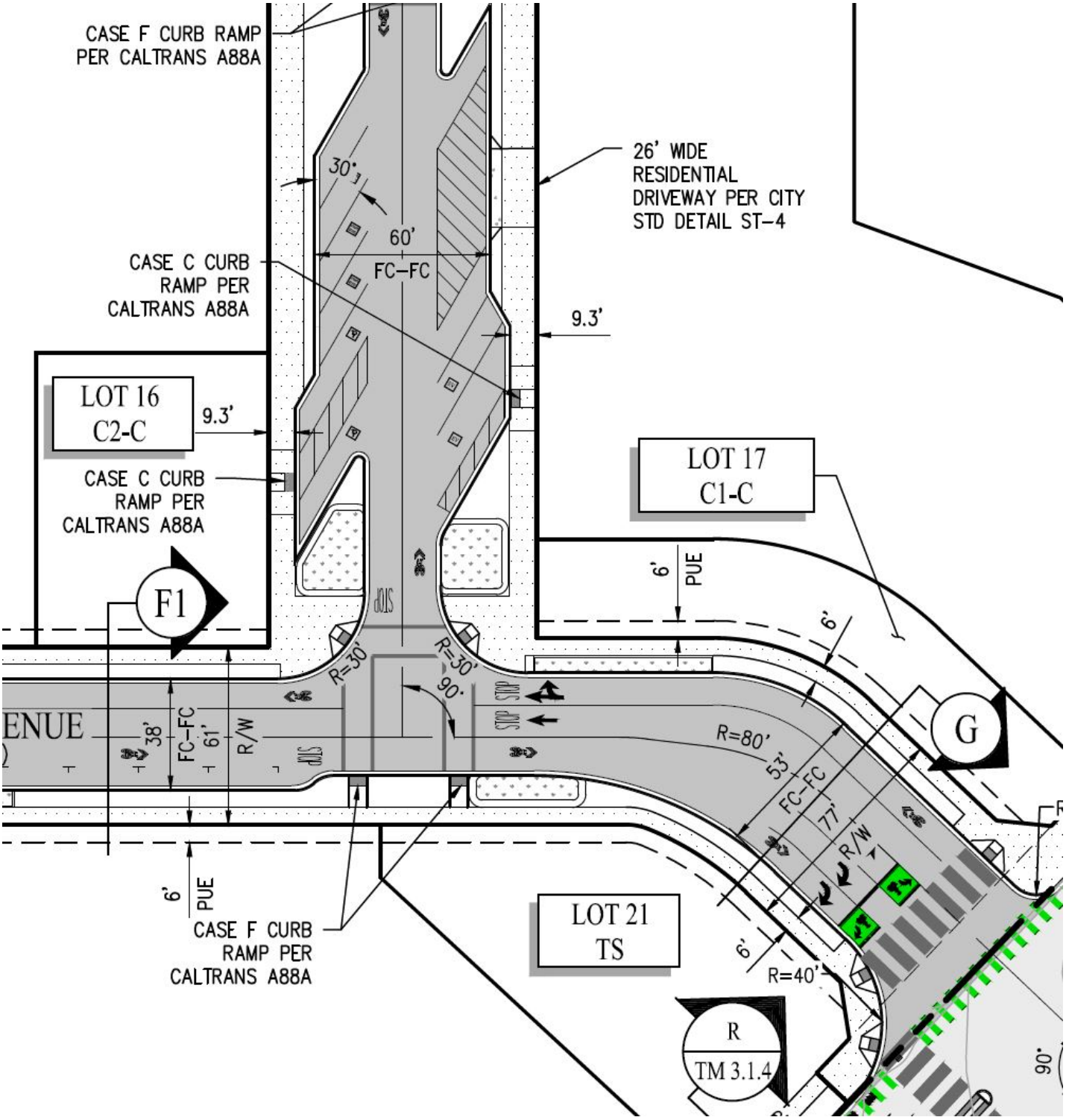
The critical queue length is for the westbound through to ensure that the queue does not extend into the adjacent intersection at Isabel Avenue. The 95th percentile westbound queue is 151 feet and 137 feet, in the AM and PM peak periods, respectively. The queue is accommodated within the 200 feet long lane and is not projected to extend into the adjacent intersection. The intersection configuration is appropriate.

Table 7: 95th Percentile Queue Lengths at Gateway Avenue at Main Street

Gateway Ave @ Main St	Eastbound Thru-Left	AM	84	145	350
		PM	153	176	
	Westbound Through	AM	127	151	200
		PM	100	137	
	Westbound Thru-Right	AM	138	164	189
		PM	109	139	

BOLD indicates that the 95th percentile queue length is estimated to exceed the proposed turn bay length

Figure 10: Main Street & Gateway Avenue Intersection Configuration



Portola Avenue at Main Street (#22)

The Project proposes to add a south leg to the existing signalized intersection of Portola Avenue at Main Street/Montage Drive. This intersection currently exists as a T-intersection with three eastbound and three westbound lanes with bike lanes. In the southbound direction, there is one left turn lane and one right turn lane.

In the recent INSP amendment in November 2022, Portola Avenue between Collier Canyon Road and Isabel Avenue is proposed to be reduced from six travel lanes to four travel lanes to accommodate a Class IV separated bicycle lane. The Project proposes to implement the lane reduction along with a Class IV bicycle lane along the Portola Avenue frontage of the project. See **Figure 11** for the project's proposed intersection configuration.

The Project adds left-turning vehicles to the existing westbound u-turn lane on Portola Avenue to access the project. For the westbound left turn pocket, the calculated 95th percentile queue is 133 feet during the a.m. peak hour and 131 feet during the p.m. peak hour. Based on vehicle queues, the westbound left turn pocket length of 298 feet is more than adequate.

The 95 percentile northbound left turn queue is 130 feet during the a.m. peak hour and 200 feet during the p.m. peak hour. The proposed turn bay length is 108 feet. The northbound queue would extend into the through-right turn lane, which is acceptable since the northbound left turn is the dominant movement.

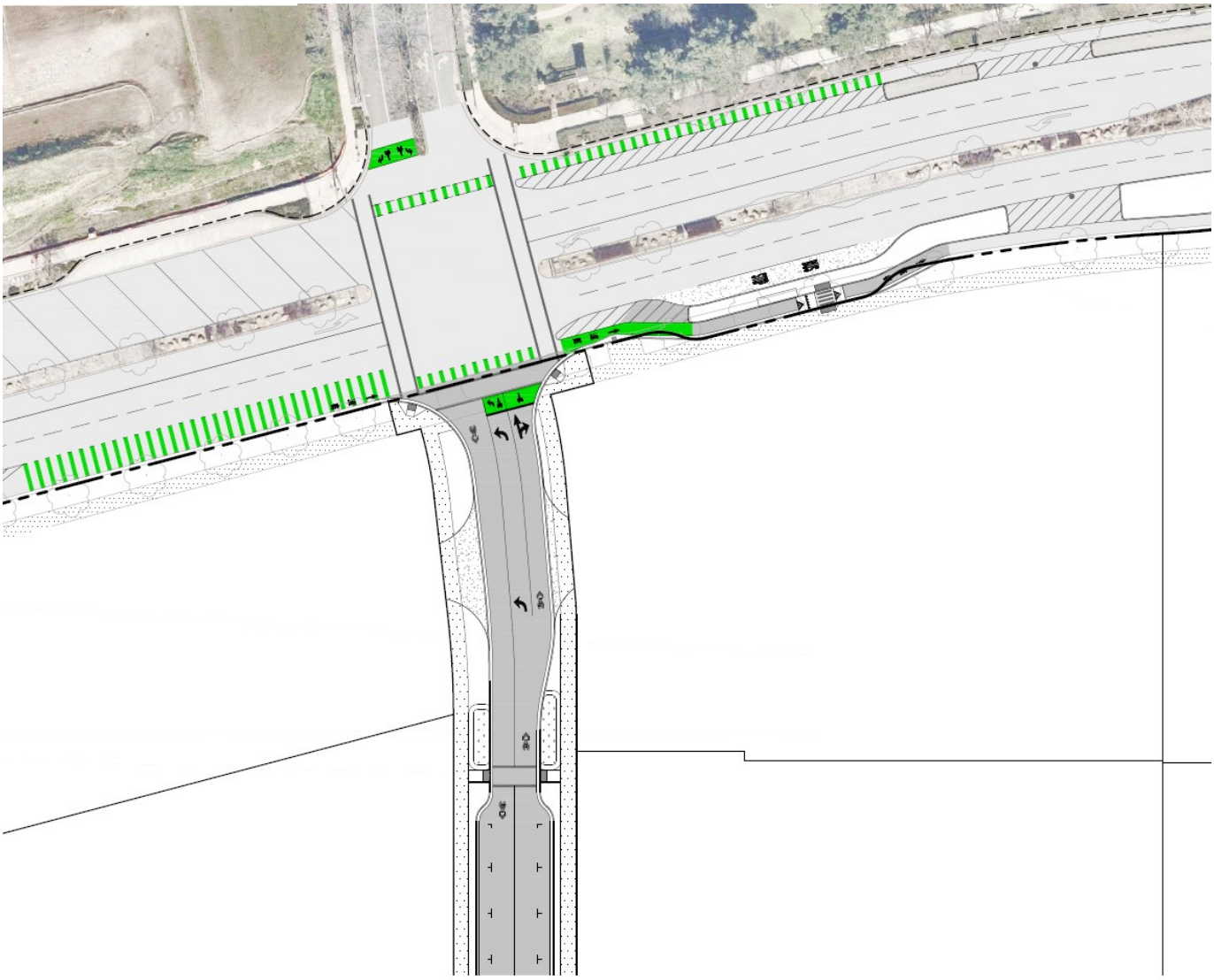
As shown on **Table 4**, this intersection operates at LOS C with 25.9 seconds of delay in the a.m. peak hour and LOS D with 50.2 seconds of delay during the p.m. peak hour. This includes the reduction of travel lanes on Portola Avenue from three through lanes to two with the inclusion of the Class IV bike lanes on Portola Avenue. It should be noted that the LOS results from the 2040 Baseline from the INSP are based on three travel lanes on Portola Avenue so the LOS results are not a direct comparison.

Table 8: 95th Percentile Queue Lengths at Portola Avenue at Main Street / Montage Drive

Study Intersection	Lane Group	Peak Hour	95th Queue (ft) 2040 Baseline	95th Queue (ft) 2040 Baseline Plus Project - Two Lane Gateway*	Proposed Turn Bay Length (ft)
Main St/ Montage Dr @ Portola	Northbound Left	AM	103	**130**	108
		PM	65	**200**	
	Westbound Left	AM	120	133	298
		PM	103	131	

BOLD indicates that the 95th percentile queue length is estimated to exceed the proposed turn bay length

Figure 11: Portola Avenue & Main Street Intersection Configuration



BICYCLE CIRCULATION

The INSP identifies several existing and proposed bicycle facilities in the vicinity of the project as shown on **Figure 12**. Although the project's proposed roadway network does not exactly match the layout in the INSP, the key east-west and north-south running roadways correlate with the appropriate bicycle facility designation.

A Street is the northern east-west roadway and is proposed to accommodate Class IIB buffered bicycle lanes with a two-foot striped buffer and a five-foot bike lane, which conforms to the INSP.

Gateway Avenue is the southern east-west roadway and is proposed to accommodate Class III bicycle route, which conforms to the INSP. The project plans indicate Class III Shared Lane pavement markings at the beginning of each intersection and at 250 foot intervals for all Class III Bike Routes per California Manual of Uniform Traffic Control Devices (CAMUTCD) Section 9C.07.

B Street is a partial east-west roadway at the southern edge of the project and is proposed to accommodate Class III bicycle route.

C Street is a partial north-south roadway that connects A Street to Gateway Avenue and C Street. It is proposed to accommodate Class III bicycle route, which conforms to the INSP**.**

Shea Center Drive is the designated north-south roadway with a Class II bike lane designation in the INSP. The Project proposes to provide Class II bicycle lanes on Shea Center Drive along with a center two-way left turn lane.

Main Street is the eastern north-south roadway and it is proposed to accommodate a Class III bicycle route. It should be noted that bicycle designations on roadways with angled parking can cause potential conflicts; however, since this short roadway is designed with bulb-outs to reduce vehicle speeds, a bicycle route designation is an acceptable design.

There is some research that indicates that back-in angle parking reduces this conflict by increasing visibility to bicyclists and approaching vehicles (Federal Highway Administration Technical Document titled *On-Street Motor Vehicle Parking and the Bikeway Selection Process* dated February 2021). A back-in angled parking maneuver is easier than a parallel parking maneuver and it is much easier to exit. Back-in angled parking can be considered on Main Street between A Street and Gateway Avenue.

In the recent INSP amendment in November 2022, Portola Avenue between Collier Canyon Road and Isabel Avenue was proposed to be reduced from six travel lanes to four travel lanes to accommodate a Class IV separated bicycle lane. This proposed Class IV bicycle lane is proposed to continue east and west along Portola, as well as south along Isabel Avenue to the intersection of I-580 westbound off-ramp. The Project proposes to implement the lane reduction along with a Class IV bicycle lane along the Portola Avenue frontage of the project. The project also proposes to modify Isabel Avenue to provide a Class IV separated bike lane in the southbound direction.

Figure 12: Existing Bicycle Facilities Map



LEGEND

- Project Site
- Future Isabel Valley Link Station
- Existing Class I Multi-Use Trail
- Existing Class II Bike Lane
- Proposed Class I Multi-Use Trail
- Proposed Class II Bike Lane
- Proposed Class III Bike Route

PEDESTRIAN CIRCULATION

A key marker of a successful transit-oriented multi-use development is vibrant, pedestrian-friendly design. The INSP identifies several proposed pedestrian facilities in the vicinity of the project area, such as pedestrian streets, trails, and pedestrian undercrossings, as shown on **Figure 13**. The proposed project is within the 10-minute walkshed of the Isabel Valley Link Station.

Pedestrian streets are identified as the main walking routes through the neighborhood and are designed to be comfortable for pedestrians with wider sidewalks and landscape strips, traffic calming measures (such as corner bulb-outs), and small block sizes for ease of crossing the street.

Gateway Avenue from Shea Center Drive to Isabel Avenue and C Street from A Street to the south limits of the project are designated pedestrian streets in the INSP. Gateway Avenue is designed per the standard in the INSP with six-foot wide public utility easements, a six-foot wide sidewalk, a six-foot wide landscape strip, an eight-foot wide parking lane, and ten-foot wide travel lanes.

INSP Policy P-TRA-1 requires short block lengths to create a walkable street grid. Block sizes should have a maximum length of 600 feet, and where block lengths exceed 400 feet, mid-block crossings shall be installed. Six blocks within the project are closer to 600 feet in length. Mid-block crosswalks with chokers are proposed on these blocks. Landscaping should not exceed 30 inches in height in this mid-block bulb-out area to maintain proper sight distance.

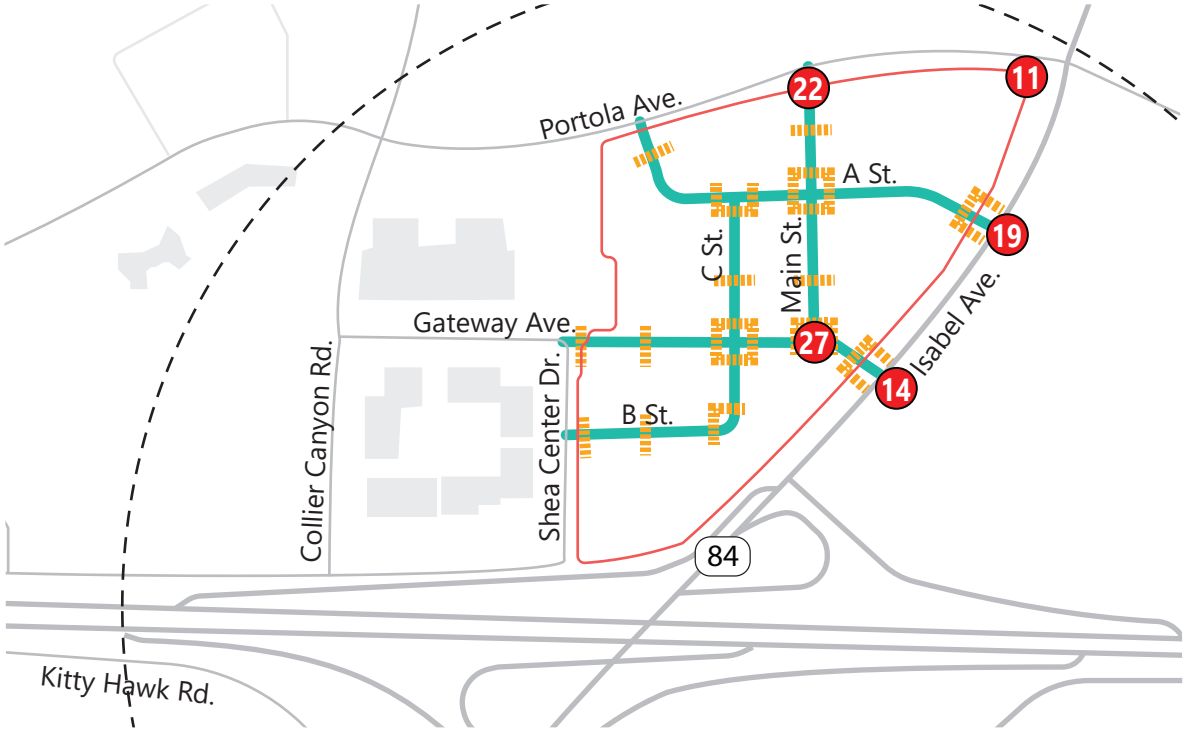
All the sidewalks within the project meet the INSP design standard with a minimum of six-foot wide sidewalks and six-foot wide landscape strips. Main Street between Gateway Avenue and A Street is designed with a 12-foot sidewalk, designated as four feet as store frontage and eight feet of walkable area, along with the four-foot landscape strip.

INSP Policy P-TRA-11 requires the incorporation of traffic calming measures to slow vehicle speeds and increase the visibility of pedestrian crossings. All of the internal roadway intersections are designed with intersection curb bulb-outs that bring the curb to the edge of the travel lane. This minimizes the pedestrian roadway crossing distance, increases pedestrian visibility, and reduces vehicle speeds through the intersection. The mid-block crosswalk chokers also act as a traffic calming measure.

Based on the above features, all the internal roadways are designed as pedestrian streets based on the standards in the INSP.

INSP Policy P-TRA-8 requires four-legged crosswalks at new signalized or stop-controlled intersections. All internal intersections are proposed to install four-legged crosswalks. The project proposes crosswalks across all legs of new intersections. At the intersection of Isabel Avenue at Gateway, the project proposes 15 foot extra-wide crosswalks with protected median refuges.

Figure 13: Proposed Crosswalks



LEGEND

- Project Site Limits
- Study Intersection
- ½ Mile Radius from Isabel Valley Link Station
- Proposed Sidewalk
- Proposed Crosswalks

TRANSIT & FUTURE VALLEY LINK ACCESS

The project vicinity is currently served by one bus line, the 30R, operated by the Livermore-Amador Valley Transit Authority, which serves Dublin, Pleasanton and Livermore. This rapid line with service every 15 minutes on weekdays connects the Lawrence Livermore Lab, the Livermore Transit Center, which also serves as an ACE station, the Las Positas Community College and the East Dublin/Pleasanton BART Station.

Valley Link is a future rail transit service to bridge the gap between BART and the Altamont Commuter Express (ACE) rail lines. It also is to improve connections between the greater San Francisco Bay Area and San Joaquin County with a station starting in Lathrop and ending with a connection to the East Dublin/Pleasanton BART station. Isabel Valley Link Station is adjacent to the East Dublin/Pleasanton BART station. Valley Link is proposed to include train service every 12 minutes during the peak commuter periods and every 24 minutes during the off-peak periods. Based on the INSP, the percentage of expected riders that will arrive to the station by driving and parking at the station is 46 percent and 54 percent will either walk, bike, transfer from bus, or be dropped off.

It is anticipated that with the development of the Isabel Valley Link Station, additional bus routes may be added to service this station. The INSP identifies a potential bus route along Gateway Avenue, from the loop road that accesses Isabel Valley Link Station access on the north side of I-580 through the proposed project. Figure 12 identifies existing transit facilities.

Gateway Avenue is also a designated pedestrian corridor in the INSP with ten-foot wide vehicle travel lanes adjacent to an eight-foot parking strip. Based on Caltrans Design Standards, a low volume street that services buses should be at least 11 feet wide. It is noted that a bus can be physically accommodated on a 10-foot wide street at a low speed, which continues to prioritize walkability. However, this is a challenging balance.

However, with the intersection curb bulb-outs, there is not sufficient width for the bus to turn from Gateway Avenue. Based on the current proposed design, the bus route is limited to straight through movements on Gateway Avenue to Collier Canyon Road**.**

Isabel Avenue is also a designated bus route per the INSP. Typically, bus stops are provided at the egress of a signalized intersection to minimize stops. Bus turnouts are proposed along Isabel Avenue at the A Street intersection. As shown on Figure 9, the project proposes a northbound bus turnout just north of the intersection and a southbound bus turnout just south of the intersection.

Figure 14: Transit Facilities Map



LEGEND

- Project Site
- Future Isabel Valley Link Station
- Bus Stop
- Route 30R

TRANSPORTATION DEMAND MANAGEMENT & PARKING

Transportation demand management (TDM) is a set of strategies aimed at encouraging and facilitating walking, bicycling, and transit use with the aim of reducing solo occupant vehicles. TDM strategies tend to be operational in nature, however, they work in tandem with strategic land use and community design. Examples of strategies include identifying a TDM coordinator, education on available transportation alternatives, parking management, transit or ridesharing passes, or subsidies and preferential parking for carpools. ***It is recommended that this project develop a complete TDM plan to be enacted upon occupancy.***

Parking management is a complex strategy in balancing the parking needs of the mixed-use development while not providing too much parking, such that active modes and transit use are encouraged. Parking will need to be monitored as part of the TDM program.

The INSP identifies specific parking requirements for both vehicles and bicycles based on the development size.

Vehicle Parking Requirements

The INSP identifies vehicle parking requirements within the project area based on the various types of residential and commercial developments as shown in **Table 8**.

Table 9: Vehicle Parking Standards

Residential Land Use	Size	Minimum Parking Space per Unit	Maximum Parking Spaces per Unit
Transition and Village	Studio/1 Bedroom	1.00	1.25
	2 Bedroom	1.50	2.00
	3+ Bedrooms	2.00	2.50
	Visitor Parking	0.13	0.25
Residential Center and Core	Studio	0.75	1.00
	1 Bedroom	1.00	1.50
	2+ Bedrooms	1.25	2.00
	Visitor Parking	0.13	0.25
AB2345 Density Bonus Affordable Housing	Studio / 1 Bedroom	0.75	1.00
	2 Bedroom	1.25	1.50
	3+ Bedrooms	1.25	1.50
	Visitor Parking	0.00	0.00
Non-Residential Land Use		Minimum of One Parking Space per Square Foot	Maximum of One Parking Space per Square Foot
Neighborhood Commercial		600	300

Source: Isabel Neighborhood Specific Plan document

Table 9 shows the minimum and maximum number of parking spaces required for each parcel of development within the proposed project.

Table 10: Vehicle Parking Requirements per Parcel

Parcel	Residential Parking		Commercial Parking	
	Minimum	Maximum	Minimum	Maximum
N1	208	269.5		
N2	119	154		
N3-A	85	110		
C1-A	132	171		
C1-B	117	177	33	65
C2-A	128	197	42	83
C2-B	36	47		
C3	96	124		
C5	179	231		
S1	191	293	53	84
S2	182	246		
S3-A	245	290		
S3-B	154	192		
S4	50	79		
Total	**1920**	**2579**	**127**	**233**

The parking provided by the project meets the minimum requirements of 2,047 spaces by providing 2,291 spaces and does not exceed the maximum of 2,812 spaces.

It should be noted that the parking included by the project also consists of public on-street parallel and angled parking. This parking should be monitored to determine if parking is being used as spill-over parking from the Isabel Valley Link Station. Additionally, the parking on Main Street should allow for adequate turn-over to service the retail components of the project. A typical threshold for implementing parking management strategies is 85 percent occupancy. Typical parking management strategies include time limited parking, paid parking or parking permit programs. This could be a component of the TDM Plan.

The parking proposed by the project is adequate and appropriate. It is recommended that as the details of each parcel are developed, the parking design should continue to be evaluated for placement of visitor and resident parking, in addition to retail and commercial parking spaces.

Bicycle Parking Requirements

Bicycle parking standards are outlined in the INSP, with an update adopted in November 2022. The bicycle parking standards are shown in **Table 5.** There are two types of bicycle parking, long-term bike parking and short-term bike parking.

Long-term bike parking is defined as a secure enclosed space, either in a private residential garage, a secure enclosed bicycle locker, or an indoor, secure room dedicated to store bicycles. Long-term bike parking is aimed for residents in the residential areas or for employees of commercial space.

Short-term bike parking is defined as a secure bicycle parking space, usually bike racks, usually located near the entrance to the destination. Short-term bike parking is aimed for visitors of residents and visitors or customers of the commercial space.

Table 11: Bicycle Parking Standards based on the INSP

Land Use	Number of Bike Parking Spaces Required
Residential Transition and Village	One Long Term Bike Parking per Unit One Short Term Bike Parking per 20 Units
Residential Center and Core	One Long Term Bike Space per Four Bedrooms One Short Term Bike Parking per 20 Units
Neighborhood Commercial	One per 1,400 square feet
General Commercial	One per 2,800 square feet with at least 25% Long term and 25% Short term
Office-Core	One per 1,600 square feet with at least 25% Long Term and 25% Short Term
Office and Business Park	One per 3,200 square feet with at least 25% Long Term and 25% Short Term

Source: Isabel Neighborhood Specific Plan document

Table 12: Bicycle Parking Requirements per Parcel

Parcel	Zone	Residential Units	Bedrooms	Neighborhood Commercial Sq. Ft.	Long Term Bike Parking	Short Term Bike Parking
N1	Village	98	362		98	5
N2	Village	56	224		56	3
N3-A	Transition	40	160		40	2
C1-A	Village	62	217		62	3
C1-B	Center	114	183	19,610	53	13
C2-A	Core	116	220	25000	64	15
C2-B	Transition	17	68		68	1
C3	Transition	45	171		171	2
C5	Transition	84	320		320	4
S1	Core	172	328	21020	90	16
S2	Transition	102	236		236	5
S3-A	Core	200	272		68	10
S3-B	Core (Affordable)	152	280		70	8
S4	Core	41	97		24	2
Total		1299	3138	65630	1321	83

Table 12 lists the bicycle parking required for each parcel based on the proposed land uses and the bicycle parking standards. ***It is recommended that the proposed project identify how the bicycle parking standards will be met***, including identifying the location of long-term and short-term bicycle parking within each parcel for all the land use types.

Additionally, the recreational and open space areas, such as the plazas, recreational center, and a neighborhood park, should provide short-term bicycle parking near the entrances to each amenity.

SUMMARY OF RECOMMENDATIONS

This section summarizes all of the recommendations for changes to the proposed project based on the traffic analysis and conformance to the INSP.

1. It is recommended that westbound Gateway Avenue at Main Street consist of two westbound through lanes.
2. It is recommended that the intersection of Main Street and Gateway Avenue be operated with all-way stop-sign control.
3. It is recommended that the signal timing for Isabel Avenue at Gateway Avenue and Isabel Avenue at A Street is optimized to reduce northbound left-turn queue lengths during the a.m. and p.m. peak hour.
4. It is recommended that this project develop a complete TDM plan to be enacted upon occupancy.
5. It is recommended that as the details of each parcel are developed, the parking design should continue to be evaluated for placement of visitor and resident parking, in addition to retail and commercial parking spaces.
6. It is recommended that the proposed project identify how the bicycle parking standards will be met, including identifying the location of long-term and short-term bicycle parking within each parcel for all the land use types.

Appendix A

Livermore Isabel Transit Village Modified Project Analysis

Date:	July 17, 2023 (revised May 14, 2024)
To:	Bill Myers Harridge Development Group
From:	Anna Vickroy, PE, TE Senior Transportation Engineer, TJKM
Subject:	Livermore Isabel Transit Village Modified Project Analysis

TECHNICAL MEMORANDUM

The purpose of this technical memorandum is to determine if the potential transportation impacts of the modifications to the Isabel Neighborhood Specific Plan (INSP) proposed by the Livermore Transit Village project (Modified Project) require "major revisions" to the Environmental Impact Report (EIR) certified on May 14, 2018 and Supplemental Environmental Impact Report (SEIR) dated September 30, 2020 for the INSP. Major revisions to the EIR and SEIR would be required if the Modified Project causes a new, previously unidentified significant transportation effect or if it increases the severity of previously identified significant transportation effects in the EIR and SEIR. If no major revisions are required, no further CEQA transportation analysis would be required for the Modified Project. As analyzed below, the Modified Project reduces the development size and density of the INSP. As a result, the Modified Project produces fewer trips than identified in the INSP. Because fewer trips are produced, no major revisions are needed to be made to the EIR and SEIR.

ISABEL NEIGHBORHOOD SPECIFIC PLAN

The INSP is a specific plan that provides policy objectives, land use regulations, and development standards within approximately 1,138-acres in northwest Livermore, approximately 2.5 miles from the City's downtown neighborhood. The INSP was adopted in November 2020 and amended in November 2022. The INSP plans for development that supports and complements the future Isabel Station for the Valley Link rail system.

The INSP allows the development of up to 4,095 new multi-family housing units and approximately 2.1 million square feet of new office and commercial development.

The EIR and SEIR included and relied on a traffic study prepared by Kittleson & Associates (Traffic Study). The Traffic Study evaluated the INSP's potential transportation impacts on intersection level of service, freeway segments, bicycle and pedestrian facilities, transit service and emergency access, as well as conformance with adopted plans, policies and programs related to the performance and safety of the circulation system, taking in account all available modes of travel. Relying on the Traffic Study, the SEIR determined that the INSP would result in significant and unavoidable impacts on roadway circulation systems and freeway and arterial segments in the vicinity of the INSP.

MODIFIED PROJECT

The Modified Project is a proposed mixed-used development located on approximately 45 acres at the southwest corner of Isabel Avenue and Portola Avenue in the City of Livermore (Site). It is bordered by Isabel Avenue to the east, Portola Avenue to the north, I-580 to the south and existing office developments to the west. A vicinity map is included in **Figure 1**.

The Modified Project would be constructed within and would modify Subareas 3b and 3c of the INSP. Subareas 3b and 3c are core areas of the INSP with a general objective of creating a vibrant residential neighborhood with retail uses that generate transit ridership. The Modified Project proposes to construct 1,299 dwelling units (townhomes and mid-rise multi-family apartments) and approximately 65,635 square feet of neighborhood serving commercial space on the 45-acre Site within the core of the INSP. The commercial space is designed on the street level of multi-story buildings with residential apartments located above. Amenities within this mixed-use development include a neighborhood park, a recreation center that includes a pool, and open space at the corners of the retail-lined street including a pocket plaza, and a town square. A site plan is included in **Figure 2**.

The proposed future Isabel Station for the Valley Link railway is located a quarter mile to the southeast of the Site. The Valley Link railway is a proposed 42-mile passenger rail project that will connect the Lathrop Altamont Commuter Express (ACE) rail station with the Dublin/Pleasanton Bay Area Rapid Transit (BART) station. The Modified Project is located within a half-mile of the proposed Isabel Station platform.

Figure 1: Vicinity Map



LEGEND

- Project Site
- Future Isabel Valley Link Station

Figure 2: Site Plan



METHODOLOGY

To determine whether the Modified Project would require major revisions to the EIR and SEIR as a result of causing new or increased significant transportation effects, traffic generation from the size, density and mix of land uses proposed by the Modified Project are directly compared to the mix, size and density of land uses proposed in Subareas 3b and 3c by the INSP using the same methods and data to ensure a valid "apples to apples" comparison.

This comparative trip generation analysis utilizes the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (ITE Manual). If the Modified Project results in reduced trip generation overall using ITE Manual trip rates, the Modified Project would not cause new unidentified or increase the severity of previously identified significant and unavoidable transportation effects caused by the INSP.

RESIDENTIAL LAND USES

Table 2-6 of the INSP identifies the residential performance measures by subarea. The maximum number of housing units identified for Subareas 3b and 3c is 1,717 units with a target number of 1477 residential units. The minimum number of housing units is 1,236. The target number of 1,477 residential units will be used to compare to 1,299 residential units proposed in the Modified Project.

The Modified Project proposes to construct 1,299 residential units within Subareas 3b and 3c. The comparative breakdown of residential unit types as between the original INSP and the Modified Project is set forth in the comparative Trip Generation analysis in Table 1. The breakdown for each residential unit type in the INSP was estimated based on the land area identified for each type along with the density for each type identified on Figure 2-3 of the INSP. The results of this estimation are 545 multi-family attached townhouse dwelling units, 288 multi-family stacked flat units and 466 multi-family apartment units. Land use sizes are further separated out by block within the study area, based on the proposed distribution of uses in the Modified Project and Figure 2-3 of the INSP.

NEIGHBORHOOD COMMERCIAL LAND USES

The INSP designates certain areas within Subareas 3a, 3b and 3c as having a "Neighborhood Commercial" or Ground Floor Retail/Flex Space land use designation. The Neighborhood Commercial land use is identified as 167,185 square feet on INSP Table 2-7 - Estimated Net New Development in 2040. This includes both Neighborhood Commercial and Ground Floor Retail/Flex Spaces within the INSP. We estimate, based on land area in the three subareas with the "Neighborhood Commercial" designation, that the INSP proposes 142,107 square feet of "Neighborhood Commercial" with Subareas 3b and 3c.

The Modified Project proposes to construct 65,635 square feet of retail commercial floor area. This is less than the 142,107 square feet that is proposed in the INSP for Subareas 3b and 3c.

OFFICE LAND USES

Table 2-7 Estimated Net New Development in 2040 in the INSP identifies 1,578,000 square feet of office space. Based on a proportional land use analysis using the maps from the INSP, we estimate that the office area within subarea 3c contains 10% of the total office area in the INSP, which would result in the construction of 157,800 square feet of office land uses within Subarea 3c of the INSP. No office uses are proposed by the INSP in Subarea 3b.

The Modified Project does not propose to construct any offices uses. Any potential future office uses would occur within the existing proposed commercial use areas discussed above. Therefore, this analysis accounts for the reduction in trips that would occur where all planned office uses in Subarea 3c of the INSP are eliminated in the Modified Project.

TRIP GENERATION COMPARISON

As detailed in Table 1 - Trip Generation Comparison, AM and PM peak hour trips are calculated for all the land uses described above. ITE trip generation rates are identified for the weekday AM and PM peak hours. The General Urban/Suburban setting/location types was used for each land use type.[1] The table also identifies the recommended ITE rate as either an average rate or a best fit equation. Applying the ITE trip rate for the AM or PM peak period to the size of the project results in the Trips SubTotal.

Due to the close proximity of the future Valley Link Isabel Station and the walkability of the designed community, a conservative trip reduction was applied for trips taken by residents walking to transit. Based on an article entitled *Vehicle Trip Reductions Impacts of Transit-Oriented Housing*, in the Journal of Public Transportation, Vol. 11, No. 3, 2008, transit-oriented developments generate on average 47 percent fewer trips compared to the ITE rate. To be conservative, it is assumed that 10 percent of trips from the multi-family townhouse residences and 15 percent of trips from the multi-family stacked flat and apartment residences are walk-to-transit trips. Given the half-mile radius of the project to the future Valley Link Isabel Station, these assumptions are reasonable for transit trips in a transit-oriented development in a suburban environment.

As shown in Table 1, the Modified Project is projected to generate 585 AM peak hour trips and 859 PM peak hour trips. The land uses in the INSP for the Subareas 3b and 3c are projected to generate 996 AM peak hour trips and 1,626 PM peak hour trips. The Modified Project results in 411 fewer trips in the a.m. peak hour and 767 fewer trips during the p.m. peak hour. This is 41 percent less during the a.m. peak hour and 47 percent less during the p.m. peak hour.

Notably, the reduction in commercial retail uses could also potentially decrease allowances for trip reductions as part of the ITE trip generation internal trip capture methodology outlined in the *Trip*

[1] For the Project's proposed multi-family townhouse uses, the closest analogue under the ITE categories is ITE Land Use 215, which applies to Single Family Attached Housing.

Generation Handbook, 3rd Edition. Trip reductions are applied to INSP residential uses as a result of internal trip from residential trips to commercial uses remaining within the project, thus resulting in additional trips outside of the Modified Project Site and the INSP. However, this potential increase in trips from reduced trip reduction credits would be minor compared to the overall reduction in trips due to the reduced size of the Modified Project as compared to the development proposed in Subareas 3b and 3c of the INSP.

Table 1: Trip Generation Comparison

MODIFIED PROJECT			AM PEAK HOUR				PM PEAK HOUR			
ITE Land Use	Unit Count	Size	Generation Method / AM Rate /Equation	Trips Sub Total	Percent Reduction / Walk to Transit	AM Total Trips	Generation Method / PM Rate /Equation	Trips Sub Total	Percent Reduction / Walk to Transit	PM Total Trips
215 - Single-Family Attached Housing	Dwelling Units	98	Best Fit (LIN) T = 0.52(X) - 5.70	45	10%	41	Best Fit (LIN) T = 0.60(X) - 3.93	55	10%	49
215 - Single-Family Attached Housing	Dwelling Units	56	Best Fit (LIN) T = 0.52(X) - 5.70	23	10%	21	Best Fit (LIN) T = 0.60(X) - 3.93	30	10%	27
215 - Single-Family Attached Housing	Dwelling Units	40	Best Fit (LIN) T = 0.52(X) - 5.70	15	10%	14	Best Fit (LIN) T = 0.60(X) - 3.93	20	10%	18
215 - Single-Family Attached Housing	Dwelling Units	129	Best Fit (LIN) T = 0.52(X) - 5.70	61	10%	55	Best Fit (LIN) T = 0.60(X) - 3.93	73	10%	66
215 - Single-Family Attached Housing	Dwelling Units	17	Best Fit (LIN) T = 0.52(X) - 5.70	3	10%	3	Best Fit (LIN) T = 0.60(X) - 3.93	6	10%	6
215 - Single-Family Attached Housing	Dwelling Units	62	Best Fit (LIN) T = 0.52(X) - 5.70	27	10%	24	Best Fit (LIN) T = 0.60(X) - 3.93	33	10%	30
215 - Single-Family Attached Housing	Dwelling Units	143	Best Fit (LIN) T = 0.52(X) - 5.70	69	10%	62	Best Fit (LIN) T = 0.60(X) - 3.93	82	10%	74
221 - Multifamily Housing (Mid-Rise)	Dwelling Units	116	Best Fit (LIN) T = 0.44(X) - 11.61	39	15%	34	Best Fit (LIN) T = 0.39(X) + 0.34	45	15%	38

221 - Multifamily Housing (Mid-Rise)	Dwelling Units	114	Best Fit (LIN) T = 0.44(X) - 11.61	39	15%	33	Best Fit (LIN) T = 0.39(X) + 0.34	44	15%	38
221 - Multifamily Housing (Mid-Rise)	Dwelling Units	524	Best Fit (LIN) T = 0.44(X) - 11.61	219	15%	186	Best Fit (LIN) T = 0.39(X) + 0.34	204	15%	173
821 - Shopping Plaza	1000 Sq. Ft. GLA	25.00	Average 1.73	43	0%	43	Average 5.19	130	0%	130
821 - Shopping Plaza	1000 Sq. Ft. GLA	19.61	Average 1.73	34	0%	34	Average 5.19	102	0%	102
821 - Shopping Plaza	1000 Sq. Ft. GLA	21.02	Average 1.73	36	0%	36	Average 5.19	109	0%	109
PROPOSED PROJECT Total						**585**				**859**

INSP SUBAREAS 3b & 3c			**AM PEAK HOUR**				**PM PEAK HOUR**			
ITE Land Use	**Unit Count**	**Size**	**Generation Method** **AM Rate /Equation**	**Trips Sub Total**	**Percent Reduction** **Walk to Transit**	**AM Total Trips**	**Generation Method** **PM Rate /Equation**	**Trips Sub Total**	**Percent Reduction** **Walk to Transit**	**PM Total Trips**
215 - Single-Family Attached Housing	Dwelling Units	161	Best Fit (LIN) T = 0.52(X) - 5.70	78	10%	70	Best Fit (LIN) T = 0.60(X) - 3.93	93	10%	83
221 - Multifamily Housing (Mid-Rise)	Dwelling Units	300	Best Fit (LIN) T = 0.44(X) - 11.61	120	15%	102	Best Fit (LIN) T = 0.39(X) + 0.34	117	15%	99
221 - Multifamily Housing (Mid-Rise)	Dwelling Units	195	Best Fit (LIN) T = 0.44(X) - 11.61	74	15%	63	Best Fit (LIN) T = 0.39(X) + 0.34	76	15%	64
220 - Multifamily Housing (Low-Rise)	Dwelling Units	350	Best Fit (LIN) T=0.31(X) + 22.85	131	15%	112	Best Fit (LIN) T = 0.43(X) + 20.55	171	0%	171
220 - Multifamily Housing (Low-Rise)	Dwelling Units	350	Best Fit (LIN) T=0.31(X) + 22.85	131	15%	112	Best Fit (LIN) T = 0.43(X) + 20.55	171	0%	171

220 - Multifamily Housing (Low-Rise)	Dwelling Units	121	Best Fit (LIN) T=0.31(X) + 22.85	60	15%	51	Best Fit (LIN) T = 0.43(X) + 20.55	73	0%	73
710 - General Office Building	1000 Sq. Ft. GLA	157.8	Average 1.5	240	0%	240	Average 1.4	227	0%	227
821 - Shopping Plaza	1000 Sq. Ft. GLA	142.1	Average 1.73	246	0%	246	Average 5.19	737	0%	737
INSP SUBAREAS 3b & 3c Total						**996**				**1626**
DIFFERENCE						**-411**				**-767**

Source - Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

CONCLUSION

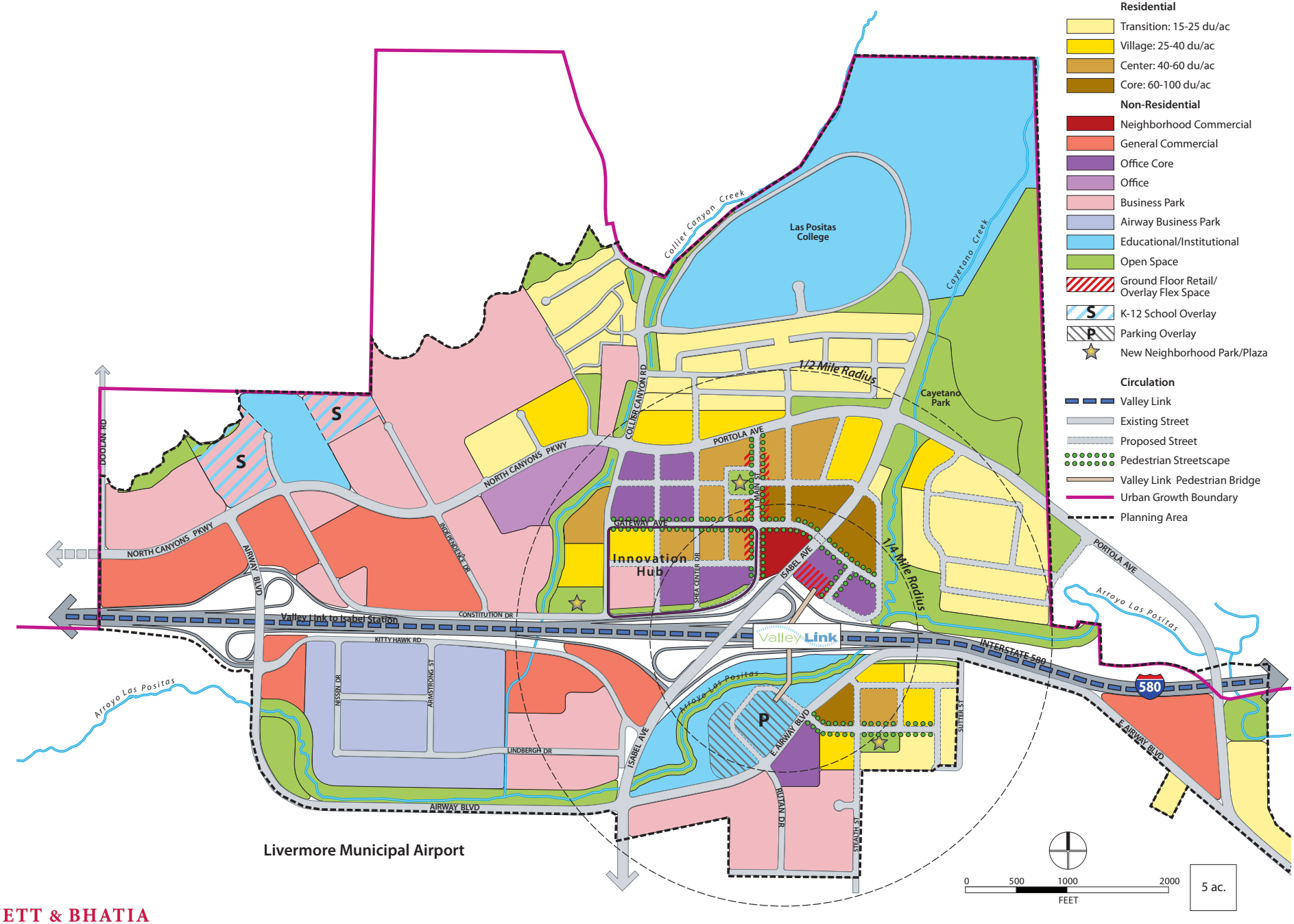
The Modified Project produces fewer trips than what was proposed in the INSP during the AM and PM peak hour. Therefore, the changes to the development completed in the INSP by the Modified Project would not require major revisions to the EIR or SEIR.

ATTACHMENTS

EXCERPTS FROM THE
ISABEL NEIGHBORHOOD SPECIFIC PLAN

EXHIBIT D

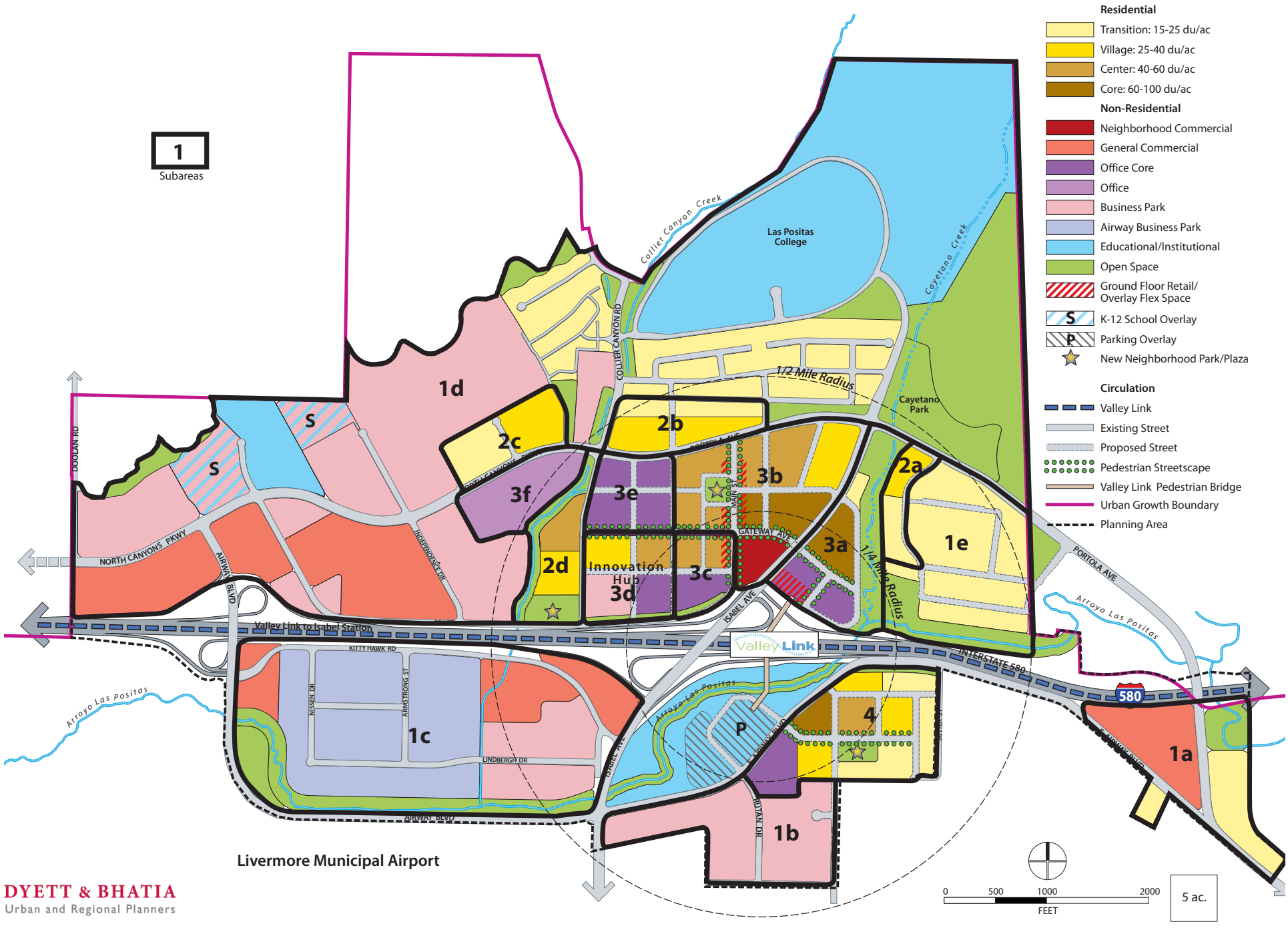
FIGURE 2-1: LAND USE DIAGRAM



DYETT & BHATIA
Urban and Regional Planners

EXHIBIT D

FIGURE 2-3: SUBAREA DIAGRAM



DYETT & BHATIA
Urban and Regional Planners

TABLE 2-6: PERFORMANCE MEASURES BY SUBAREA

Sub-area	Minimum Housing Units	Target Housing Units[1]	Maximum Housing Units	Performance Measures
1a	138	184	230	a) Provide at least two residential product types.
2a	163	201	240	a) Provide at least two residential product types.
2b	299	361	422	a) Provide at least two residential product types. b) Limit the building heights of units directly facing the adjacent Montage development to 45 feet above existing grade (three stories). c) Limit building heights on the remainder of the site to 50 feet above existing grade or Scenic Corridor limit, whichever is stricter.
2c	268	327	386	a) Provide at least two residential product types. b) Limit building heights to 50 feet above existing grade or Scenic Corridor limit, whichever is stricter.
2d	200	243	286	a) Provide at least two residential product types. b) Limit building heights to 50 feet above existing grade or Scenic Corridor limit, whichever is stricter.
3a	162	244	326	a) Provide at least two residential product types. b) The exact location of new streets is flexible, as long as they align with the proposed intersections shown on the Plan figures.
3b	1,054	1,267	1,480	a) Provide at least three residential product types. b) Concentrate the tallest buildings along Gateway Avenue and transition downward in scale along Portola. c) With the exception of Gateway Avenue, Shea Center Drive, and Main Street, the exact location of the new streets is flexible.
3c	182	210	237	a) Provide at least two residential product types. b) Provide the tallest buildings along Gateway Avenue and transition downward in scale for housing along Portola Avenue.
3d	197	238	279	a) Provide at least two residential product types. b) For sites outside of the Scenic Corridor exception area, limit building heights to 40 feet above existing grade (or Scenic Corridor limit, whichever is stricter).
4	660	793	926	a) Provide at least three residential product types. b) Limit building heights along Sutter Street and adjacent to existing residential uses to three stories. c) Locate the tallest buildings closest to the Valley Link station. d) The exact location of new streets is flexible, as long as they align with the proposed intersection with the Valley Link station and there is at least one connection to Sutter Street. e) If development is phased such that redevelopment of the self-storage site occurs after development of the G&M Farms property, the first phase shall plan for future street connections with the second phase.

Notes:

1. The target unit count is based on a variety of factors including density averages, development constraints, and market conditions.

2.6 DEVELOPMENT POTENTIAL

This section summarizes the overall development potential under build-out of the Plan. Build-out refers to the future scenario in which development has occurred on all properties envisioned for development under the Plan. The buildout scenario provides estimates as to the number of new households, residents, and jobs in the Neighborhood, and serves as the overall capacity for new development under the Plan. The City and partner agencies use these estimates to analyze environmental impacts and plan needed infrastructure and public services over the long-term (see the Isabel Neighborhood Specific Plan Draft EIR and Chapters 3, 4, and 7 of this Plan).

For planning and environmental review purposes, it is assumed buildout will occur by the year 2040, although it may take longer to fully realize the vision for the Isabel Neighborhood. Ultimately, private property owners are responsible for initiating development or redevelopment of their land, which often depends on market conditions.

Table 2-7 shows the estimated net new development under buildout of the Isabel Neighborhood Specific Plan. The development potential was calculated by applying the development standards (including average densities for the residential categories) applied to the Change Areas shown on Figure 2-2. The table also breaks down the net new development within and outside of the half-mile radius of the Valley Link station.

TABLE 2-7: ESTIMATED NET NEW DEVELOPMENT IN 2040

	Within ½ mile radius of Valley Link station	*Outside ½ mile radius*	*Planning Area Total*
Residential (housing units)	***3,525***	***570***	***4,095***
Non-residential (square feet)			
Office	1,578,000[1]	152,500	1,730,500
Business Park	73,590	106,800	180,390
Neighborhood Commercial	167,185[2]	0	167,185
General Commercial	107,200	52,500	159,700
General Industrial[3]	(270,175)	0	(270,175)
Total	***1,655,800***	***311,800***	***1,967,600***
Jobs	***8,000***	***1,200***	***9,200***

Notes:

1. *Includes existing LAM property*
2. *Includes Ground Floor Retail/Flex Space*
3. *As build out of the Planning Area occurs, General Industrial uses will be replaced with Office, Business Park, Neighborhood Commercial, and General Commercial uses.*

MARKET ANALYSIS

The market analysis prepared for the Isabel Neighborhood Specific Plan studied the potential for residential, office, and retail development in the Neighborhood based on the current real estate market in the Tri-Valley and forecasts of future economic conditions.[4]

The market analysis concluded that there is currently strong demand for multi-family residential development in the Isabel Neighborhood. With the introduction of Valley Link and a broader mix of housing formats and price points, average annual residential demand will likely be even stronger in the future.

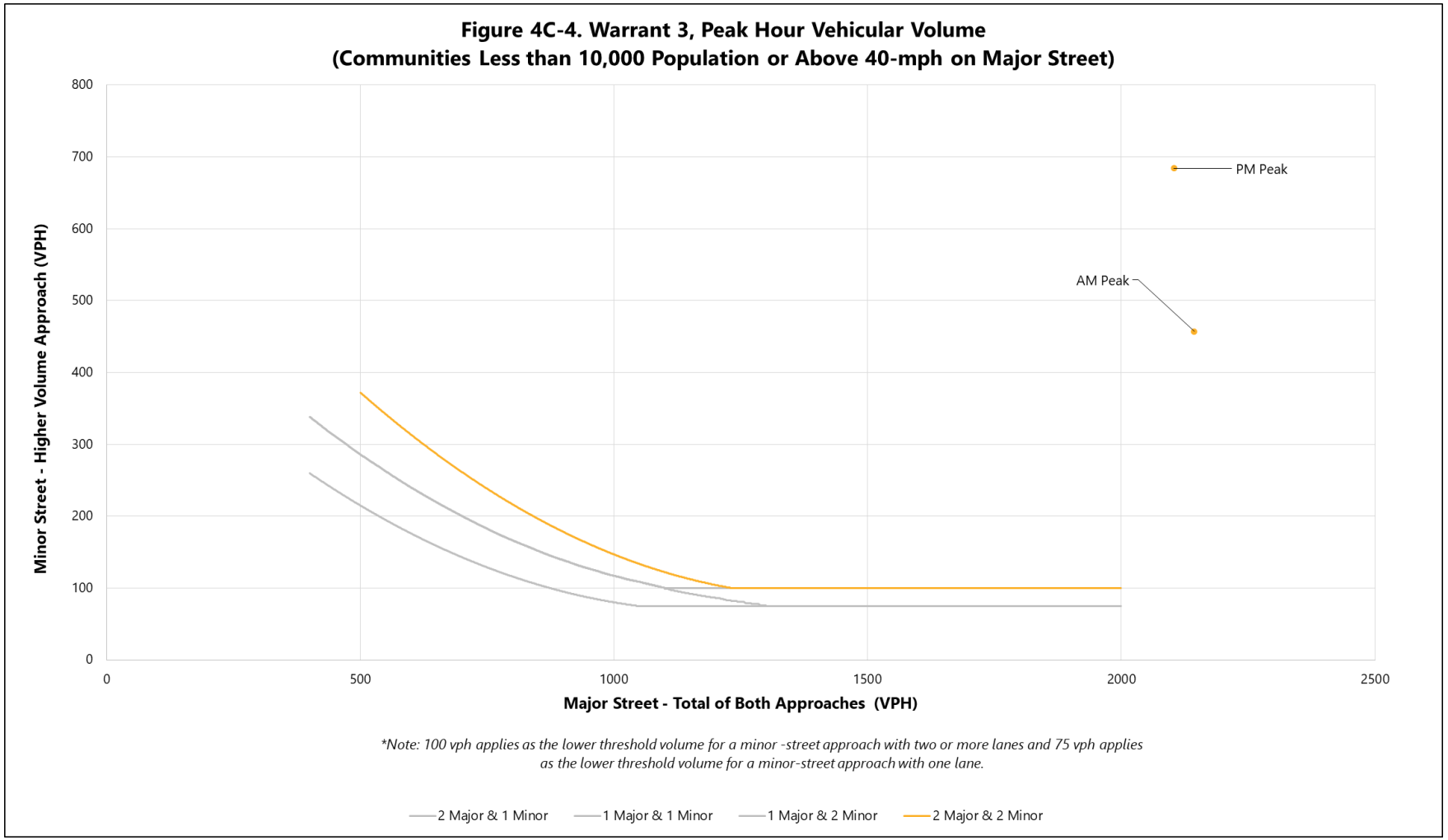
The study concluded that development of new office space is a long-term opportunity, based on current market conditions and regional competition. However, the Valley Link project, new amenities, and implementation of economic development strategies would increase the

4. The market study considered demand for three major land use categories: residential, office, and retail; it did not consider demand for the full range of land uses that would be allowed under the Isabel Neighborhood Specific Plan.

Appendix B

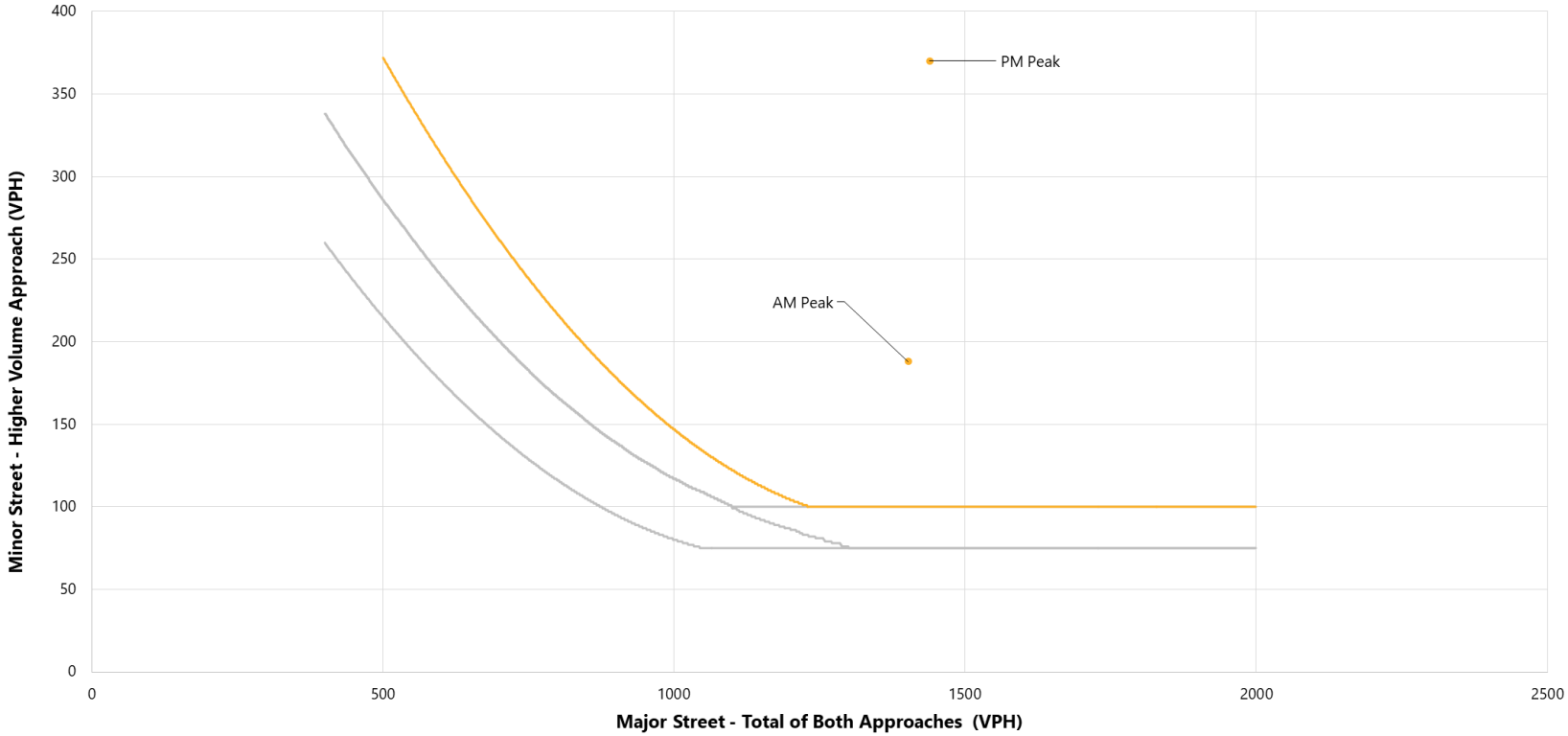
Traffic Signal Warrant Analysis Worksheets

Isabel Avenue & Gateway Avenue



Isabel Avenue & A Street

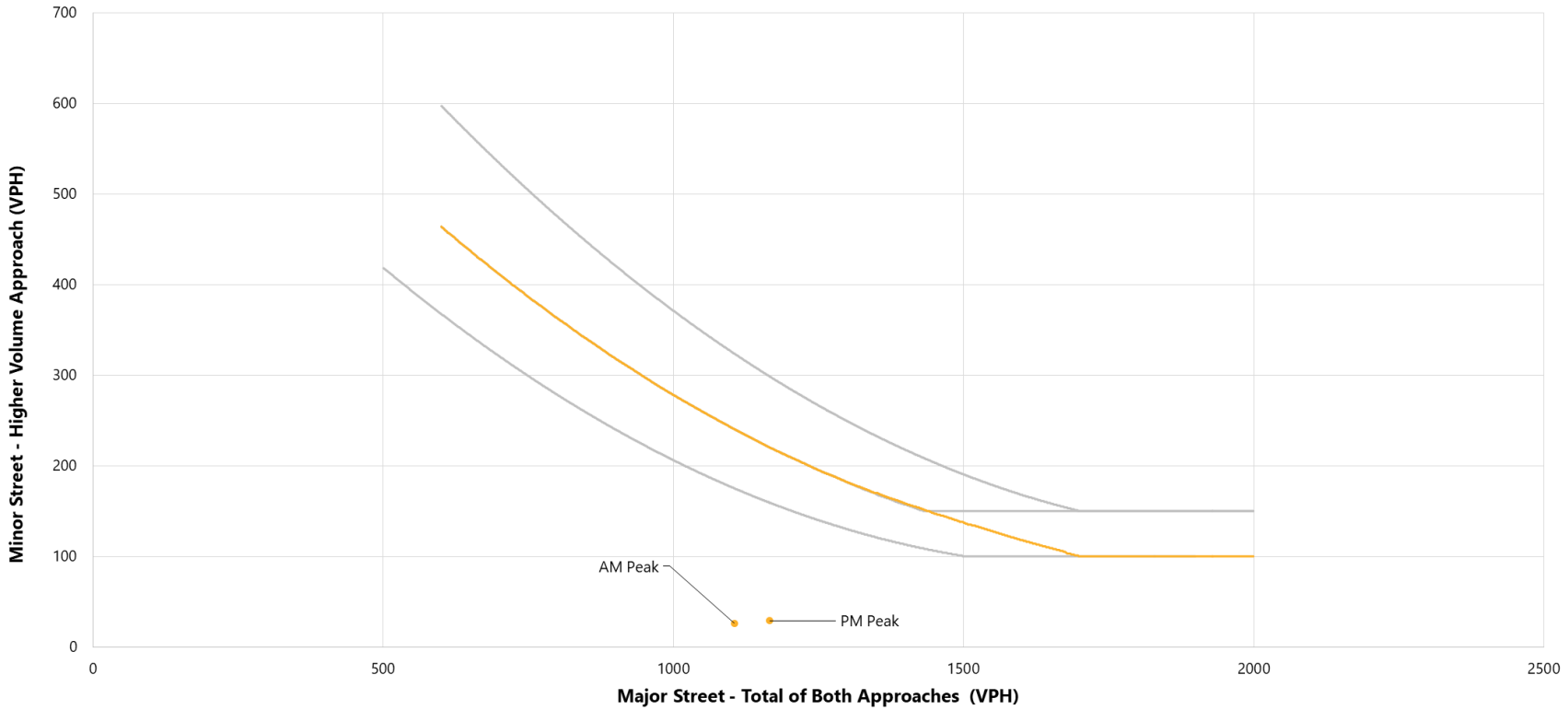
Figure 4C-4. Warrant 3, Peak Hour Vehicular Volume
(Communities Less than 10,000 Population or Above 40-mph on Major Street)



**Note: 100 vph applies as the lower threshold volume for a minor -street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.*

Gateway Avenue at Main Street

Figure 4C-3. Warrant 3, Peak Hour Vehicular Volume
(Communities more than 10,000 Population or Below 40-mph on Major Street)



**Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.*

Appendix D

Synchro LOS Analysis Worksheets

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	228	552	0	16	9
Future Vol, veh/h	0	228	552	0	16	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	248	600	0	17	10
Number of Lanes	0	1	2	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	9.7	8.7	8.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	0%	0%	64%
Vol Thru, %	100%	100%	100%	0%
Vol Right, %	0%	0%	0%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	228	276	276	25
LT Vol	0	0	0	16
Through Vol	228	276	276	0
RT Vol	0	0	0	9
Lane Flow Rate	248	300	300	27
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.315	0.392	0.247	0.041
Departure Headway (Hd)	4.57	4.704	2.966	5.378
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	791	756	1182	668
Service Time	2.57	2.494	0.754	3.39
HCM Lane V/C Ratio	0.314	0.397	0.254	0.04
HCM Control Delay, s/veh	9.7	10.6	6.8	8.6
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	1.4	1.9	1	0.1

HCM 6th Signalized Intersection Summary
11: Isabel & Portola

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	280	188	310	634	75	424	291	18	11	75	2
Future Volume (veh/h)	2	280	188	310	634	75	424	291	18	11	75	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	304	204	337	689	82	461	316	20	12	82	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	685	538	724	1062	126	592	1197	534	48	685	306
Arrive On Green	0.00	0.19	0.19	0.14	0.33	0.33	0.17	0.34	0.34	0.03	0.19	0.19
Sat Flow, veh/h	1781	3554	2790	5023	3198	380	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	2	304	204	337	382	389	461	316	20	12	82	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1802	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.1	4.7	4.0	3.8	11.4	11.4	7.9	4.0	0.5	0.4	1.2	0.1
Cycle Q Clear(g_c), s	0.1	4.7	4.0	3.8	11.4	11.4	7.9	4.0	0.5	0.4	1.2	0.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	9	685	538	724	590	598	592	1197	534	48	685	306
V/C Ratio(X)	0.23	0.44	0.38	0.47	0.65	0.65	0.78	0.26	0.04	0.25	0.12	0.01
Avail Cap(c_a), veh/h	258	2398	1883	1453	1456	1477	1111	2821	1258	343	2387	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	22.2	21.9	24.4	17.7	17.7	24.7	15.0	13.9	29.7	20.8	20.3
Incr Delay (d2), s/veh	4.8	0.2	0.2	0.2	0.4	0.4	0.9	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.9	1.2	1.4	4.3	4.4	3.1	1.5	0.2	0.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	22.3	22.0	24.6	18.1	18.1	25.5	15.1	13.9	30.6	20.8	20.3
LnGrp LOS	D	C	C	C	B	B	C	B	B	C	C	C
Approach Vol, veh/h		510			1108			797			96	
Approach Delay, s/veh		22.3			20.1			21.1			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	26.3	13.0	17.3	14.7	17.3	4.3	26.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	12.0	49.4	18.0	42.0	20.0	* 42	9.0	51.0
Max Q Clear Time (g_c+I1), s	2.4	6.0	5.8	6.7	9.9	3.2	2.1	13.4
Green Ext Time (p_c), s	0.0	1.5	0.6	1.8	0.7	0.3	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	20.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3	241	83	17	18	492	741	35	19	584	43
Future Volume (veh/h)	0	3	241	83	17	18	492	741	35	19	584	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	264	90	18	20	535	805	38	21	635	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	0	506	115	240	267	722	1602	76	35	868	64
Arrive On Green	0.00	0.00	0.17	0.06	0.30	0.30	0.23	0.46	0.46	0.02	0.26	0.26
Sat Flow, veh/h	1781	0	3055	1781	798	886	3206	3448	163	1781	3347	247
Grp Volume(v), veh/h	0	0	264	90	0	38	535	415	428	21	337	345
Grp Sat Flow(s),veh/h/ln	1781	0	1528	1781	0	1684	1603	1777	1834	1781	1777	1818
Q Serve(g_s), s	0.0	0.0	4.4	2.8	0.0	0.9	8.7	9.1	9.1	0.7	9.7	9.7
Cycle Q Clear(g_c), s	0.0	0.0	4.4	2.8	0.0	0.9	8.7	9.1	9.1	0.7	9.7	9.7
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	3	0	506	115	0	507	722	825	852	35	461	471
V/C Ratio(X)	0.00	0.00	0.52	0.78	0.00	0.07	0.74	0.50	0.50	0.59	0.73	0.73
Avail Cap(c_a), veh/h	127	0	1745	159	0	992	2404	1808	1867	159	634	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	21.3	25.8	0.0	14.0	20.2	10.5	10.5	27.2	19.0	19.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	15.6	0.0	0.1	1.5	0.5	0.5	14.7	2.7	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.5	1.6	0.0	0.3	2.9	2.7	2.8	0.4	3.7	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	22.2	41.5	0.0	14.0	21.7	11.0	10.9	42.0	21.7	21.7
LnGrp LOS			C	D		B	C	B	B	D	C	C
Approach Vol, veh/h		264			128			1378			703	
Approach Delay, s/veh		22.2			33.3			15.1			22.3	
Approach LOS		C			C			B			C	

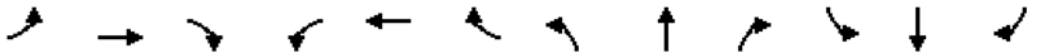
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	30.0	7.6	13.3	16.6	18.5	0.0	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	57.0	5.0	32.0	42.0	20.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	2.7	11.1	4.8	6.4	10.7	11.7	0.0	2.9
Green Ext Time (p_c), s	0.0	5.5	0.0	1.1	1.9	2.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	18.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
19: Isabel Ave & A Street



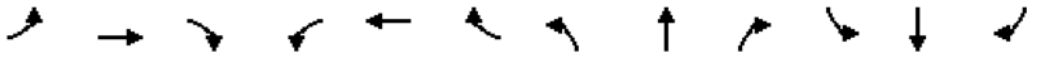
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	70	28	14	6	255	478	12	7	548	18
Future Volume (veh/h)	0	13	70	28	14	6	255	478	12	7	548	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	14	76	30	15	7	277	520	13	8	596	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	28	150	50	284	132	355	1654	41	15	982	419
Arrive On Green	0.00	0.11	0.11	0.03	0.24	0.24	0.20	0.47	0.47	0.01	0.28	0.28
Sat Flow, veh/h	1781	242	1315	1781	1194	557	1781	3539	88	1781	3554	1515
Grp Volume(v), veh/h	0	0	90	30	0	22	277	261	272	8	596	20
Grp Sat Flow(s),veh/h/ln	1781	0	1557	1781	0	1751	1781	1777	1851	1781	1777	1515
Q Serve(g_s), s	0.0	0.0	2.3	0.7	0.0	0.4	6.2	3.8	3.8	0.2	6.1	0.4
Cycle Q Clear(g_c), s	0.0	0.0	2.3	0.7	0.0	0.4	6.2	3.8	3.8	0.2	6.1	0.4
Prop In Lane	1.00		0.84	1.00		0.32	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	4	0	178	50	0	416	355	830	865	15	982	419
V/C Ratio(X)	0.00	0.00	0.51	0.60	0.00	0.05	0.78	0.31	0.31	0.53	0.61	0.05
Avail Cap(c_a), veh/h	170	0	1190	170	0	1338	723	1442	1502	170	1782	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	20.1	0.0	12.3	15.9	7.0	7.0	20.7	13.2	8.4
Incr Delay (d2), s/veh	0.0	0.0	2.2	10.9	0.0	0.1	3.8	0.2	0.2	25.8	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	0.4	0.0	0.1	2.3	0.9	0.9	0.2	1.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	19.7	31.0	0.0	12.4	19.7	7.2	7.2	46.4	13.8	8.4
LnGrp LOS			B	C		B	B	A	A	D	B	A
Approach Vol, veh/h		90			52			810			624	
Approach Delay, s/veh		19.7			23.1			11.4			14.0	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	23.6	5.2	8.8	12.3	15.6	0.0	14.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	34.0	4.0	32.0	17.0	21.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	2.2	5.8	2.7	4.3	8.2	8.1	0.0	2.4
Green Ext Time (p_c), s	0.0	2.9	0.0	0.5	0.5	3.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.3
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
22: Main Street/Montage Dr & Portola

2040 Baseline
Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	381	0	127	894	27	132	9	0	24	87	102
Future Volume (veh/h)	10	381	0	127	894	27	132	9	0	24	87	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	414	0	138	972	29	143	10	0	26	95	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1191	0	166	1469	44	184	467	0	43	134	157
Arrive On Green	0.01	0.34	0.00	0.09	0.42	0.42	0.10	0.25	0.00	0.02	0.17	0.17
Sat Flow, veh/h	1781	3647	0	1781	3523	105	1781	1870	0	1781	786	919
Grp Volume(v), veh/h	11	414	0	138	490	511	143	10	0	26	0	206
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1851	1781	1870	0	1781	0	1705
Q Serve(g_s), s	0.3	4.7	0.0	4.1	11.9	11.9	4.2	0.2	0.0	0.8	0.0	6.1
Cycle Q Clear(g_c), s	0.3	4.7	0.0	4.1	11.9	11.9	4.2	0.2	0.0	0.8	0.0	6.1
Prop In Lane	1.00		0.00	1.00		0.06	1.00		0.00	1.00		0.54
Lane Grp Cap(c), veh/h	20	1191	0	166	741	772	184	467	0	43	0	290
V/C Ratio(X)	0.55	0.35	0.00	0.83	0.66	0.66	0.78	0.02	0.00	0.61	0.00	0.71
Avail Cap(c_a), veh/h	133	1191	0	166	741	772	299	1254	0	166	0	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	13.4	0.0	23.9	12.6	12.6	23.5	15.2	0.0	26.0	0.0	21.0
Incr Delay (d2), s/veh	21.2	0.8	0.0	28.7	4.6	4.4	6.9	0.0	0.0	13.2	0.0	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	0.0	2.8	4.6	4.7	2.0	0.1	0.0	0.5	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.7	14.2	0.0	52.6	17.2	17.0	30.4	15.2	0.0	39.2	0.0	24.2
LnGrp LOS	D	B		D	B	B	C	B		D		C
Approach Vol, veh/h		425			1139			153			232	
Approach Delay, s/veh		15.1			21.4			29.4			25.9	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.0	9.5	13.1	4.6	26.4	5.3	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	18.0	9.0	32.0	4.0	19.0	5.0	36.0
Max Q Clear Time (g_c+I1), s	6.1	6.7	6.2	8.1	2.3	13.9	2.8	2.2
Green Ext Time (p_c), s	0.0	1.9	0.1	1.3	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	21.2
HCM 6th LOS	C

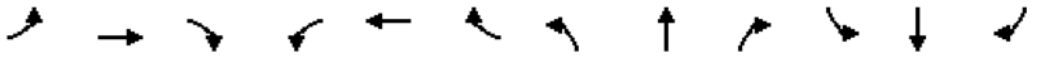
Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	455	379	0	16	21
Future Vol, veh/h	0	455	379	0	16	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	495	412	0	17	23
Number of Lanes	0	1	2	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	14.5	8.2	8.9
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	0%	0%	43%
Vol Thru, %	100%	100%	100%	0%
Vol Right, %	0%	0%	0%	57%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	455	190	190	37
LT Vol	0	0	0	16
Through Vol	455	190	190	0
RT Vol	0	0	0	21
Lane Flow Rate	495	206	206	40
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.617	0.286	0.183	0.061
Departure Headway (Hd)	4.494	4.996	3.2	5.473
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	806	721	1104	654
Service Time	2.508	2.715	0.969	3.508
HCM Lane V/C Ratio	0.614	0.286	0.187	0.061
HCM Control Delay, s/veh	14.5	9.7	6.7	8.9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	4.3	1.2	0.7	0.2

HCM 6th Signalized Intersection Summary
11: Isabel & Portola



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1105	359	280	531	9	259	221	10	23	164	6
Future Volume (veh/h)	6	1105	359	280	531	9	259	221	10	23	164	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	1201	390	304	577	10	282	240	11	25	178	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	1447	1136	551	1789	31	379	741	330	85	521	232
Arrive On Green	0.02	0.41	0.41	0.11	0.50	0.50	0.11	0.21	0.21	0.05	0.15	0.15
Sat Flow, veh/h	1781	3554	2790	5023	3574	62	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	7	1201	390	304	287	300	282	240	11	25	178	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1859	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	24.8	7.9	4.7	7.9	7.9	6.5	4.7	0.5	1.1	3.7	0.3
Cycle Q Clear(g_c), s	0.3	24.8	7.9	4.7	7.9	7.9	6.5	4.7	0.5	1.1	3.7	0.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	1447	1136	551	890	931	379	741	330	85	521	232
V/C Ratio(X)	0.24	0.83	0.34	0.55	0.32	0.32	0.74	0.32	0.03	0.29	0.34	0.03
Avail Cap(c_a), veh/h	196	1822	1430	1655	1301	1362	464	1666	743	304	1813	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	21.8	16.7	34.6	12.2	12.2	35.4	27.5	25.8	37.7	31.4	30.0
Incr Delay (d2), s/veh	1.6	2.2	0.1	0.3	0.1	0.1	3.7	0.1	0.0	0.7	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.1	2.4	1.9	2.9	3.1	2.9	2.0	0.2	0.5	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.4	24.0	16.8	34.9	12.3	12.3	39.1	27.6	25.9	38.4	31.6	30.0
LnGrp LOS	D	C	B	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1598			891			533			210	
Approach Delay, s/veh		22.3			20.0			33.6			32.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	22.4	13.0	38.7	13.0	17.3	5.3	46.3
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	14.0	38.4	27.0	42.0	11.0	* 42	9.0	60.0
Max Q Clear Time (g_c+I1), s	3.1	6.7	6.7	26.8	8.5	5.7	2.3	9.9
Green Ext Time (p_c), s	0.0	1.1	0.6	6.6	0.2	0.8	0.0	2.4

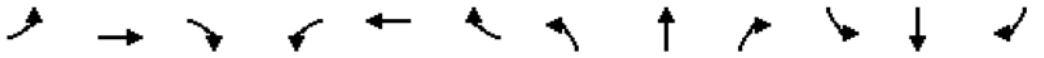
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	24.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
14: Isabel & Gateway Avenue

2040 Baseline
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	25	380	59	18	54	351	427	90	52	944	10
Future Volume (veh/h)	66	25	380	59	18	54	351	427	90	52	944	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	0	431	64	20	59	382	464	98	57	1026	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	0	634	82	82	241	514	1389	291	72	1292	14
Arrive On Green	0.05	0.00	0.21	0.05	0.20	0.20	0.16	0.48	0.48	0.04	0.36	0.36
Sat Flow, veh/h	1781	0	3070	1781	407	1200	3206	2904	608	1781	3601	39
Grp Volume(v), veh/h	72	0	431	64	0	79	382	282	280	57	506	531
Grp Sat Flow(s),veh/h/ln	1781	0	1535	1781	0	1607	1603	1777	1736	1781	1777	1862
Q Serve(g_s), s	2.8	0.0	9.1	2.5	0.0	2.9	7.9	6.9	7.0	2.2	17.9	17.9
Cycle Q Clear(g_c), s	2.8	0.0	9.1	2.5	0.0	2.9	7.9	6.9	7.0	2.2	17.9	17.9
Prop In Lane	1.00		1.00	1.00		0.75	1.00		0.35	1.00		0.02
Lane Grp Cap(c), veh/h	92	0	634	82	0	322	514	850	830	72	638	668
V/C Ratio(X)	0.78	0.00	0.68	0.78	0.00	0.25	0.74	0.33	0.34	0.79	0.79	0.79
Avail Cap(c_a), veh/h	153	0	1316	153	0	689	1512	1524	1488	178	863	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	25.6	33.0	0.0	23.5	28.0	11.3	11.3	33.3	20.1	20.1
Incr Delay (d2), s/veh	13.2	0.0	1.3	15.0	0.0	0.4	2.2	0.2	0.2	17.0	3.7	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.3	1.4	0.0	1.1	2.9	2.3	2.2	1.2	6.9	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	0.0	26.9	48.1	0.0	23.9	30.2	11.5	11.6	50.3	23.8	23.6
LnGrp LOS	D		C	D		C	C	B	B	D	C	C
Approach Vol, veh/h		503			143			944			1094	
Approach Delay, s/veh		29.7			34.7			19.1			25.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	37.5	7.2	18.5	15.2	29.1	7.6	18.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	60.0	6.0	30.0	33.0	34.0	6.0	30.0
Max Q Clear Time (g_c+I1), s	4.2	9.0	4.5	11.1	9.9	19.9	4.8	4.9
Green Ext Time (p_c), s	0.0	3.4	0.0	1.8	1.3	5.2	0.0	0.4

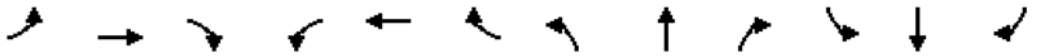
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	24.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
19: Isabel Ave & A Street

2040 Baseline
Timing Plan: PM Peak



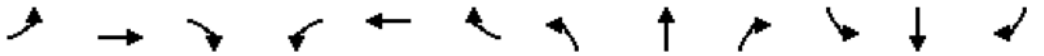
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	41	197	19	27	19	159	358	30	18	790	0
Future Volume (veh/h)	27	41	197	19	27	19	159	358	30	18	790	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	45	214	21	29	21	173	389	33	20	859	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	71	338	35	209	151	222	1443	122	34	1174	524
Arrive On Green	0.07	0.26	0.26	0.02	0.21	0.21	0.12	0.44	0.44	0.02	0.33	0.00
Sat Flow, veh/h	1781	276	1314	1781	994	720	1781	3306	279	1781	3554	1585
Grp Volume(v), veh/h	29	0	259	21	0	50	173	208	214	20	859	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1781	0	1714	1781	1777	1808	1781	1777	1585
Q Serve(g_s), s	0.9	0.0	8.6	0.7	0.0	1.4	5.6	4.5	4.5	0.7	12.8	0.0
Cycle Q Clear(g_c), s	0.9	0.0	8.6	0.7	0.0	1.4	5.6	4.5	4.5	0.7	12.8	0.0
Prop In Lane	1.00		0.83	1.00		0.42	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	119	0	409	35	0	361	222	775	789	34	1174	524
V/C Ratio(X)	0.24	0.00	0.63	0.60	0.00	0.14	0.78	0.27	0.27	0.59	0.73	0.00
Avail Cap(c_a), veh/h	119	0	851	119	0	918	507	1279	1301	149	1844	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.5	0.0	19.7	29.1	0.0	19.2	25.3	10.7	10.8	29.1	17.7	0.0
Incr Delay (d2), s/veh	1.1	0.0	1.6	15.2	0.0	0.2	5.8	0.2	0.2	15.6	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	3.2	0.4	0.0	0.5	2.5	1.4	1.4	0.4	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.5	0.0	21.3	44.3	0.0	19.4	31.1	10.9	10.9	44.6	18.6	0.0
LnGrp LOS	C		C	D		B	C	B	B	D	B	
Approach Vol, veh/h		288			71			595			879	
Approach Delay, s/veh		21.9			26.7			16.8			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	30.1	5.2	19.4	11.5	23.7	8.0	16.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	43.0	4.0	32.0	17.0	31.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	2.7	6.5	2.7	10.6	7.6	14.8	2.9	3.4
Green Ext Time (p_c), s	0.0	2.3	0.0	1.7	0.3	5.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	19.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
22: Main Street/Montage Dr & Portola

2040 Baseline
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1189	82	101	510	129	22	38	204	37	69	31
Future Volume (veh/h)	125	1189	82	101	510	129	22	38	204	37	69	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	1292	89	110	554	140	24	41	222	40	75	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1225	84	142	756	190	40	55	298	60	279	126
Arrive On Green	0.17	0.36	0.36	0.08	0.27	0.27	0.02	0.22	0.22	0.03	0.23	0.23
Sat Flow, veh/h	1781	3374	232	1781	2812	708	1781	253	1371	1781	1219	552
Grp Volume(v), veh/h	136	679	702	110	349	345	24	0	263	40	0	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1781	1777	1743	1781	0	1624	1781	0	1771
Q Serve(g_s), s	3.6	19.0	19.0	3.2	9.4	9.4	0.7	0.0	7.9	1.2	0.0	2.6
Cycle Q Clear(g_c), s	3.6	19.0	19.0	3.2	9.4	9.4	0.7	0.0	7.9	1.2	0.0	2.6
Prop In Lane	1.00		0.13	1.00		0.41	1.00		0.84	1.00		0.31
Lane Grp Cap(c), veh/h	310	645	664	142	478	469	40	0	354	60	0	405
V/C Ratio(X)	0.44	1.05	1.06	0.77	0.73	0.74	0.60	0.00	0.74	0.67	0.00	0.27
Avail Cap(c_a), veh/h	310	645	664	272	679	666	170	0	993	170	0	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.3	16.7	16.7	23.6	17.4	17.4	25.3	0.0	19.1	25.0	0.0	16.6
Incr Delay (d2), s/veh	1.0	50.1	50.9	8.7	2.4	2.5	13.5	0.0	3.1	12.0	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	15.0	15.6	1.5	3.5	3.5	0.4	0.0	3.0	0.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.3	66.8	67.6	32.3	19.8	20.0	38.8	0.0	22.2	37.0	0.0	16.9
LnGrp LOS	C	F	F	C	B	B	D		C	D		B
Approach Vol, veh/h		1517			804			287			149	
Approach Delay, s/veh		63.0			21.6			23.6			22.3	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	23.0	5.2	16.0	13.1	18.1	5.8	15.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	19.0	5.0	32.0	7.0	20.0	5.0	32.0
Max Q Clear Time (g_c+I1), s	5.2	21.0	2.7	4.6	5.6	11.4	3.2	9.9
Green Ext Time (p_c), s	0.1	0.0	0.0	0.6	0.0	2.6	0.0	1.7

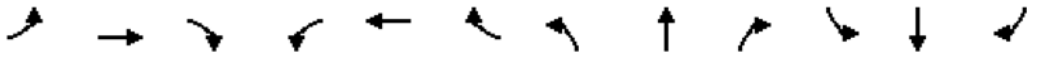
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	44.6
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	34.7
Intersection LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	440	644	8	17	9
Future Vol, veh/h	13	440	644	8	17	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	478	700	9	18	10
Number of Lanes	0	1	1	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	17.5	47.6	10
HCM LOS	C	E	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	3%	0%	0%	65%
Vol Thru, %	97%	100%	0%	0%
Vol Right, %	0%	0%	100%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	453	644	8	26
LT Vol	13	0	0	17
Through Vol	440	644	0	0
RT Vol	0	0	8	9
Lane Flow Rate	492	700	9	28
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.673	0.969	0.01	0.052
Departure Headway (Hd)	4.918	4.983	4.279	6.611
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	734	728	833	545
Service Time	2.96	2.725	2.02	4.611
HCM Lane V/C Ratio	0.67	0.962	0.011	0.051
HCM Control Delay, s/veh	17.5	48.1	7.1	10
HCM Lane LOS	C	E	A	A
HCM 95th-tile Q	5.2	14.8	0	0.2



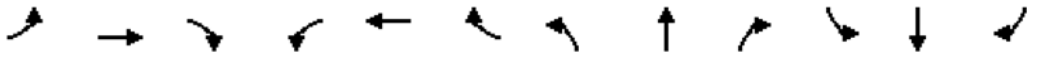
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	302	191	329	643	75	425	291	57	11	75	2
Future Volume (veh/h)	2	302	191	329	643	75	425	291	57	11	75	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	328	208	358	699	82	462	316	62	12	82	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	685	538	725	1064	125	593	1198	534	48	685	306
Arrive On Green	0.00	0.19	0.19	0.14	0.33	0.33	0.17	0.34	0.34	0.03	0.19	0.19
Sat Flow, veh/h	1781	3554	2790	5023	3204	376	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	2	328	208	358	387	394	462	316	62	12	82	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1803	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.1	5.1	4.0	4.1	11.6	11.6	8.0	4.0	1.7	0.4	1.2	0.1
Cycle Q Clear(g_c), s	0.1	5.1	4.0	4.1	11.6	11.6	8.0	4.0	1.7	0.4	1.2	0.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	9	685	538	725	590	599	593	1198	534	48	685	306
V/C Ratio(X)	0.23	0.48	0.39	0.49	0.66	0.66	0.78	0.26	0.12	0.25	0.12	0.01
Avail Cap(c_a), veh/h	257	2397	1882	1452	1456	1477	1110	2820	1258	343	2386	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	22.3	21.9	24.5	17.8	17.8	24.7	15.0	14.2	29.7	20.8	20.3
Incr Delay (d2), s/veh	4.8	0.2	0.2	0.2	0.5	0.5	0.9	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	1.3	1.5	4.4	4.4	3.1	1.5	0.6	0.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	22.5	22.1	24.7	18.2	18.2	25.5	15.1	14.3	30.7	20.8	20.3
LnGrp LOS	D	C	C	C	B	B	C	B	B	C	C	C
Approach Vol, veh/h		538			1139			840			96	
Approach Delay, s/veh		22.4			20.3			20.8			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	26.3	13.0	17.3	14.7	17.3	4.3	26.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	12.0	49.4	18.0	42.0	20.0	* 42	9.0	51.0
Max Q Clear Time (g_c+I1), s	2.4	6.0	6.1	7.1	10.0	3.2	2.1	13.6
Green Ext Time (p_c), s	0.0	1.5	0.6	2.0	0.7	0.3	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	20.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	6	429	83	18	18	580	781	35	20	674	54
Future Volume (veh/h)	22	6	429	83	18	18	580	781	35	20	674	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	0	471	90	20	20	630	849	38	22	733	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	0	628	100	203	203	685	1872	84	34	633	51
Arrive On Green	0.02	0.00	0.20	0.06	0.24	0.24	0.37	0.54	0.54	0.02	0.19	0.19
Sat Flow, veh/h	1781	0	3070	1781	844	844	1853	3458	155	1781	3321	267
Grp Volume(v), veh/h	24	0	471	90	0	40	630	436	451	22	392	400
Grp Sat Flow(s),veh/h/ln	1781	0	1535	1781	0	1689	926	1777	1836	1781	1777	1811
Q Serve(g_s), s	1.2	0.0	12.9	4.5	0.0	1.6	29.0	13.3	13.3	1.1	17.0	17.0
Cycle Q Clear(g_c), s	1.2	0.0	12.9	4.5	0.0	1.6	29.0	13.3	13.3	1.1	17.0	17.0
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.08	1.00		0.15
Lane Grp Cap(c), veh/h	36	0	628	100	0	406	685	962	994	34	338	345
V/C Ratio(X)	0.67	0.00	0.75	0.90	0.00	0.10	0.92	0.45	0.45	0.66	1.16	1.16
Avail Cap(c_a), veh/h	80	0	1032	100	0	568	934	1135	1173	100	338	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	0.0	33.3	41.9	0.0	26.4	26.9	12.4	12.5	43.5	36.1	36.1
Incr Delay (d2), s/veh	19.5	0.0	1.8	59.7	0.0	0.1	11.3	0.3	0.3	19.6	99.1	99.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	4.8	3.6	0.0	0.7	6.8	4.6	4.7	0.6	16.2	16.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.0	0.0	35.2	101.5	0.0	26.5	38.2	12.8	12.8	63.1	135.2	135.3
LnGrp LOS	E		D	F		C	D	B	B	E	F	F
Approach Vol, veh/h		495			130			1517			814	
Approach Delay, s/veh		36.5			78.4			23.3			133.3	
Approach LOS		D			E			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	52.3	9.0	22.3	37.0	21.0	5.8	25.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	57.0	5.0	30.0	45.0	17.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	3.1	15.3	6.5	14.9	31.0	19.0	3.2	3.6
Green Ext Time (p_c), s	0.0	5.8	0.0	1.8	2.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	58.2
HCM 6th LOS	E

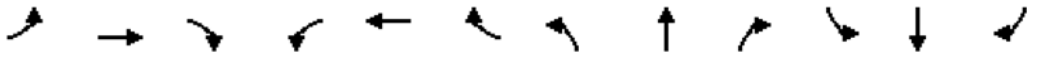
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	13	158	28	14	6	294	501	12	7	562	26
Future Volume (veh/h)	17	13	158	28	14	6	294	501	12	7	562	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	14	172	30	15	7	320	545	13	8	611	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	22	272	48	237	111	399	1649	39	15	888	377
Arrive On Green	0.02	0.19	0.19	0.03	0.20	0.20	0.22	0.47	0.47	0.01	0.25	0.25
Sat Flow, veh/h	1781	117	1437	1781	1192	556	1781	3544	84	1781	3554	1511
Grp Volume(v), veh/h	18	0	186	30	0	22	320	273	285	8	611	28
Grp Sat Flow(s),veh/h/ln	1781	0	1554	1781	0	1748	1781	1777	1852	1781	1777	1511
Q Serve(g_s), s	0.5	0.0	5.7	0.9	0.0	0.5	8.8	5.0	5.0	0.2	8.1	0.6
Cycle Q Clear(g_c), s	0.5	0.0	5.7	0.9	0.0	0.5	8.8	5.0	5.0	0.2	8.1	0.6
Prop In Lane	1.00		0.92	1.00		0.32	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	31	0	295	48	0	348	399	827	862	15	888	377
V/C Ratio(X)	0.57	0.00	0.63	0.62	0.00	0.06	0.80	0.33	0.33	0.53	0.69	0.07
Avail Cap(c_a), veh/h	138	0	902	138	0	1015	1344	1856	1934	138	1306	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	19.3	24.9	0.0	16.8	19.0	8.7	8.7	25.5	17.6	8.8
Incr Delay (d2), s/veh	15.4	0.0	2.2	12.4	0.0	0.1	3.8	0.2	0.2	26.5	1.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.1	0.5	0.0	0.2	3.4	1.4	1.4	0.2	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	0.0	21.5	37.2	0.0	16.9	22.8	9.0	9.0	52.1	18.5	8.9
LnGrp LOS	D		C	D		B	C	A	A	D	B	A
Approach Vol, veh/h		204			52			878			647	
Approach Delay, s/veh		23.2			28.6			14.0			18.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	28.1	5.4	13.8	15.6	16.9	4.9	14.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	54.0	4.0	30.0	39.0	19.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.2	7.0	2.9	7.7	10.8	10.1	2.5	2.5
Green Ext Time (p_c), s	0.0	3.2	0.0	1.2	0.9	2.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	381	28	137	894	27	192	9	25	24	87	102
Future Volume (veh/h)	10	381	28	137	894	27	192	9	25	24	87	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	414	30	149	972	29	209	10	27	26	95	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1062	77	156	1383	41	264	130	352	42	131	153
Arrive On Green	0.01	0.32	0.32	0.09	0.39	0.39	0.15	0.29	0.29	0.02	0.17	0.17
Sat Flow, veh/h	1781	3361	243	1781	3523	105	1781	447	1206	1781	786	919
Grp Volume(v), veh/h	11	218	226	149	490	511	209	0	37	26	0	206
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1851	1781	0	1653	1781	0	1705
Q Serve(g_s), s	0.3	5.5	5.5	4.7	13.2	13.2	6.4	0.0	0.9	0.8	0.0	6.5
Cycle Q Clear(g_c), s	0.3	5.5	5.5	4.7	13.2	13.2	6.4	0.0	0.9	0.8	0.0	6.5
Prop In Lane	1.00		0.13	1.00		0.06	1.00		0.73	1.00		0.54
Lane Grp Cap(c), veh/h	20	562	577	156	698	727	264	0	482	42	0	285
V/C Ratio(X)	0.55	0.39	0.39	0.95	0.70	0.70	0.79	0.00	0.08	0.62	0.00	0.72
Avail Cap(c_a), veh/h	125	562	577	156	698	727	469	0	1045	156	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	15.2	15.2	25.9	14.5	14.5	23.4	0.0	14.6	27.5	0.0	22.5
Incr Delay (d2), s/veh	21.5	2.0	2.0	57.8	5.8	5.6	5.3	0.0	0.1	13.7	0.0	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.2	4.3	5.4	5.5	2.9	0.0	0.3	0.5	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	17.2	17.2	83.7	20.4	20.1	28.7	0.0	14.7	41.3	0.0	26.0
LnGrp LOS	D	B	B	F	C	C	C		B	D		C
Approach Vol, veh/h		455			1150			246			232	
Approach Delay, s/veh		18.0			28.5			26.6			27.7	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.0	12.4	13.5	4.6	26.4	5.3	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	18.0	15.0	26.0	4.0	19.0	5.0	36.0
Max Q Clear Time (g_c+I1), s	6.7	7.5	8.4	8.5	2.3	15.2	2.8	2.9
Green Ext Time (p_c), s	0.0	1.8	0.3	1.1	0.0	2.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	25.9
HCM 6th LOS	C

Notes

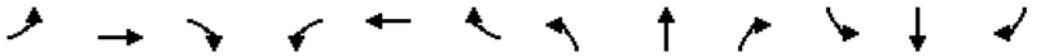
User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	38.9
Intersection LOS	E

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	628	581	18	12	17
Future Vol, veh/h	15	628	581	18	12	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	683	632	20	13	18
Number of Lanes	0	1	1	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	42.9	35.9	10.1
HCM LOS	E	E	B

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	0%	0%	41%
Vol Thru, %	98%	100%	0%	0%
Vol Right, %	0%	0%	100%	59%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	643	581	18	29
LT Vol	15	0	0	12
Through Vol	628	581	0	0
RT Vol	0	0	18	17
Lane Flow Rate	699	632	20	32
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.945	0.902	0.024	0.059
Departure Headway (Hd)	4.87	5.143	4.437	6.685
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	741	701	801	539
Service Time	2.921	2.9	2.194	4.685
HCM Lane V/C Ratio	0.943	0.902	0.025	0.059
HCM Control Delay, s/veh	42.9	36.8	7.3	10.1
HCM Lane LOS	E	E	A	B
HCM 95th-tile Q	13.8	11.6	0.1	0.2



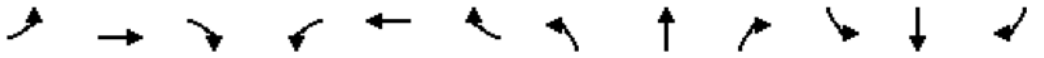
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1122	361	319	552	9	262	221	44	23	164	6
Future Volume (veh/h)	6	1122	361	319	552	9	262	221	44	23	164	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	1220	392	347	600	10	285	240	48	25	178	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	1461	1147	548	1803	30	376	735	328	85	517	231
Arrive On Green	0.02	0.41	0.41	0.11	0.50	0.50	0.11	0.21	0.21	0.05	0.15	0.15
Sat Flow, veh/h	1781	3554	2790	5023	3577	60	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	7	1220	392	347	298	312	285	240	48	25	178	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1860	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	25.4	7.9	5.5	8.2	8.3	6.6	4.7	2.0	1.1	3.7	0.3
Cycle Q Clear(g_c), s	0.3	25.4	7.9	5.5	8.2	8.3	6.6	4.7	2.0	1.1	3.7	0.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	1461	1147	548	896	937	376	735	328	85	517	231
V/C Ratio(X)	0.24	0.83	0.34	0.63	0.33	0.33	0.76	0.33	0.15	0.29	0.34	0.03
Avail Cap(c_a), veh/h	194	1809	1420	1644	1292	1352	461	1654	738	302	1800	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	21.8	16.6	35.2	12.2	12.2	35.7	27.8	26.8	38.0	31.7	30.3
Incr Delay (d2), s/veh	1.6	2.4	0.1	0.5	0.1	0.1	4.3	0.1	0.1	0.7	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	10.3	2.4	2.2	3.1	3.2	2.9	2.0	0.8	0.5	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.7	24.2	16.7	35.6	12.3	12.3	40.0	27.9	26.8	38.7	31.9	30.3
LnGrp LOS	D	C	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1619			957			573			210	
Approach Delay, s/veh		22.5			20.7			33.8			32.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	22.4	13.0	39.2	13.0	17.3	5.3	46.9
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	14.0	38.4	27.0	42.0	11.0	* 42	9.0	60.0
Max Q Clear Time (g_c+I1), s	3.1	6.7	7.5	27.4	8.6	5.7	2.3	10.3
Green Ext Time (p_c), s	0.0	1.1	0.7	6.5	0.1	0.8	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	24.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



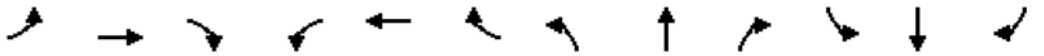
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	26	530	59	21	54	545	505	90	53	1028	33
Future Volume (veh/h)	84	26	530	59	21	54	545	505	90	53	1028	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	0	595	64	23	59	592	549	98	58	1117	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	0	693	63	102	262	561	1662	296	75	1031	33
Arrive On Green	0.04	0.00	0.23	0.04	0.23	0.23	0.30	0.55	0.55	0.04	0.29	0.29
Sat Flow, veh/h	1781	0	3075	1781	454	1164	1853	2998	533	1781	3510	113
Grp Volume(v), veh/h	91	0	595	64	0	82	592	324	323	58	565	588
Grp Sat Flow(s),veh/h/ln	1781	0	1538	1781	0	1618	926	1777	1754	1781	1777	1846
Q Serve(g_s), s	4.0	0.0	20.9	4.0	0.0	4.6	34.0	11.2	11.3	3.6	33.0	33.0
Cycle Q Clear(g_c), s	4.0	0.0	20.9	4.0	0.0	4.6	34.0	11.2	11.3	3.6	33.0	33.0
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.30	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	693	63	0	365	561	985	973	75	522	543
V/C Ratio(X)	1.43	0.00	0.86	1.01	0.00	0.22	1.06	0.33	0.33	0.78	1.08	1.08
Avail Cap(c_a), veh/h	63	0	822	63	0	432	561	985	973	127	522	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	0.0	41.8	54.2	0.0	35.5	39.2	13.6	13.7	53.3	39.7	39.7
Incr Delay (d2), s/veh	264.6	0.0	8.0	115.5	0.0	0.3	53.5	0.2	0.2	15.6	63.6	63.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	8.6	3.8	0.0	1.9	11.5	4.2	4.1	1.9	22.9	23.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	318.8	0.0	49.7	169.6	0.0	35.8	92.6	13.8	13.8	68.8	103.3	102.7
LnGrp LOS	F		D	F		D	F	B	B	E	F	F
Approach Vol, veh/h		686			146			1239			1211	
Approach Delay, s/veh		85.4			94.5			51.5			101.4	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	66.3	8.0	29.3	38.0	37.0	8.0	29.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	59.0	4.0	30.0	34.0	33.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	5.6	13.3	6.0	22.9	36.0	35.0	6.0	6.6
Green Ext Time (p_c), s	0.0	4.0	0.0	1.6	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	78.9
HCM 6th LOS	E

Notes

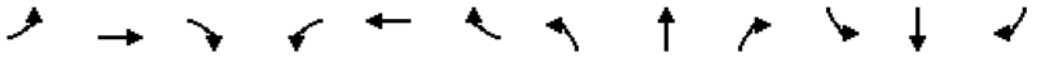
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	41	280	19	27	19	234	379	30	18	815	16
Future Volume (veh/h)	43	41	280	19	27	19	234	379	30	18	815	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	45	304	21	29	21	254	412	33	20	886	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	60	403	34	252	182	313	1439	115	33	981	418
Arrive On Green	0.06	0.29	0.29	0.02	0.25	0.25	0.18	0.43	0.43	0.02	0.28	0.28
Sat Flow, veh/h	1781	204	1376	1781	995	721	1781	3323	265	1781	3554	1515
Grp Volume(v), veh/h	47	0	349	21	0	50	254	219	226	20	886	17
Grp Sat Flow(s),veh/h/ln	1781	0	1580	1781	0	1716	1781	1777	1811	1781	1777	1515
Q Serve(g_s), s	1.7	0.0	13.6	0.8	0.0	1.5	9.3	5.4	5.5	0.8	16.3	0.4
Cycle Q Clear(g_c), s	1.7	0.0	13.6	0.8	0.0	1.5	9.3	5.4	5.5	0.8	16.3	0.4
Prop In Lane	1.00		0.87	1.00		0.42	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	105	0	462	34	0	434	313	770	784	33	981	418
V/C Ratio(X)	0.45	0.00	0.75	0.61	0.00	0.12	0.81	0.29	0.29	0.61	0.90	0.04
Avail Cap(c_a), veh/h	105	0	700	105	0	761	1026	1391	1418	132	997	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	21.7	32.9	0.0	19.5	26.8	12.4	12.4	33.0	23.6	10.2
Incr Delay (d2), s/veh	2.9	0.0	2.5	16.3	0.0	0.1	5.1	0.2	0.2	16.6	11.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	5.1	0.5	0.0	0.6	4.0	1.8	1.9	0.5	7.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.7	0.0	24.3	49.3	0.0	19.6	31.9	12.6	12.6	49.6	34.8	10.3
LnGrp LOS	C		C	D		B	C	B	B	D	C	B
Approach Vol, veh/h		396			71			699			923	
Approach Delay, s/veh		25.4			28.4			19.6			34.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	33.3	5.3	23.8	15.9	22.7	8.0	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	4.0	30.0	39.0	19.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.8	7.5	2.8	15.6	11.3	18.3	3.7	3.5
Green Ext Time (p_c), s	0.0	2.5	0.0	2.1	0.7	0.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	27.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1189	142	125	510	129	73	38	223	37	69	31
Future Volume (veh/h)	125	1189	142	125	510	129	73	38	223	37	69	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	1292	154	136	554	140	79	41	242	40	75	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	367	1211	144	153	727	183	101	53	315	58	248	112
Arrive On Green	0.21	0.38	0.38	0.09	0.26	0.26	0.06	0.23	0.23	0.03	0.20	0.20
Sat Flow, veh/h	1781	3199	380	1781	2812	708	1781	235	1386	1781	1219	552
Grp Volume(v), veh/h	136	715	731	136	349	345	79	0	283	40	0	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1802	1781	1777	1743	1781	0	1621	1781	0	1771
Q Serve(g_s), s	3.8	22.0	22.0	4.4	10.5	10.6	2.5	0.0	9.5	1.3	0.0	3.0
Cycle Q Clear(g_c), s	3.8	22.0	22.0	4.4	10.5	10.6	2.5	0.0	9.5	1.3	0.0	3.0
Prop In Lane	1.00		0.21	1.00		0.41	1.00		0.86	1.00		0.31
Lane Grp Cap(c), veh/h	367	673	682	153	459	450	101	0	368	58	0	361
V/C Ratio(X)	0.37	1.06	1.07	0.89	0.76	0.77	0.79	0.00	0.77	0.69	0.00	0.30
Avail Cap(c_a), veh/h	367	673	682	153	612	600	153	0	893	153	0	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	18.1	18.1	26.3	19.9	19.9	27.1	0.0	21.0	27.8	0.0	19.6
Incr Delay (d2), s/veh	0.6	52.5	55.3	41.8	3.9	4.2	13.8	0.0	3.4	13.3	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	17.1	17.8	3.5	4.2	4.2	1.4	0.0	3.7	0.7	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	70.6	73.4	68.0	23.8	24.1	40.9	0.0	24.4	41.1	0.0	20.1
LnGrp LOS	C	F	F	E	C	C	D		C	D		C
Approach Vol, veh/h		1582			830			362			149	
Approach Delay, s/veh		67.6			31.2			28.0			25.7	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	26.0	7.3	15.8	16.0	19.0	5.9	17.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	22.0	5.0	32.0	7.0	20.0	5.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	24.0	4.5	5.0	5.8	12.6	3.3	11.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	2.4	0.0	1.8

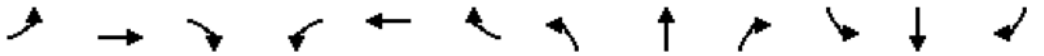
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	50.2
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	440	644	8	17	9
Future Vol, veh/h	13	440	644	8	17	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	478	700	9	18	10
Number of Lanes	0	1	2	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	16.2	14.2	9.6
HCM LOS	C	B	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	3%	0%	0%	65%
Vol Thru, %	97%	100%	96%	0%
Vol Right, %	0%	0%	4%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	453	429	223	26
LT Vol	13	0	0	17
Through Vol	440	429	215	0
RT Vol	0	0	8	9
Lane Flow Rate	492	467	242	28
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.65	0.645	0.333	0.049
Departure Headway (Hd)	4.754	4.975	4.95	6.201
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	758	728	726	575
Service Time	2.78	2.704	2.679	4.268
HCM Lane V/C Ratio	0.649	0.641	0.333	0.049
HCM Control Delay, s/veh	16.2	16.3	10.1	9.6
HCM Lane LOS	C	C	B	A
HCM 95th-tile Q	4.9	4.7	1.5	0.2



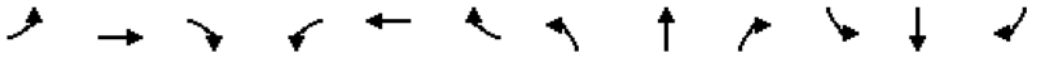
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	302	191	329	643	75	425	291	57	11	75	2
Future Volume (veh/h)	2	302	191	329	643	75	425	291	57	11	75	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	328	208	358	699	82	462	316	62	12	82	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	685	538	725	1064	125	593	1198	534	48	685	306
Arrive On Green	0.00	0.19	0.19	0.14	0.33	0.33	0.17	0.34	0.34	0.03	0.19	0.19
Sat Flow, veh/h	1781	3554	2790	5023	3204	376	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	2	328	208	358	387	394	462	316	62	12	82	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1803	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.1	5.1	4.0	4.1	11.6	11.6	8.0	4.0	1.7	0.4	1.2	0.1
Cycle Q Clear(g_c), s	0.1	5.1	4.0	4.1	11.6	11.6	8.0	4.0	1.7	0.4	1.2	0.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	9	685	538	725	590	599	593	1198	534	48	685	306
V/C Ratio(X)	0.23	0.48	0.39	0.49	0.66	0.66	0.78	0.26	0.12	0.25	0.12	0.01
Avail Cap(c_a), veh/h	257	2397	1882	1452	1456	1477	1110	2820	1258	343	2386	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	22.3	21.9	24.5	17.8	17.8	24.7	15.0	14.2	29.7	20.8	20.3
Incr Delay (d2), s/veh	4.8	0.2	0.2	0.2	0.5	0.5	0.9	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	1.3	1.5	4.4	4.4	3.1	1.5	0.6	0.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	22.5	22.1	24.7	18.2	18.2	25.5	15.1	14.3	30.7	20.8	20.3
LnGrp LOS	D	C	C	C	B	B	C	B	B	C	C	C
Approach Vol, veh/h		538			1139			840			96	
Approach Delay, s/veh		22.4			20.3			20.8			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	26.3	13.0	17.3	14.7	17.3	4.3	26.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	12.0	49.4	18.0	42.0	20.0	* 42	9.0	51.0
Max Q Clear Time (g_c+I1), s	2.4	6.0	6.1	7.1	10.0	3.2	2.1	13.6
Green Ext Time (p_c), s	0.0	1.5	0.6	2.0	0.7	0.3	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	20.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



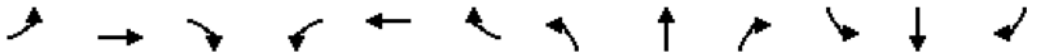
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	6	429	83	18	18	580	781	35	20	674	54
Future Volume (veh/h)	22	6	429	83	18	18	580	781	35	20	674	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	0	471	90	20	20	630	849	38	22	733	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	0	676	103	217	217	791	1629	73	36	812	65
Arrive On Green	0.02	0.00	0.22	0.06	0.26	0.26	0.25	0.47	0.47	0.02	0.24	0.24
Sat Flow, veh/h	1781	0	3074	1781	845	845	3206	3458	155	1781	3323	267
Grp Volume(v), veh/h	24	0	471	90	0	40	630	436	451	22	392	400
Grp Sat Flow(s),veh/h/ln	1781	0	1537	1781	0	1690	1603	1777	1836	1781	1777	1813
Q Serve(g_s), s	0.9	0.0	9.8	3.5	0.0	1.2	12.7	11.9	11.9	0.8	14.8	14.8
Cycle Q Clear(g_c), s	0.9	0.0	9.8	3.5	0.0	1.2	12.7	11.9	11.9	0.8	14.8	14.8
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.08	1.00		0.15
Lane Grp Cap(c), veh/h	38	0	676	103	0	433	791	837	865	36	434	443
V/C Ratio(X)	0.63	0.00	0.70	0.87	0.00	0.09	0.80	0.52	0.52	0.62	0.90	0.90
Avail Cap(c_a), veh/h	103	0	1333	103	0	733	2131	1489	1539	129	436	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	24.9	32.4	0.0	19.6	24.4	12.8	12.8	33.7	25.3	25.3
Incr Delay (d2), s/veh	15.9	0.0	1.3	51.2	0.0	0.1	1.9	0.5	0.5	16.3	21.5	21.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.5	2.9	0.0	0.5	4.5	3.9	4.1	0.5	8.1	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	0.0	26.2	83.5	0.0	19.7	26.3	13.3	13.3	49.9	46.9	46.7
LnGrp LOS	D		C	F		B	C	B	B	D	D	D
Approach Vol, veh/h		495			130			1517			814	
Approach Delay, s/veh		27.3			63.9			18.7			46.9	
Approach LOS		C			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.6	8.0	19.2	21.1	20.9	5.5	21.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	58.0	4.0	30.0	46.0	17.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.8	13.9	5.5	11.8	14.7	16.8	2.9	3.2
Green Ext Time (p_c), s	0.0	5.9	0.0	1.9	2.3	0.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	29.9
HCM 6th LOS	C

Notes

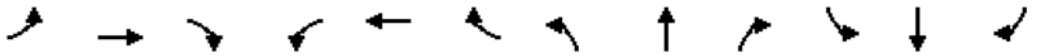
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	13	158	28	14	6	294	501	12	7	562	26
Future Volume (veh/h)	17	13	158	28	14	6	294	501	12	7	562	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	14	172	30	15	7	320	545	13	8	611	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	22	272	48	237	111	399	1649	39	15	888	377
Arrive On Green	0.02	0.19	0.19	0.03	0.20	0.20	0.22	0.47	0.47	0.01	0.25	0.25
Sat Flow, veh/h	1781	117	1437	1781	1192	556	1781	3544	84	1781	3554	1511
Grp Volume(v), veh/h	18	0	186	30	0	22	320	273	285	8	611	28
Grp Sat Flow(s),veh/h/ln	1781	0	1554	1781	0	1748	1781	1777	1852	1781	1777	1511
Q Serve(g_s), s	0.5	0.0	5.7	0.9	0.0	0.5	8.8	5.0	5.0	0.2	8.1	0.6
Cycle Q Clear(g_c), s	0.5	0.0	5.7	0.9	0.0	0.5	8.8	5.0	5.0	0.2	8.1	0.6
Prop In Lane	1.00		0.92	1.00		0.32	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	31	0	295	48	0	348	399	827	862	15	888	377
V/C Ratio(X)	0.57	0.00	0.63	0.62	0.00	0.06	0.80	0.33	0.33	0.53	0.69	0.07
Avail Cap(c_a), veh/h	138	0	902	138	0	1015	1344	1856	1934	138	1306	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	19.3	24.9	0.0	16.8	19.0	8.7	8.7	25.5	17.6	8.8
Incr Delay (d2), s/veh	15.4	0.0	2.2	12.4	0.0	0.1	3.8	0.2	0.2	26.5	1.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.1	0.5	0.0	0.2	3.4	1.4	1.4	0.2	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	0.0	21.5	37.2	0.0	16.9	22.8	9.0	9.0	52.1	18.5	8.9
LnGrp LOS	D		C	D		B	C	A	A	D	B	A
Approach Vol, veh/h		204			52			878			647	
Approach Delay, s/veh		23.2			28.6			14.0			18.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	28.1	5.4	13.8	15.6	16.9	4.9	14.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	54.0	4.0	30.0	39.0	19.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.2	7.0	2.9	7.7	10.8	10.1	2.5	2.5
Green Ext Time (p_c), s	0.0	3.2	0.0	1.2	0.9	2.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	381	28	137	894	27	192	9	25	24	87	102
Future Volume (veh/h)	10	381	28	137	894	27	192	9	25	24	87	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	414	30	149	972	29	209	10	27	26	95	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1062	77	156	1383	41	264	130	352	42	131	153
Arrive On Green	0.01	0.32	0.32	0.09	0.39	0.39	0.15	0.29	0.29	0.02	0.17	0.17
Sat Flow, veh/h	1781	3361	243	1781	3523	105	1781	447	1206	1781	786	919
Grp Volume(v), veh/h	11	218	226	149	490	511	209	0	37	26	0	206
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1851	1781	0	1653	1781	0	1705
Q Serve(g_s), s	0.3	5.5	5.5	4.7	13.2	13.2	6.4	0.0	0.9	0.8	0.0	6.5
Cycle Q Clear(g_c), s	0.3	5.5	5.5	4.7	13.2	13.2	6.4	0.0	0.9	0.8	0.0	6.5
Prop In Lane	1.00		0.13	1.00		0.06	1.00		0.73	1.00		0.54
Lane Grp Cap(c), veh/h	20	562	577	156	698	727	264	0	482	42	0	285
V/C Ratio(X)	0.55	0.39	0.39	0.95	0.70	0.70	0.79	0.00	0.08	0.62	0.00	0.72
Avail Cap(c_a), veh/h	125	562	577	156	698	727	469	0	1045	156	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	15.2	15.2	25.9	14.5	14.5	23.4	0.0	14.6	27.5	0.0	22.5
Incr Delay (d2), s/veh	21.5	2.0	2.0	57.8	5.8	5.6	5.3	0.0	0.1	13.7	0.0	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.2	4.3	5.4	5.5	2.9	0.0	0.3	0.5	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	17.2	17.2	83.7	20.4	20.1	28.7	0.0	14.7	41.3	0.0	26.0
LnGrp LOS	D	B	B	F	C	C	C		B	D		C
Approach Vol, veh/h		455			1150			246			232	
Approach Delay, s/veh		18.0			28.5			26.6			27.7	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.0	12.4	13.5	4.6	26.4	5.3	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	18.0	15.0	26.0	4.0	19.0	5.0	36.0
Max Q Clear Time (g_c+I1), s	6.7	7.5	8.4	8.5	2.3	15.2	2.8	2.9
Green Ext Time (p_c), s	0.0	1.8	0.3	1.1	0.0	2.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	25.9
HCM 6th LOS	C

Notes

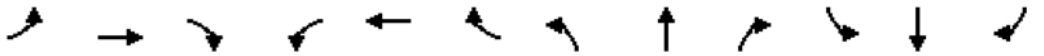
User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	30.7
Intersection LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	672	461	18	12	17
Future Vol, veh/h	15	672	461	18	12	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	730	501	20	13	18
Number of Lanes	0	1	2	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	44.9	11.6	9.7
HCM LOS	E	B	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	0%	0%	41%
Vol Thru, %	98%	100%	90%	0%
Vol Right, %	0%	0%	10%	59%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	687	307	172	29
LT Vol	15	0	0	12
Through Vol	672	307	154	0
RT Vol	0	0	18	17
Lane Flow Rate	747	334	187	32
Geometry Grp	4a	5	5	2
Degree of Util (X)	0.962	0.479	0.264	0.055
Departure Headway (Hd)	4.638	5.16	5.086	6.239
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	784	698	705	569
Service Time	2.668	2.899	2.825	4.329
HCM Lane V/C Ratio	0.953	0.479	0.265	0.056
HCM Control Delay, s/veh	44.9	12.6	9.7	9.7
HCM Lane LOS	E	B	A	A
HCM 95th-tile Q	14.9	2.6	1.1	0.2



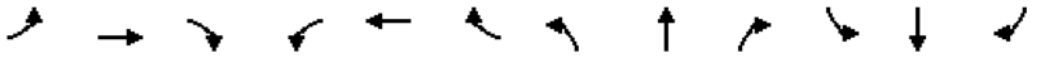
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1122	361	319	552	9	262	221	44	23	164	6
Future Volume (veh/h)	6	1122	361	319	552	9	262	221	44	23	164	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	1220	392	347	600	10	285	240	48	25	178	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	1461	1147	548	1803	30	376	735	328	85	517	231
Arrive On Green	0.02	0.41	0.41	0.11	0.50	0.50	0.11	0.21	0.21	0.05	0.15	0.15
Sat Flow, veh/h	1781	3554	2790	5023	3577	60	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	7	1220	392	347	298	312	285	240	48	25	178	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1674	1777	1860	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	25.4	7.9	5.5	8.2	8.3	6.6	4.7	2.0	1.1	3.7	0.3
Cycle Q Clear(g_c), s	0.3	25.4	7.9	5.5	8.2	8.3	6.6	4.7	2.0	1.1	3.7	0.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	1461	1147	548	896	937	376	735	328	85	517	231
V/C Ratio(X)	0.24	0.83	0.34	0.63	0.33	0.33	0.76	0.33	0.15	0.29	0.34	0.03
Avail Cap(c_a), veh/h	194	1809	1420	1644	1292	1352	461	1654	738	302	1800	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	21.8	16.6	35.2	12.2	12.2	35.7	27.8	26.8	38.0	31.7	30.3
Incr Delay (d2), s/veh	1.6	2.4	0.1	0.5	0.1	0.1	4.3	0.1	0.1	0.7	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	10.3	2.4	2.2	3.1	3.2	2.9	2.0	0.8	0.5	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.7	24.2	16.7	35.6	12.3	12.3	40.0	27.9	26.8	38.7	31.9	30.3
LnGrp LOS	D	C	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1619			957			573			210	
Approach Delay, s/veh		22.5			20.7			33.8			32.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	22.4	13.0	39.2	13.0	17.3	5.3	46.9
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	14.0	38.4	27.0	42.0	11.0	* 42	9.0	60.0
Max Q Clear Time (g_c+I1), s	3.1	6.7	7.5	27.4	8.6	5.7	2.3	10.3
Green Ext Time (p_c), s	0.0	1.1	0.7	6.5	0.1	0.8	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	24.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



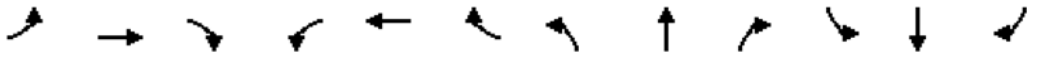
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	26	530	59	21	54	545	505	90	53	1028	33
Future Volume (veh/h)	84	26	530	59	21	54	545	505	90	53	1028	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	0	595	64	23	59	592	549	98	58	1117	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	0	690	82	99	253	1014	1639	291	75	956	31
Arrive On Green	0.05	0.00	0.22	0.05	0.22	0.22	0.32	0.55	0.55	0.04	0.27	0.27
Sat Flow, veh/h	1781	0	3075	1781	454	1164	3206	2997	533	1781	3510	113
Grp Volume(v), veh/h	91	0	595	64	0	82	592	325	322	58	565	588
Grp Sat Flow(s),veh/h/ln	1781	0	1538	1781	0	1618	1603	1777	1753	1781	1777	1846
Q Serve(g_s), s	5.8	0.0	21.2	4.0	0.0	4.8	17.6	11.5	11.6	3.7	31.0	31.0
Cycle Q Clear(g_c), s	5.8	0.0	21.2	4.0	0.0	4.8	17.6	11.5	11.6	3.7	31.0	31.0
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.30	1.00		0.06
Lane Grp Cap(c), veh/h	94	0	690	82	0	352	1014	972	959	75	484	503
V/C Ratio(X)	0.97	0.00	0.86	0.78	0.00	0.23	0.58	0.33	0.34	0.78	1.17	1.17
Avail Cap(c_a), veh/h	94	0	811	94	0	427	1014	972	959	110	484	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	0.0	42.4	53.7	0.0	36.7	32.6	14.3	14.3	54.0	41.4	41.4
Incr Delay (d2), s/veh	82.4	0.0	8.4	29.8	0.0	0.3	2.5	0.2	0.2	18.5	95.9	95.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	8.8	2.5	0.0	1.9	6.9	4.3	4.3	2.0	25.8	26.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	136.2	0.0	50.8	83.5	0.0	37.0	35.1	14.5	14.5	72.5	137.3	136.8
LnGrp LOS	F		D	F		D	D	B	B	E	F	F
Approach Vol, veh/h		686			146			1239			1211	
Approach Delay, s/veh		62.1			57.4			24.3			133.9	
Approach LOS		E			E			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	66.2	9.2	29.5	40.0	35.0	10.0	28.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	60.0	6.0	30.0	36.0	31.0	6.0	30.0
Max Q Clear Time (g_c+I1), s	5.7	13.6	6.0	23.2	19.6	33.0	7.8	6.8
Green Ext Time (p_c), s	0.0	4.0	0.0	1.6	1.9	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	74.1
HCM 6th LOS	E

Notes

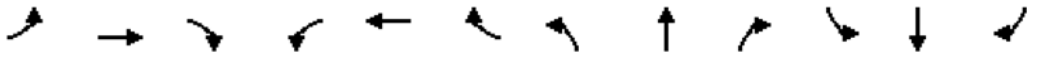
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	41	280	19	27	19	234	379	30	18	815	16
Future Volume (veh/h)	43	41	280	19	27	19	234	379	30	18	815	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	45	304	21	29	21	254	412	33	20	886	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	60	403	34	252	182	313	1439	115	33	981	418
Arrive On Green	0.06	0.29	0.29	0.02	0.25	0.25	0.18	0.43	0.43	0.02	0.28	0.28
Sat Flow, veh/h	1781	204	1376	1781	995	721	1781	3323	265	1781	3554	1515
Grp Volume(v), veh/h	47	0	349	21	0	50	254	219	226	20	886	17
Grp Sat Flow(s),veh/h/ln	1781	0	1580	1781	0	1716	1781	1777	1811	1781	1777	1515
Q Serve(g_s), s	1.7	0.0	13.6	0.8	0.0	1.5	9.3	5.4	5.5	0.8	16.3	0.4
Cycle Q Clear(g_c), s	1.7	0.0	13.6	0.8	0.0	1.5	9.3	5.4	5.5	0.8	16.3	0.4
Prop In Lane	1.00		0.87	1.00		0.42	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	105	0	462	34	0	434	313	770	784	33	981	418
V/C Ratio(X)	0.45	0.00	0.75	0.61	0.00	0.12	0.81	0.29	0.29	0.61	0.90	0.04
Avail Cap(c_a), veh/h	105	0	700	105	0	761	1026	1391	1418	132	997	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	21.7	32.9	0.0	19.5	26.8	12.4	12.4	33.0	23.6	10.2
Incr Delay (d2), s/veh	2.9	0.0	2.5	16.3	0.0	0.1	5.1	0.2	0.2	16.6	11.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	5.1	0.5	0.0	0.6	4.0	1.8	1.9	0.5	7.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.7	0.0	24.3	49.3	0.0	19.6	31.9	12.6	12.6	49.6	34.8	10.3
LnGrp LOS	C		C	D		B	C	B	B	D	C	B
Approach Vol, veh/h		396			71			699			923	
Approach Delay, s/veh		25.4			28.4			19.6			34.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	33.3	5.3	23.8	15.9	22.7	8.0	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	4.0	30.0	39.0	19.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.8	7.5	2.8	15.6	11.3	18.3	3.7	3.5
Green Ext Time (p_c), s	0.0	2.5	0.0	2.1	0.7	0.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	27.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1189	142	125	510	129	73	38	223	37	69	31
Future Volume (veh/h)	125	1189	142	125	510	129	73	38	223	37	69	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	1292	154	136	554	140	79	41	242	40	75	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	367	1211	144	153	727	183	101	53	315	58	248	112
Arrive On Green	0.21	0.38	0.38	0.09	0.26	0.26	0.06	0.23	0.23	0.03	0.20	0.20
Sat Flow, veh/h	1781	3199	380	1781	2812	708	1781	235	1386	1781	1219	552
Grp Volume(v), veh/h	136	715	731	136	349	345	79	0	283	40	0	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1802	1781	1777	1743	1781	0	1621	1781	0	1771
Q Serve(g_s), s	3.8	22.0	22.0	4.4	10.5	10.6	2.5	0.0	9.5	1.3	0.0	3.0
Cycle Q Clear(g_c), s	3.8	22.0	22.0	4.4	10.5	10.6	2.5	0.0	9.5	1.3	0.0	3.0
Prop In Lane	1.00		0.21	1.00		0.41	1.00		0.86	1.00		0.31
Lane Grp Cap(c), veh/h	367	673	682	153	459	450	101	0	368	58	0	361
V/C Ratio(X)	0.37	1.06	1.07	0.89	0.76	0.77	0.79	0.00	0.77	0.69	0.00	0.30
Avail Cap(c_a), veh/h	367	673	682	153	612	600	153	0	893	153	0	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	18.1	18.1	26.3	19.9	19.9	27.1	0.0	21.0	27.8	0.0	19.6
Incr Delay (d2), s/veh	0.6	52.5	55.3	41.8	3.9	4.2	13.8	0.0	3.4	13.3	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	17.1	17.8	3.5	4.2	4.2	1.4	0.0	3.7	0.7	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	70.6	73.4	68.0	23.8	24.1	40.9	0.0	24.4	41.1	0.0	20.1
LnGrp LOS	C	F	F	E	C	C	D		C	D		C
Approach Vol, veh/h		1582			830			362			149	
Approach Delay, s/veh		67.6			31.2			28.0			25.7	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	26.0	7.3	15.8	16.0	19.0	5.9	17.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	22.0	5.0	32.0	7.0	20.0	5.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	24.0	4.5	5.0	5.8	12.6	3.3	11.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	2.4	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	50.2
HCM 6th LOS	D

Appendix D

Simtraffic Queue Analysis Worksheets

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	110	154	163	30
Average Queue (ft)	52	79	88	15
95th Queue (ft)	84	127	138	36
Link Distance (ft)		196	196	
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	14	105	121	76	91	22	178	227	194	199	169	166
Average Queue (ft)	1	60	60	34	38	3	51	127	114	104	103	95
95th Queue (ft)	7	96	106	61	75	15	146	195	173	173	158	156
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	111	99	31	40	50	91	19
Average Queue (ft)	48	48	5	9	6	39	1
95th Queue (ft)	94	93	21	32	31	78	10
Link Distance (ft)	328	328			568	568	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			275	170			170
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	118	75	133	60	219	241	264	181	110	251	278
Average Queue (ft)	52	35	55	17	96	126	124	54	20	117	151
95th Queue (ft)	92	72	104	51	168	196	235	127	67	206	241
Link Distance (ft)	196		352	352		434	434	434		678	678
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		50			225				100		
Storage Blk Time (%)	8	1			0	0				13	
Queuing Penalty (veh)	10	1			0	0				3	

Intersection: 19: Isabel Ave & A Street

Movement	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	TR	L	TR	L	T	TR	L	T	T	R
Maximum Queue (ft)	80	62	40	203	169	114	33	164	198	86
Average Queue (ft)	37	21	11	95	48	23	5	69	92	12
95th Queue (ft)	66	53	36	169	122	72	24	138	173	56
Link Distance (ft)			475		678	678	170	170	170	
Upstream Blk Time (%)								0	1	0
Queuing Penalty (veh)								0	2	0
Storage Bay Dist (ft)		200		200						150
Storage Blk Time (%)				0	0				2	0
Queuing Penalty (veh)				1	0				0	0

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	35	102	130	150	204	206	129	22	54	139
Average Queue (ft)	8	42	60	63	93	102	59	3	17	66
95th Queue (ft)	26	81	113	120	167	170	103	16	44	120
Link Distance (ft)		616	616		862	862			215	215
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)					0		1			
Queuing Penalty (veh)					0		0			

Zone Summary

Zone wide Queuing Penalty: 17

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	152	117	122	44
Average Queue (ft)	96	63	73	19
95th Queue (ft)	153	100	109	41
Link Distance (ft)		196	196	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	175	494	514	323	237	43	311	343	388	385	200	224
Average Queue (ft)	13	293	305	121	116	4	138	212	186	140	100	111
95th Queue (ft)	87	480	498	366	228	23	362	407	563	441	170	188
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)									12	0		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)		6	6	0	0		0	15	0			0
Queuing Penalty (veh)		0	20	1	0		1	41	0			0

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	180	126	22	82	122	235	28
Average Queue (ft)	63	63	4	23	16	112	5
95th Queue (ft)	143	113	16	59	83	208	21
Link Distance (ft)	328	328			568	568	
Upstream Blk Time (%)	0						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)			275	170			170
Storage Blk Time (%)	0				0	4	
Queuing Penalty (veh)	1				0	0	

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	75	202	76	99	91	162	173	185	150	127	341	403
Average Queue (ft)	45	127	66	41	37	77	103	77	54	41	183	245
95th Queue (ft)	83	219	92	83	72	132	157	148	118	88	300	364
Link Distance (ft)		196		210	210		434	434	434	675	675	675
Upstream Blk Time (%)		3										
Queuing Penalty (veh)		16										
Storage Bay Dist (ft)	50		50			225						
Storage Blk Time (%)	17	30	9									
Queuing Penalty (veh)	67	76	24									

Intersection: 19: Isabel Ave & A Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	B28	B28
Directions Served	L	TR	L	TR	L	T	TR	L	T	T	T	T
Maximum Queue (ft)	64	194	50	71	174	141	92	56	240	266	325	352
Average Queue (ft)	23	79	17	25	83	50	30	13	107	227	85	185
95th Queue (ft)	53	144	43	57	151	112	76	38	228	292	275	422
Link Distance (ft)				309		675	675	170	170	170	328	328
Upstream Blk Time (%)									5	46	0	9
Queuing Penalty (veh)									14	124	0	25
Storage Bay Dist (ft)	200		200		200							
Storage Blk Time (%)		0			0					48		
Queuing Penalty (veh)		0			0					0		

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	240	364	380	119	165	180	121	122	57	96
Average Queue (ft)	66	167	193	53	77	95	17	62	22	45
95th Queue (ft)	160	306	339	103	140	157	65	108	49	81
Link Distance (ft)		616	616		862	862			215	215
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)		2						2		
Queuing Penalty (veh)		3						0		

Zone Summary

Zone wide Queuing Penalty: 416

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	R	LR
Maximum Queue (ft)	144	206	40	22
Average Queue (ft)	86	174	8	10
95th Queue (ft)	136	205	31	24
Link Distance (ft)		196	196	
Upstream Blk Time (%)		1		
Queuing Penalty (veh)		2		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	14	132	142	140	138	366	416	425	682	644	240	241
Average Queue (ft)	1	76	80	46	59	85	216	268	327	229	125	121
95th Queue (ft)	7	123	134	100	113	307	490	493	768	606	209	209
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)									27	0		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)						0	5	31	3		0	0
Queuing Penalty (veh)						0	17	100	9		0	0

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	190	157	66	36	43	157	14
Average Queue (ft)	65	65	16	9	3	56	1
95th Queue (ft)	135	124	42	30	23	127	9
Link Distance (ft)	328	328			568	568	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			275	170			170
Storage Blk Time (%)						1	
Queuing Penalty (veh)						0	

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	69	198	75	240	58	250	468	492	377	122	716	706
Average Queue (ft)	21	97	63	114	21	249	446	385	87	25	680	686
95th Queue (ft)	55	185	88	253	51	253	484	592	234	91	729	704
Link Distance (ft)		196		352	352		434	434	434		678	678
Upstream Blk Time (%)		1		1			32	19	0		25	41
Queuing Penalty (veh)		3		0			151	88	0		96	154
Storage Bay Dist (ft)	50		50			225				100		
Storage Blk Time (%)	6	19	4			73	64			0	83	
Queuing Penalty (veh)	25	45	10			210	185			1	16	

Intersection: 19: Isabel Ave & A Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB	B28
Directions Served	L	TR	L	TR	L	T	TR	L	T	T	R	T
Maximum Queue (ft)	81	256	103	48	224	365	182	42	272	269	170	89
Average Queue (ft)	17	104	35	10	131	107	56	8	218	226	70	3
95th Queue (ft)	57	194	86	35	241	266	135	30	305	302	202	50
Link Distance (ft)				475		678	678	170	170	170		328
Upstream Blk Time (%)									68	79	1	
Queuing Penalty (veh)									135	158	0	
Storage Bay Dist (ft)	200		200		200						150	
Storage Blk Time (%)		2			5	0				81	0	
Queuing Penalty (veh)		0			12	1				21	1	

Intersection: 19: Isabel Ave & A Street

Movement	B28	B28
Directions Served	T	T
Maximum Queue (ft)	354	364
Average Queue (ft)	223	242
95th Queue (ft)	460	463
Link Distance (ft)	328	328
Upstream Blk Time (%)	19	31
Queuing Penalty (veh)	39	62
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	32	117	134	166	202	208	182	65	54	158
Average Queue (ft)	7	50	72	71	99	108	81	12	16	69
95th Queue (ft)	24	92	125	152	178	187	143	37	41	125
Link Distance (ft)		616	616		862	862			215	215
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)				0			5	0		
Queuing Penalty (veh)				0			2	0		

Zone Summary

Zone wide Queuing Penalty: 1544

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	R	LR
Maximum Queue (ft)	183	206	41	31
Average Queue (ft)	147	166	12	12
95th Queue (ft)	184	197	37	28
Link Distance (ft)		196	196	
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		1		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	94	850	850	375	351	219	417	425	706	685	213	229
Average Queue (ft)	7	545	570	314	257	20	329	406	603	331	109	118
95th Queue (ft)	60	910	940	508	414	118	547	490	925	809	210	223
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)		2	3						74	0		
Queuing Penalty (veh)		13	26						0	0		
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)		28	27	14	17	0	3	79	1		0	1
Queuing Penalty (veh)		2	100	78	96	0	7	219	2		0	1

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	B28	SB	SB	SB	SB
Directions Served	T	T	R	T	L	T	T	R
Maximum Queue (ft)	239	112	49	5	90	201	355	92
Average Queue (ft)	58	54	13	0	28	41	182	11
95th Queue (ft)	160	102	35	3	90	210	430	70
Link Distance (ft)	328	328		170		568	568	
Upstream Blk Time (%)	0						7	
Queuing Penalty (veh)	1						0	
Storage Bay Dist (ft)			275		170			170
Storage Blk Time (%)						7	24	0
Queuing Penalty (veh)						2	2	0

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	75	209	75	158	107	250	463	496	422	225	508	586
Average Queue (ft)	61	194	69	60	42	248	449	281	98	52	320	393
95th Queue (ft)	88	223	90	135	84	256	462	588	312	138	490	562
Link Distance (ft)		196		210	210		434	434	434	675	675	675
Upstream Blk Time (%)		24		1			58	16	0			0
Queuing Penalty (veh)		151		0			221	61	0			1
Storage Bay Dist (ft)	50		50			225						
Storage Blk Time (%)	44	35	14			75	74					
Queuing Penalty (veh)	248	123	54			203	201					

Intersection: 19: Isabel Ave & A Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB	B28
Directions Served	L	TR	L	TR	L	T	TR	L	T	T	R	T
Maximum Queue (ft)	119	280	47	75	212	217	88	44	237	270	170	344
Average Queue (ft)	31	102	15	27	95	47	31	14	117	244	37	170
95th Queue (ft)	75	203	41	57	182	151	73	40	233	258	144	358
Link Distance (ft)				309		675	675	170	170	170		328
Upstream Blk Time (%)									8	78	0	1
Queuing Penalty (veh)									24	220	0	4
Storage Bay Dist (ft)	200		200		200						150	
Storage Blk Time (%)		1			1	0				77	0	
Queuing Penalty (veh)		1			3	0				13	0	

Intersection: 19: Isabel Ave & A Street

Movement	B28
Directions Served	T
Maximum Queue (ft)	360
Average Queue (ft)	338
95th Queue (ft)	373
Link Distance (ft)	328
Upstream Blk Time (%)	38
Queuing Penalty (veh)	108
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	315	467	464	178	192	197	186	125	67	109
Average Queue (ft)	105	232	256	66	73	98	56	82	26	42
95th Queue (ft)	275	435	452	142	151	177	135	134	54	79
Link Distance (ft)		616	616		862	862			215	215
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)		13					0	6		
Queuing Penalty (veh)		16					1	5		

Zone Summary

Zone wide Queuing Penalty: 2205

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	144	164	180	40
Average Queue (ft)	93	98	108	16
95th Queue (ft)	145	151	164	38
Link Distance (ft)		196	196	
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	14	134	138	69	96	26	216	252	193	205	188	183
Average Queue (ft)	1	70	74	33	42	2	77	150	113	106	111	104
95th Queue (ft)	8	113	120	60	75	14	195	228	180	181	172	166
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	104	110	53	48	38	94	18
Average Queue (ft)	52	55	16	9	2	39	1
95th Queue (ft)	96	103	42	33	17	76	10
Link Distance (ft)	328	328			568	568	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			275	170			170
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	69	199	75	185	56	234	301	327	204	124	443	489
Average Queue (ft)	17	111	64	79	18	127	154	163	76	27	227	270
95th Queue (ft)	49	198	91	157	46	209	241	285	164	91	403	448
Link Distance (ft)		196		352	352		434	434	434		678	678
Upstream Blk Time (%)		2					0					
Queuing Penalty (veh)		8					0					
Storage Bay Dist (ft)	50		50			225				100		
Storage Blk Time (%)	3	25	5			0	1			0	44	
Queuing Penalty (veh)	11	59	13			0	2			0	9	

Intersection: 19: Isabel Ave & A Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB	B28
Directions Served	L	TR	L	TR	L	T	TR	L	T	T	R	T
Maximum Queue (ft)	47	117	80	48	223	287	167	33	194	233	146	4
Average Queue (ft)	16	51	25	11	125	68	39	5	94	126	24	0
95th Queue (ft)	43	87	59	39	215	192	111	24	175	215	95	3
Link Distance (ft)				475		678	678	170	170	170		328
Upstream Blk Time (%)									1	4	0	
Queuing Penalty (veh)									2	8	0	
Storage Bay Dist (ft)	200		200		200						150	
Storage Blk Time (%)					3	0				7	0	
Queuing Penalty (veh)					8	0				2	0	

Intersection: 19: Isabel Ave & A Street

Movement	B28
Directions Served	T
Maximum Queue (ft)	28
Average Queue (ft)	1
95th Queue (ft)	14
Link Distance (ft)	328
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	36	100	151	155	222	225	176	64	64	143
Average Queue (ft)	7	51	68	72	103	117	73	15	21	70
95th Queue (ft)	27	87	117	133	189	199	130	46	53	118
Link Distance (ft)		616	616		862	862			212	212
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)					0		3			
Queuing Penalty (veh)					0		1			

Zone Summary

Zone wide Queuing Penalty: 124

Intersection: 1: Gateway Avenue & Main Street

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	183	184	168	51
Average Queue (ft)	148	83	90	17
95th Queue (ft)	176	137	139	41
Link Distance (ft)		196	196	
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Isabel & Portola

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	R	L	L	L	T	TR	L	L
Maximum Queue (ft)	162	894	892	375	355	77	417	425	710	682	241	257
Average Queue (ft)	8	599	726	326	283	5	286	379	583	311	149	162
95th Queue (ft)	81	1081	1051	508	432	41	560	557	947	804	285	303
Link Distance (ft)		862	862						670	670		
Upstream Blk Time (%)		2	21						73	0		
Queuing Penalty (veh)		15	152						0	0		
Storage Bay Dist (ft)	350			350	350	400	400	400			275	275
Storage Blk Time (%)		33	30	34	37		1	77	3		2	10
Queuing Penalty (veh)		2	109	193	209		3	213	10		2	11

Intersection: 11: Isabel & Portola

Movement	NB	NB	NB	B28	B28	SB	SB	SB	SB
Directions Served	T	T	R	T	T	L	T	T	R
Maximum Queue (ft)	240	207	51	75	24	73	231	428	160
Average Queue (ft)	108	72	13	12	1	24	23	174	12
95th Queue (ft)	310	161	35	75	17	57	138	338	82
Link Distance (ft)	328	328		170	170		568	568	
Upstream Blk Time (%)	8	0		0					
Queuing Penalty (veh)	17	0		0					
Storage Bay Dist (ft)			275			170			170
Storage Blk Time (%)	1	0					0	23	0
Queuing Penalty (veh)	3	0					0	1	0

Intersection: 14: Isabel & Gateway Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	L	T	TR	L	T	TR
Maximum Queue (ft)	75	211	75	137	114	241	288	239	160	246	631	657
Average Queue (ft)	56	191	69	55	41	135	163	105	63	53	349	417
95th Queue (ft)	90	234	87	118	84	215	243	196	132	153	596	652
Link Distance (ft)		196		210	210		434	434	434	675	675	675
Upstream Blk Time (%)		18		0							0	0
Queuing Penalty (veh)		126		0							0	1
Storage Bay Dist (ft)	50		50			225						
Storage Blk Time (%)	37	30	15			0	1					
Queuing Penalty (veh)	205	105	57			1	2					

Intersection: 19: Isabel Ave & A Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB	B28
Directions Served	L	TR	L	TR	L	T	TR	L	T	T	R	T
Maximum Queue (ft)	86	199	60	80	211	168	125	44	225	278	170	336
Average Queue (ft)	29	96	17	27	109	56	42	13	105	236	30	155
95th Queue (ft)	67	165	48	60	186	140	98	37	230	287	130	348
Link Distance (ft)				309		675	675	170	170	170		328
Upstream Blk Time (%)									7	72	0	0
Queuing Penalty (veh)									20	201	0	1
Storage Bay Dist (ft)	200		200		200						150	
Storage Blk Time (%)		0			1	0				71	0	
Queuing Penalty (veh)		0			1	0				12	0	

Intersection: 19: Isabel Ave & A Street

Movement	B28
Directions Served	T
Maximum Queue (ft)	353
Average Queue (ft)	301
95th Queue (ft)	475
Link Distance (ft)	328
Upstream Blk Time (%)	36
Queuing Penalty (veh)	100
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 22: Main Street/Montage Dr & Portola

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	314	561	550	153	202	233	212	125	107	110
Average Queue (ft)	142	361	376	62	75	101	82	84	37	43
95th Queue (ft)	361	668	670	131	163	195	200	138	122	86
Link Distance (ft)		616	616		862	862			215	215
Upstream Blk Time (%)		14	15						5	
Queuing Penalty (veh)		65	69						0	
Storage Bay Dist (ft)	290			295				100		
Storage Blk Time (%)	0	42					0	20		
Queuing Penalty (veh)	0	54					1	15		

Zone Summary

Zone wide Queuing Penalty: 1979

Appendix E-2

Isabel Crossing Project – VMT Assessment

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Technical Memorandum

December 21, 2023 Project# 29502

To: Aileen Mahoney,
Rincon Environmental Engineers
449 25th Street, Suite 303
Oakland, CA 94612

From: Damian Stefanakis, Kittelson & Associates, Inc.

CC:

RE: **Livermore Isabel Transit Village Modified Project – VMT Analysis**

INTRODUCTION

This technical memorandum summarizes the VMT assessment prepared by Kittelson for the Livermore Isabel Transit Village Modified Project Analysis. The VMT Analysis was prepared to determine if the proposed modifications to the Isabel Neighborhood Specific Plan (INSP) by the Livermore Transit Village project (Modified Project) incur any additional VMT impacts compared to the Environmental Impact Report (EIR) certified on May 14, 2018, and Supplemental Environmental Impact Report (SEIR) dated September 30, 2020, for the INSP.

The developer for the Modified Project proposes to reduce the development size and intensity of the INSP. This review has been prepared to indicate whether the assumptions, methodologies and conclusions of the Transportation Analysis are adequate and in accordance with the standards set in the City of Livermore General Plan and SB-743.

VMT AND SB-743

Under recent Senate Bill 743 legislation, local agencies may no longer solely rely on roadway/intersection delay and capacity-based analyses for the California Environmental Quality Act (CEQA) purposes, but rather, agencies must analyze transportation impacts utilizing vehicle miles travelled ("VMT"), which measures the number of vehicle trips generated by a project and the average distance of travel to and from the project. This is a change from the prior method of analyzing transportation impacts, which measured levels of service ("LOS") at intersections and roadway segments, graded from LOS A to LOS F. Travel delay as measured by LOS is no longer used as a metric to evaluate transportation impacts under CEQA but it's often used to assess roadway capacity and conformance with desired LOS targets as part of policies in the City of Livermore General Plan.

This memorandum describes the recommended approach to evaluate VMT impacts. Given the SEIR cleared the project for VMT, this comparison focused on comparing the VMT of the modified project with the VMT from the original INSP. If the VMT with the modified project is less than the original SEIR, then the conclusion is that the modified project does not add any new VMT impacts.

At the time the SEIR reported VMT for the project, the Office of Planning and Research (OPR) proposed using VMT as the metric for evaluating the significant traffic impacts, where projects that decrease VMT compared to existing conditions may be considered to have a less than significant transportation impact. Using this metric, the overall INSP SEIR was considered to have a less than significant impact for VMT.

Subsequent Final OPR guidelines recommended using 85% of the existing VMT as considered to have a less than significant impact.

PROJECT OVERVIEW

The Modified Project is a proposed mixed-used development located on 45 acres at the southwest corner of Isabel Avenue and Portola Avenue in the City of Livermore. It is bordered by Isabel Avenue to the east, Portola Avenue to the north, I-580 to the south and existing office developments to the west. The Modified Project would be constructed within and would modify Subareas 3b and 3c of the INSP.

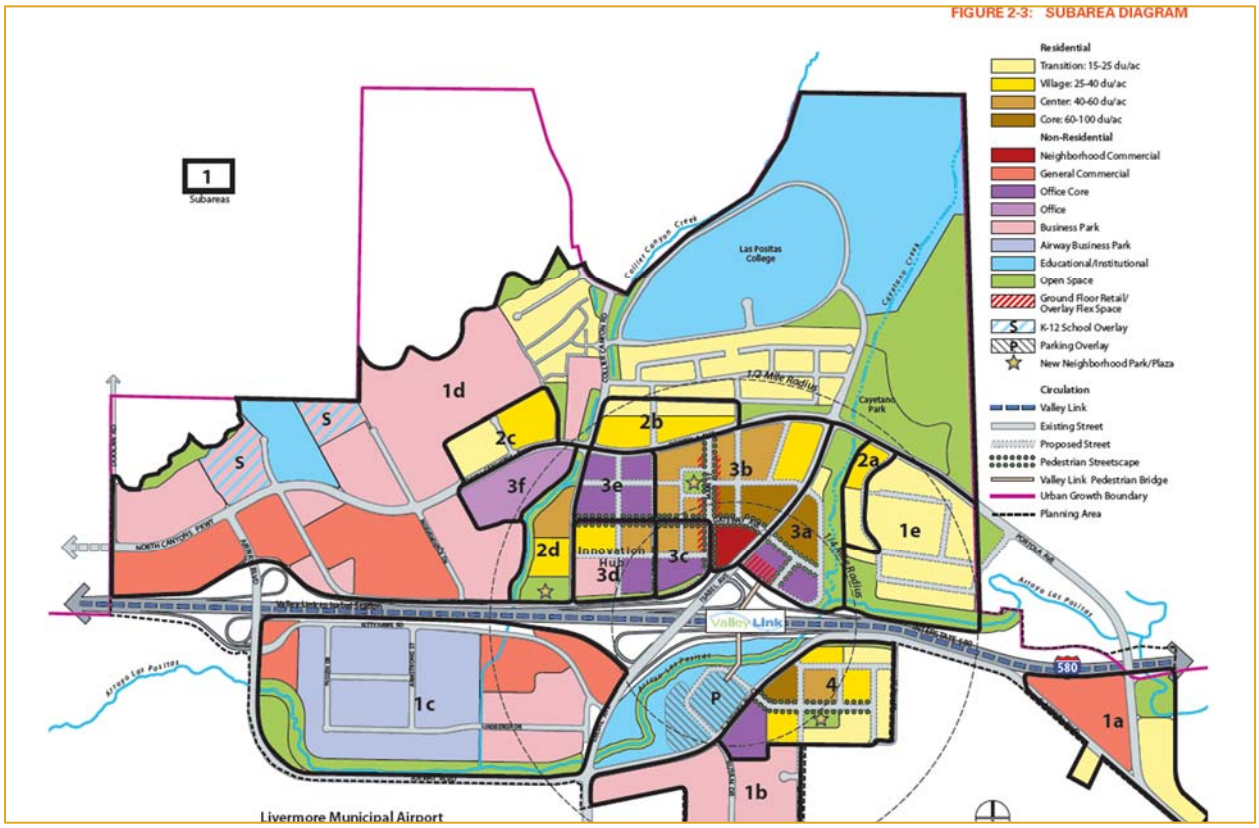
Figure 1 shows the vicinity of the modified project. Figure 2 displays the INSP to identify the location of Subareas 3b and 3c, Figure 3 displays the INSP Project Site Plan for Subareas 3b and 3c, Figure 4 displays the modified Project site plan for the same subareas, and Figure 5 displays the INSP model Traffic Analysis Zones (TAZs) identifying the TAZs that cover Subareas 3b and 3c. Note, TAZ 1303 does cover both sides of Isabel Avenue and includes subareas 3b and 3a east of Isabel Avenue.

Figure 1: INSP Project Vicinity



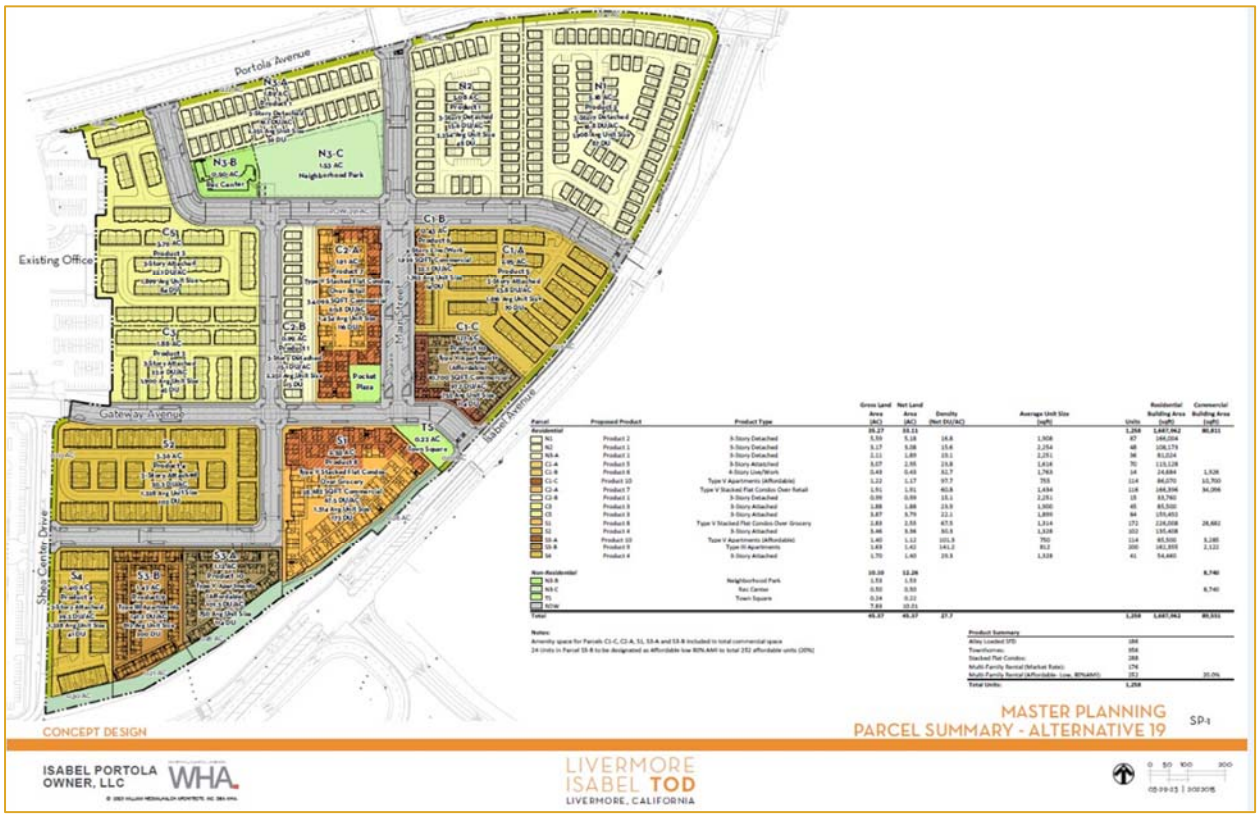
Source: Transit Village Modified Project, CEQA Report, TJKM, July 17, 2023

Figure 2: INSP Subareas



Source: INSP SEIR, 2018

Figure 3: INSP Project Site Plan for Subareas 3b and 3c



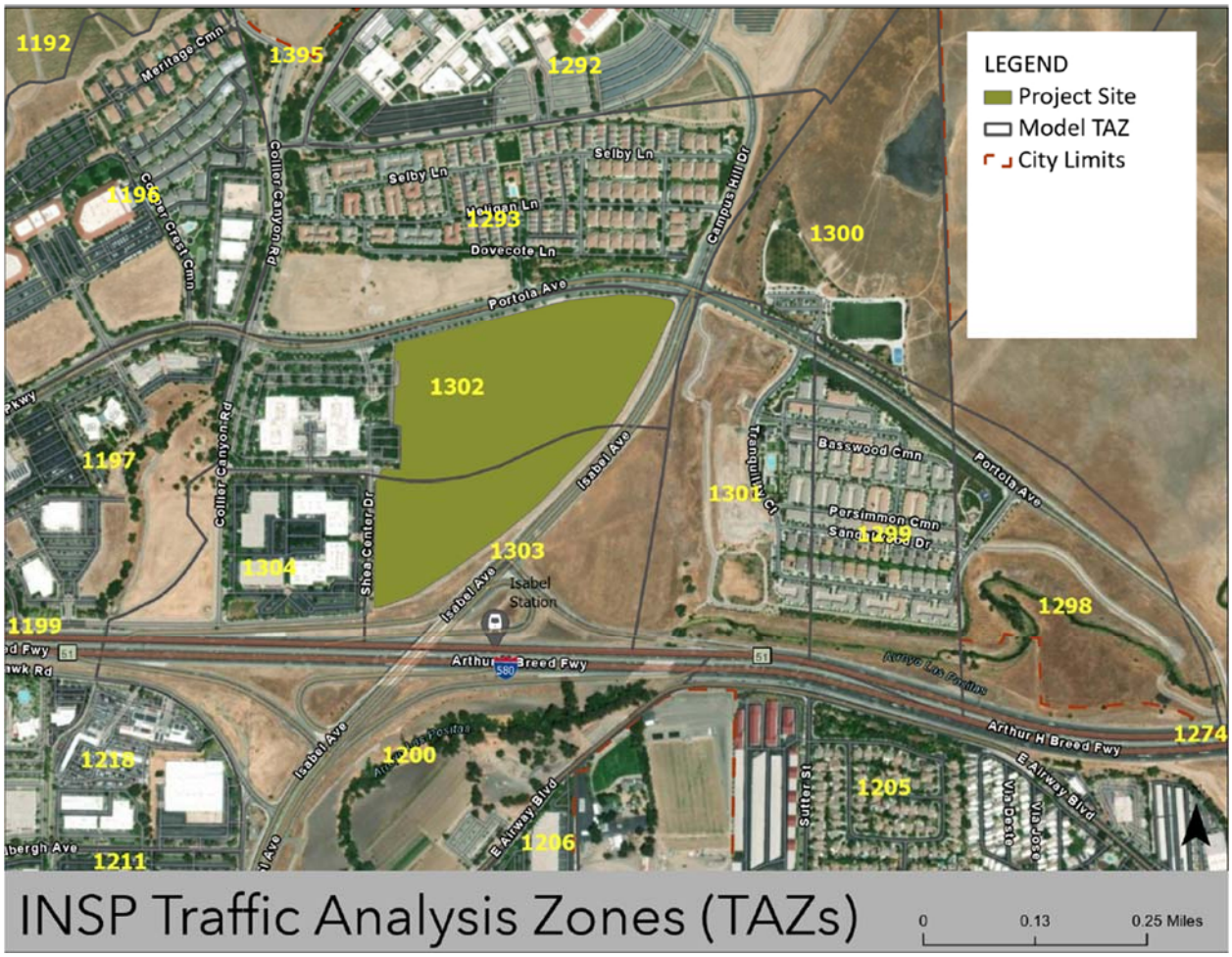
Source: INSP SEIR, 2018

Figure 4: Modified Project Site Plan for Subareas 3b and 3c



Source: Transit Village Modified Project, CEQA Report, TJKM, July 17, 2023

Figure 5: INSP Traffic Analysis Zones (TAZs)



Source: ACTC Countywide Model TAZ Map, Kittelson & Assoc, Inc., 2023

PROJECT LAND USES

The developer for the modified project has proposed to revise the land uses within Subareas 3b and 3c compared to the INSP SEIR. Table 1 displays the proposed change in land uses within Subareas 3b and 3c for the Modified Project compared to the INSP.

Table 1 Proposed Land Use Changes, INSP vs Modified Project

Land Use	Unit	INSP SEIR	Modified Project	Change
Single Family Housing	Dwelling Units	161	546	385
Multi-family Housing (Low-Rise)	Dwelling Units	821	0	*-821*
Multi-family Housing (Mid-Rise)	Dwelling Units	495	716	221
General Office Building	1,000 Square Feet	157.8	0	*-157.8*
Shopping Plaza	1,000 Square Feet	142.1	65.6	*-76.5*

Source: TJKM Transportation Consultants, 2023

Kittelson used these revised land uses in the modeling to represent the modified project with appropriate splits between the two INSP TAZs that cover Subareas 3b and 3c.

VMT METRICS AND THRESHOLDS

VMT is determined by multiplying the number of vehicular trips by the trip distance in miles. For example, one vehicle that travels ten miles in a day generates ten vehicle miles traveled (VMT). Normally VMT is computed on a daily basis for a typical weekday. VMT can be expressed in several ways such as Total VMT, or based on efficiency metrics such as VMT per capita (aka per resident), VMT per worker (a.k.a. per employee), or VMT per service population used in the SEIR (service population is the sum of residents plus employees). VMT for land use projects are typically calculated and assessed on a per rate basis – per capita for residential projects or per employee for employment-generating projects. It should be noted that for the purposes of evaluating transportation impact under CEQA, only VMT from automobiles (not trucks) is to be considered.

For land plans such as the INSP, VMT is calculated for the full length of a given trip and are not truncated at jurisdiction boundaries. Additionally, these VMT values are for trips beginning or ending in the city (i.e., are associated with land uses within Livermore and the INSP). Trips passing through the city or INSP without stopping are not included in these VMT estimates, as the city/project has little or no control over such trips.

Although the absolute amount of VMT may be reported, transportation impact analysis is typically based on VMT expressed as an efficiency metric. VMT efficiency metrics, such as VMT per resident and VMT per employee, allow the VMT performance of different land use quantities to be compared. Such metrics provide a measure of travel efficiency and help depict whether people are traveling by vehicle more or less over time, across different areas, or across different planning scenarios. A per-capita or per-employee decline in VMT compared to a baseline condition indicates that the land use patterns and transportation network are operating more efficiently.

The City of Livermore has not adopted VMT criteria and thresholds to evaluate projects under CEQA. Therefore, Kittelson is proposing to conduct a simple comparison of the modified project VMT to the original INSP project VMT for impact assessment.

VMT Mitigation

Per OPR Guidelines, if a Project results in a VMT impact then appropriate TDM trip reduction policies would need to be applied to reduce the impact to less than significant.

Analysis Scenarios

The following scenarios are analyzed using the INSP version of the ACTC Countywide model (to be consistent with the INSP forecasting).

- **2040 INSP SEIR.** Projected 2040 buildout land use for the INSP SEIR with focus on Subareas 3b and 3c
- **2040 Modified Project.** Modified buildout land use proposed by Harridge in Subareas 3b and 3c

VMT MODELING

To evaluate impacts from the Modified Project, Kittelson applied the INSP model used in the SEIR to the land uses proposed by the modified project for the two TAZs that cover subareas 3b (TAZ 1302) and 3c (1303). There is some overlap in TAZ 1302 with existing land uses to the west, and TAZ 1303 also covers INSP areas to the east of Isabel Avenue. This overlap complicates the VMT results by including some existing land uses in subarea 3e as part of TAZ 1302, and with INSP land uses in subarea 3a as part of TAZ 1303 east of Isabel Avenue. Given these are common to both scenarios, their inclusion would not significantly compromise the VMT results. However, some office land uses do remain within TAZ 1303 but are not part of the modified project since they represent office uses east of Isabel Avenue in the same TAZ. So this VMT evaluation only focuses on subareas 3b (TAZ 1302) and 3c (1303). While Kittelson did not split the two TAZs which overlap Specific Plan parcels and existing uses since that would require significant effort, it is assumed the existing uses are common to both scenarios and would not factor into the VMT computation since the conclusions deal with net change VMT and VMT/capita and VMT/job ratios. Therefore, the VMT change is assumed to only be related to subareas 3b and 3c since the existing uses are common and included in both analyzes.

Kittelson ran the model for the modified project land uses and extracted VMT results for the comparison described below.

VMT ANALYSIS

To evaluate impacts from the Modified Project, the recommended metrics and thresholds described above for new residential, employment-generating, and retail projects would apply and are summarized in the following tables; Table 2 for residential VMT, Table 3 for Employment VMT, and Table 4 for Total VMT (used for the retail assessment).

Table 2 VMT Analysis – Residential VMT

Land Use	INSP Project VMT	INSP Project VMT/Capita	Modified Project VMT	Modified Project VMT/Capita	Net Change Modified Project – INSP Project
Project	126,704	24.5	80,020	20.8	-3.7
City	3,712,376	31.8	3,560,947	30.9	-0.9
County	33,805,996	17.0	33,658,808	17.0	0.0
Region	161,000,734	17.5	160,794,201	17.5	0.0

Source: INSP SEIR Model, Kittelson & Associates, Inc, 2023

Table 3 VMT Analysis – Employment VMT

Land Use	INSP Project VMT	INSP Project VMT/Employee	Modified Project VMT	Modified Project VMT/Employee	Net Change Modified Project – INSP Project
Project	50,474	12.7	44,260	13.4	+0.6
City	999,779	14.2	998,562	14.3	+0.1
County	14,861,937	15.2	14,873,157	15.2	0.0

Region	69,614,860	15.3	69,538,888	15.3	0.0

Source: INSP SEIR Model, Kittelson & Associates, Inc, 2023

Table 4 VMT Analysis - Total VMT (used for Retail Assessment)

Land Use	INSP Project Total VMT	Modified Project Total VMT	Net Change VMT Modified Project – INSP Project
Project	235,940	193,155	-42,785
City	6,013,569	5,905,715	-107,854
County	74,409,848	74,327,541	-82,307
Region	359,276,156	359,181,851	-94,305

Source: INSP SEIR Model, Kittelson & Associates, Inc, 2023
Note: Net change in Total VMT is used as a metric for the retail portion.

VMT FINDINGS

The VMT impacts of the Modified Project were assessed using the INSP version of the ACTC Countywide travel demand model using the recommended metrics and thresholds described above for new residential, employment-generating, and retail projects. While the INSP SEIR did not address VMT as an impact metric per SB-743, this analysis directly compares the INSP VMT to Modified Project VMT to disclose whether there would be additional total VMT or worse VMT metrics generated by the change in the project.

- The residential VMT per capita results in Table 2 shows the Modified Project VMT (80,020) at 20.8 VMT per capita, while the INSP VMT is higher at 126,704 and 24.5 VMT per capita. The Modified project therefore reduces the residential VMT and VMT per capita. While the INSP included appropriate TDM measures and much of the area is within 0.5 miles to high quality transit (Valley Rail), the same measures would apply to the Modified Project even though it does not demonstrate a VMT impact for residential.

- The VMT per employment results in Table 3 shows the Modified Project VMT (44,260) at 13.4 VMT per employee, while the INSP VMT is higher at 50,474 but with a slightly lower VMT per employee of 12.7. This demonstrates that while the total employment VMT is lower, the loss of office land uses contributes to a slight increase in VMT per employee with the modified project. In addition, the Modified project is still within 0.5 miles to high quality transit (Valley Rail) would still adhere to appropriate TDM measures specified in the SEIR.

- The Total VMT results in Table 4 are used to demonstrate the net change in retail VMT, which show the Modified Project VMT is less than the INSP, suggesting the reduction in retail contributes to lower net overall VMT.

- Overall, the reduction in residential and retail VMT compensates for the slight increase in VMT per employee between the original and modified projects, and therefore the comparison shows the overall VMT would be lower with the modified project.

Overall VMT findings suggest the modified project would not substantially increase VMT impacts compared to the INSP SEIR and with some metrics it reduces VMT impacts.

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Technical Memorandum

May 2, 2024 Project# 29502

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Oakland, CA 94612

From: Damian Stefanakis, Kittelson & Associates, Inc.

CC:

RE: **Livermore Isabel Transit Village - Harridge Modified Isabel Crossing Project – Revised VMT Assessment**

INTRODUCTION

This technical memorandum prepared by Kittelson & Assoc., Inc, summarizes the VMT assessment for the revised Harridge Isabel Crossing project located in the future Livermore Isabel Transit Village. Previously, Kittelson had prepared a detailed VMT assessment documented in a memorandum on December, 21, 2023. Since then, the project applicant, Harridge, has revised the project with the addition of 38 multifamily residential units (from 1,261 to 1,299 units). This memorandum provides a qualitative review of VMT and a statement of whether the change in project affects the VMT findings.

Previously, Kittelson prepared a VMT Analysis to determine if the Harridge proposed modifications to the Isabel Neighborhood Specific Plan (INSP) by the Livermore Transit Village project (Modified Project) incur the same or any additional VMT impacts compared to the Environmental Impact Report (EIR) certified on May 14, 2018, and Supplemental Environmental Impact Report (SEIR) dated September 30, 2020, for the INSP. A summary of those results and findings is shown below.

Summary of Prior VMT Assessment

Previously, the VMT impacts of the Modified Project were assessed using the INSP version of the ACTC Countywide travel demand model using the recommended metrics and thresholds described previously for new residential, employment-generating, and retail projects.

- The residential VMT for the Modified Project was 80,020 and the VMT/capita was 20.8 VMT. The INSP VMT is higher at 126,704 and 24.5 VMT per capita. The Modified project therefore reduced the residential VMT and VMT per capita.

- The VMT per employment results showed the Modified Project VMT (44,260) at 13.4 VMT per employee, while the INSP VMT was higher at 50,474 and with a slightly lower VMT per employee of 12.7. This demonstrated that while the total employment VMT is lower, the loss of office land uses contributed to a slight increase in VMT per employee with the modified project.

- The Total VMT results are used to demonstrate the net change in retail VMT, which showed the Modified Project VMT was less than the INSP, suggesting the reduction in retail contributed to lower net overall VMT.

- Overall, the reduction in residential and retail VMT compensated for the slight increase in VMT per employee between the original and modified projects, and therefore the comparison showed the overall VMT would be lower with the modified project.

Overall VMT findings suggested the Modified Project would not substantially increase VMT impacts compared to the INSP SEIR, and with some metrics it actually reduced VMT impacts.

Summary of Revised VMT Assessment (with 38 additional units)

Now that the project has changed to add 38 additional multifamily units (the commercial size did not change), the VMT is expected to change:

- Given that VMT per SB 743 is assessed as an efficiency (ratio) metric, the increase in units will not appreciably change the VMT/capita ratio from the prior. As VMT increases, so does the population, so the finding of 20.8 VMT per capita will still be applicable and will remain lower than the INSP VMT/Capita of 24.5.

- The total residential VMT however will increase as a result of the additional units. This was previously reported as 80,020 VMT which is lower than the INSP VMT of 126,704. The additional units would conservatively add approximately 7,600 VMT for a net increase to 87,620 VMT, which still remains lower than the INSP VMT of 126,704.

- The commercial VMT based on VMT/employee and total retail VMT is not expected to change.

Conclusion

Based on this assessment, the increase of 38 multifamily residential units is not expected to incur any new VMT impacts and therefore the revised Project remains less than significant for VMT in accordance with the standards set in the City of Livermore General Plan and SB-743.

Appendix E-3

No Net Loss Project – Level of Service Assessment

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Technical Memorandum

June 20, 2024 Project# 30502

To: Aileen Mahoney,
Rincon Consultants, Inc.
449 25th Street, Suite 303
Oakland, CA 94612

From: Damian Stefanakis, Kittelson & Associates, Inc.

CC:

RE: **Livermore Isabel Neighborhood Specific Plan – No Net Loss Rezoning – Level of Service Assessment**

INTRODUCTION

This technical memorandum prepared by Kittelson & Associates, Inc, (Kittelson) summarizes the Level of Service (LOS) assessment for the rezoning of specific parcels within the Isabel Neighborhood Specific Plan (INSP) area. Following the INSP 2018 Draft Environmental Impact Report (EIR) and 2020 Supplemental EIR (D/SEIR) and the subsequent Isabel Crossing development application by Harridge, which has proposed a lower number of residential units in INSP Subareas 3b and 3c than anticipated under the INSP, we understand the City of Livermore is required to ensure no net loss of residential units to meet the City's RHNA pursuant to Government Code 65863. As a result, the City has proposed two rezoning options to replace some of the planned office development with additional residential units in the INSP area.

Kittelson has modeled the two options using the citywide INSP traffic model and extracted VMT and intersection forecasts for LOS so that the city can assess if there is a substantial increase in the environmental impact conclusions provided in D/SEIR resulting from the implementation of either rezoning option. This memorandum focuses on intersection LOS, while a previous memo addressed VMT.

This memorandum provides a quantitative analysis of LOS to disclose if either rezoning option contributes to substantially more significant impacts compared to the D/SEIR.

All informational sections from the prior D/SEIR including regulatory section, existing setting and existing conditions are incorporated by reference.

SUMMARY OF LAND USE CHANGES

We understand that the city has proposed two options for rezoning, including sites within INSP Subareas 3a and/or 1d. The intent of the proposed rezoning is to ensure no net loss of housing opportunity sites, in accordance with the City's adopted Housing Element, for the INSP area. Proposed and constructed developments in the INSP area have not met the anticipated unit counts identified in the INSP and/or Housing Element; therefore, the city desires to rezone certain parcels within the INSP area to ensure that there is adequate opportunity for the development of housing within the INSP area. The current shortfall of residential units is 344 units, with the trend of housing unit shortfalls anticipated to continue as the INSP area is built out.

The two options being considered for rezoning by the city include:

Option 1: Rezone the following parcel to residential: Assessor's Parcel Number (APN) 903-10-36-3, BART Parcel West (INSP 3a), 913 units.

- Increase of 569 residential units and decrease of 946,994 square feet (sf) of office space, as compared to the certified INSP EIR

Option 2: Rezone the following parcels to residential: APN 905-10-23, Comcast Parcel West (INSP 1d), 350 units; APN 905-10-24, Comcast Parcel East (INSP 1d), 512 units; APN 903-10-36-3, BART Parcel West (INSP 3a), 913 units.

- Increase of 1,431 residential units and decrease of 1,531,486 sf of office space, as compared to the certified INSP EIR

Figure 1 displays the location of the parcels considered for rezoning.

Figure 1: INSP Proposed Rezoning Parcels



Source: Google Maps, City of Livermore, 2024

SIGNIFICANCE CRITERIA

The criteria used for intersection level of service are summarized below from the D/SEIR. The criteria used to evaluate whether the rezoning options have substantial increased impacts under 2040 cumulative conditions compared to the D/SEIR.

City of Livermore General Plan

The City of Livermore General Plan stipulates a transportation goal to "maintain adequate levels of service for all areas of the city." "The upper limit of acceptable service at signalized intersections shall be mid level D, except in the Downtown Area and near freeway interchanges. The upper limit of acceptable level of service at selected intersections near freeway interchanges shall be LOS E" (City of Livermore, 2014). In addition, the General Plan identifies selected intersections that are exempt and may exceed the LOS standard.

The Circulation Element of the Livermore General Plan provides the policy framework for regulation and development of the City's transportation system. This Element includes policies to plan for Complete Streets, promote multimodal transportation, provide a pedestrian network that encourages walking for transportation and recreation, and provide safe and convenient bicycle parking.

Local Roadway Intersections

Performance standards from the D/SEIR for traffic at local roadway intersections are described below.

An intersection impact would occur if, in either the AM or PM peak hour, the proposed Plan resulted in the following:

- An intersection operating at an acceptable mid level LOS D or better (corresponding to an average delay of 45 seconds per vehicle) under No Project Conditions degraded to an unacceptable high of LOS D or worse under Project Conditions.
- An intersection near the freeway operating at an acceptable LOS E or better (80 seconds per vehicle) under No Project Conditions degraded to an unacceptable LOS F under Project Conditions.
- An intersection operating at substandard LOS under No Project Conditions increased average delays by more than 5 seconds per vehicle.

Note: Selected intersections with close proximity to the I-580 freeway are deemed Exempt per Livermore Policy: Goal CIR-5, Objective CIR-5.1 Policy P4, Circulation Element, Amended 2014

For signalized intersections in the study area, the analysis calculates the average delay per vehicle using the HCM 2000 methodology, via Synchro 11 traffic analysis software, to determine LOS, as shown in **Table 1**. If the V/C ratio was found to exceed 1.0, regardless of the delay, the analysis assigned LOS F.

Table 1 Level of Service Criteria – Signalized Intersections

Average Control Delay (sec/veh)	*Level of Service*
≤ 10	A
>10–20	B
>20–35	C
>35–55	D
>55–80	E
>80	F

Note: sec/veh = seconds per vehicle

Source: Transportation Research Board, 2000.

For unsignalized intersections in the study area, the analysis used HCM 2000 methodology, determining the LOS by calculating the weighted average control delay, expressed in seconds per vehicle, as illustrated in **Table 2**. Control delay includes the sum of all individual movements that a vehicle might make at an unsignalized intersection, including initial deceleration delay, queue move-up time, stopped delay, and final acceleration. At two-way stop-controlled intersections, LOS was calculated for each controlled movement, as opposed to the intersection as a whole. If the V/C ratio of a lane was found to exceed 1.0, regardless of the control delay, the analysis assigned LOS F.

Table 2 Level of Service Criteria – Unsignalized Intersections

Average Control Delay (sec/veh)	*Level of Service*
≤ 10	A
>10–15	B
>15–25	C
>25–35	D
>35–50	E
>50	F

Note: sec/veh = seconds per vehicle

Source: Transportation Research Board, 2000.

SUMMARY OF LOS ASSESSMENT

Previously, the D/SEIR summarized LOS results for 2040 plus project conditions at 25 key study intersections. This LOS assessment has developed forecasts and LOS results for two different options at the same 25 intersections.

LOS Assessment - Option 1

Table 3 summarizes the LOS results for the D/SEIR compared to Option 1 for the AM peak hour, while **Table 4** summarizes the LOS results for the D/SEIR compared to Option 1 for the PM peak hour. Detailed LOS calculations for Option 1 – AM Peak are provided in **Appendix A,** and PM Peak in **Appendix B**.

Table 3: Intersection Level of Service - 2040 Cumulative Plus D/SEIR Project compared to 2040 Option 1 - AM Peak Hour

#	Name	Control	Standard	2040 Plus D/SEIR Project			2040 Plus Option 1 Project		
				V/C	Delay	LOS	V/C	Delay	LOS
1	Isabel Avenue & Airway Boulevard	Signal	Exempt*	0.93	41.5	D	0.93	42.3	D
2	Murrieta Boulevard & Portola Avenue	Signal	Mid D	0.71	15.1	B	0.71	14.6	B
3	Livermore Avenue & Portola Avenue	Signal	Mid D	0.81	40.1	D	0.83	45.2	D
4	I-580 WB Ramps & Isabel Avenue	Signal	E	0.80	16.1	B	0.69	13.2	B
5	I-580 EB Ramps & Isabel Avenue	Signal	E	0.44	7.6	A	0.41	5.2	A
6	I-580 WB Ramps & Airway Boulevard	Signal	E	0.76	12.4	B	0.75	11.5	B
7	I-580 EB Ramps & Airway Boulevard	Signal	E	0.67	25.7	C	0.69	29.4	C
8	Isabel Avenue & Jack London Boulevard	Signal	Exempt*	0.98	53.7	D	1.03	57.8	E
9	Airway Boulevard & North Canyons Parkway	Signal	E	1.08	52.9	D	1.10	40.4	D
10	Collier Canyon Road & North Canyons Parkway	Signal	Mid D	0.59	19.1	B	0.64	19.8	B
11	Isabel Avenue & Portola Avenue	Signal	E	0.56	24.6	C	0.55	25.0	C
12	Rutan Drive & E. Airway Boulevard	Signal	Mid D	0.77	17.7	B	0.79	18.9	B
13	BART Access & E. Airway Boulevard	Signal	Mid D	0.84	29.9	C	0.88	22.9	C
14	Isabel Avenue & BART Parking (North)	Signal	Mid D	0.65	28.8	C	**0.77**	**113.8**	**F**
15	Portola Avenue & Main Street	Signal	Mid D	0.25	8.5	A	0.27	8.5	A
16	Sutter Street & E. Airway Boulevard	Stop Control	Mid D	0.40	7.2	A	0.45	6.7	A
17	Portola Avenue & E. Airway Boulevard	Stop	Mid D	0.50	10.0	B	0.49	10.7	B
18	Stealth Street & E. Airway Boulevard	Future	Mid D	0.55	12.3	B	0.58	11.6	B
19	Isabel Avenue & INP Road	Future	Mid D	0.54	20.2	C	0.45	23.6	C
20	Portola Avenue & Tranquility Circle	Signal	Mid D	0.57	14.2	B	0.53	13.4	B
21	Portola Avenue & Sandalwood Drive	Stop	Mid D	0.28	9.6	A	0.26	9.9	A
22	Portola Avenue & Montage Drive/Road 3	Future	Mid D	0.63	31.5	C	0.57	21.5	C
23	Portola Avenue & Road 1	Future	Mid D	0.27	9.2	A	0.30	9.2	A
24	Portola Avenue & Road 2	Future	Mid D	0.62	24.9	C	0.59	23.0	C
25	Portola Avenue & Road 4	Future	Mid D	0.23	8.5	A	0.24	8.5	A

Notes:
* Exempt per Livermore Policy: Goal CIR-5, Objective CIR-5.1 Policy P4, Circulation Element, Amended 2014
Bold text indicates intersection operating beyond standard. Shaded cell indicates significant impact.
Source: Kittelson & Associates, Inc., 2024.

Table 4: Intersection Level of Service - 2040 Cumulative Plus D/SEIR Project compared to 2040 Option 1 - PM Peak Hour

#	Name	Control	Standard	2040 Plus D/SEIR Project			2040 Plus Option 1 Project		
				V/C	Delay	LOS	V/C	Delay	LOS
1	Isabel Avenue & Airway Boulevard	Signal	Exempt*	**1.00**	**80.9**	**F**	**1.01**	**87.8**	**F**
2	Murrieta Boulevard & Portola Avenue	Signal	Mid D	0.88	36.3	D	0.79	29.9	C
3	Livermore Avenue & Portola Avenue	Signal	Mid D	**0.98**	**70.1**	**E**	**1.00**	**80.4**	**F**
4	I-580 WB Ramps & Isabel Avenue	Signal	E	0.64	16.8	B	0.62	16.0	B
5	I-580 EB Ramps & Isabel Avenue	Signal	E	0.59	5.9	A	0.59	6.3	A
6	I-580 WB Ramps & Airway Boulevard	Signal	E	0.47	7.0	A	0.42	6.6	A
7	I-580 EB Ramps & Airway Boulevard	Signal	E	0.67	41.5	D	0.63	41.7	D
8	Isabel Avenue & Jack London Boulevard	Signal	Exempt*	0.97	56.2	E	0.95	53.3	D
9	Airway Boulevard & North Canyons Parkway	Signal	E	0.73	26.8	C	0.74	28.8	C
10	Collier Canyon Road & North Canyons Parkway	Signal	Mid D	0.59	19.3	B	0.63	19.7	B
11	Isabel Avenue & Portola Avenue	Signal	E	0.68	27.2	C	0.64	28.1	C
12	Rutan Drive & E. Airway Boulevard	Signal	Mid D	0.66	16.3	B	0.66	17.3	B
13	BART Access & E. Airway Boulevard	Signal	Mid D	0.83	24.7	C	0.84	26.0	C
14	Isabel Avenue & BART Parking (North)	Signal	Mid D	0.77	28.8	C	0.74	28.9	C
15	Portola Avenue & Main Street	Signal	Mid D	0.35	10.1	B	0.35	9.9	A
16	Sutter Street & E. Airway Boulevard	Stop Control	Mid D	0.32	4.7	A	0.41	5.3	A
17	Portola Avenue & E. Airway Boulevard	Stop	Mid D	0.78	20.7	C	0.77	21.4	C
18	Stealth Street & E. Airway Boulevard	Future	Mid D	0.55	9.0	A	0.63	9.8	A
19	Isabel Avenue & INP Road	Future	Mid D	0.66	23.6	C	0.74	28.2	C
20	Portola Avenue & Tranquility Circle	Signal	Mid D	0.73	31.3	C	0.67	29.0	C
21	Portola Avenue & Sandalwood Drive	Stop	Mid D	0.39	9.8	A	0.31	9.2	A
22	Portola Avenue & Montage Drive/Road 3	Future	Mid D	0.64	24.1	C	0.60	59.1	C
23	Portola Avenue & Road 1	Future	Mid D	0.33	9.4	A	0.37	9.5	A
24	Portola Avenue & Road 2	Future	Mid D	0.65	26.2	C	0.62	24.0	C
25	Portola Avenue & Road 4	Future	Mid D	0.37	9.7	A	0.33	9.4	A

Notes:
* Exempt per Livermore Policy: Goal CIR-5, Objective CIR-5.1 Policy P4, Circulation Element, Amended 2014
Bold text indicates intersection operating beyond standard. Shaded cell indicates significant impact.
Source: Kittelson & Associates, Inc., 2024.

LOS Impact Comparison – Option 1

Intersection #3 - North Livermore Avenue and Portola Avenue
The intersection of North Livermore Avenue and Portola Avenue was identified as an impact for the D/SEIR, and also for Option 1 during the PM peak hour. In the D/SEIR, adding additional left turn lanes to the impacted intersection under 2040 Plus D/SEIR Project conditions were proposed as a mitigation to address impacts to intersection operations. However, the addition of left turn lanes would require that both roads be widened. Due to roadway right-of-way constraints on North Livermore Avenue and Portola Avenue, the addition of more travel lanes is not feasible. Therefore, no additional improvements would be feasible to address this significant impact, and it remains significant and unavoidable.

Level of service conditions during the PM peak hour under Option 1 exhibit the same impact as the D/SEIR which could be mitigated using the same proposed mitigation to achieve an LOS E with 56 seconds of delay. Since the mitigation was determined to be infeasible, the same condition would remain with Option 1. Therefore, no new or significant or substantial increase in an impact will occur with Option 1.

Intersection #14 – Isabel Avenue and Gateway Ave-Bart Parking (North)
The intersection of Isabel Avenue and Gateway Ave-Bart Parking (North) is identified as impacted for Option 1 during the AM peak hour. This was not identified as an impact for the D/SEIR. However, since this is a new intersection, and detailed traffic operations were evaluated at this location for the Isabel Crossing study[1], the mitigation to reduce the impact is to configure the intersection per the Isabel Crossing traffic study and optimize the cycle length and splits. This reduces the LOS to C with 34.7 seconds of delay in the AM peak, and LOS C with 28.9 seconds of delay in the PM peak, resulting in no new or significant or substantial increase in an impact with Option 1.

Mitigated LOS calculations for Option 1 are provided in **Appendix C** for AM peak, and **Appendix D** for PM peak.

LOS Assessment - Option 2

Table 5 summarizes the results for the D/SEIR compared to Option 2 for the AM peak hour, while **Table 6** summarizes the results for the D/SEIR compared to Option 2 for the PM peak hour. Detailed LOS calculations for Option 2 – AM Peak are provided in **Appendix E,** and PM Peak in **Appendix F**.

[1] *Livermore Isabel Project – Focused Transportation Analysis, December 8, 2023*, and related updated memos, prepared by TJKM Engineers.

Table 5: Intersection Level of Service - 2040 Cumulative Plus SEIR Project compared to 2040 Option 2 - AM Peak Hour

#	Name	Control	Standard	2040 Plus D/SEIR Project			2040 Plus Option2 Project		
				V/C	Delay	LOS	V/C	Delay	LOS
1	Isabel Avenue & Airway Boulevard	Signal	Exempt*	0.93	41.5	D	0.85	36.7	D
2	Murrieta Boulevard & Portola Avenue	Signal	Mid D	0.71	15.1	B	0.7	14.4	B
3	Livermore Avenue & Portola Avenue	Signal	Mid D	0.81	40.1	D	0.83	41.8	D
4	I-580 WB Ramps & Isabel Avenue	Signal	E	0.80	16.1	B	0.76	14.1	B
5	I-580 EB Ramps & Isabel Avenue	Signal	E	0.44	7.6	A	0.44	6.0	A
6	I-580 WB Ramps & Airway Boulevard	Signal	E	0.76	12.4	B	0.69	10.7	B
7	I-580 EB Ramps & Airway Boulevard	Signal	E	0.67	25.7	C	0.63	24.9	C
8	Isabel Avenue & Jack London Boulevard	Signal	Exempt*	0.98	53.7	D	1.00	56.7	E
9	Airway Boulevard & North Canyons Parkway	Signal	E	1.08	52.9	D	1.17	53.2	D
10	Collier Canyon Road & North Canyons Parkway	Signal	Mid D	0.59	19.1	B	0.58	18.3	B
11	Isabel Avenue & Portola Avenue	Signal	E	0.56	24.6	C	0.52	24.4	C
12	Rutan Drive & E. Airway Boulevard	Signal	Mid D	0.77	17.7	B	0.80	19.6	B
13	BART Access & E. Airway Boulevard	Signal	Mid D	0.84	29.9	C	0.89	32.2	C
14	Isabel Avenue & BART Parking (North)	Signal	Mid D	0.65	28.8	C	**0.77**	**125.3**	**F**
15	Portola Avenue & Main Street	Signal	Mid D	0.25	8.5	A	0.24	8.5	A
16	Sutter Street & E. Airway Boulevard	Stop Control	Mid D	0.40	7.2	A	0.47	6.5	A
17	Portola Avenue & E. Airway Boulevard	Stop	Mid D	0.50	10.0	B	0.51	11.2	B
18	Stealth Street & E. Airway Boulevard	Future	Mid D	0.55	12.3	B	0.60	11.2	B
19	Isabel Avenue & INP Road	Future	Mid D	0.54	20.2	C	0.46	25.5	C
20	Portola Avenue & Tranquility Circle	Signal	Mid D	0.57	14.2	B	0.51	14.5	B
21	Portola Avenue & Sandalwood Drive	Stop	Mid D	0.28	9.6	A	0.23	9.8	A
22	Portola Avenue & Montage Drive/Road 3	Future	Mid D	0.63	31.5	C	0.52	25.9	C
23	Portola Avenue & Road 1	Future	Mid D	0.27	9.2	A	0.26	9.1	A
24	Portola Avenue & Road 2	Future	Mid D	0.62	24.9	C	0.55	20.4	C
25	Portola Avenue & Road 4	Future	Mid D	0.23	8.5	A	0.21	8.5	A

Notes:
* Exempt per Livermore Policy: Goal CIR-5, Objective CIR-5.1 Policy P4, Circulation Element, Amended 2014
Bold text indicates intersection operating beyond standard. Shaded cell indicates significant impact.

Source: Kittelson & Associates, Inc., 2024.

Table 6: Intersection Level of Service - 2040 Cumulative Plus D/SEIR Project compared to 2040 Option 2 - PM Peak Hour

#	Name	Control	Standard	2040 Plus D/SEIR Project			2040 Plus Option 2 Project		
				V/C	Delay	LOS	V/C	Delay	LOS
1	Isabel Avenue & Airway Boulevard	Signal	Exempt*	1.00	80.9	F	0.99	78.3	E
2	Murrieta Boulevard & Portola Avenue	Signal	Mid D	0.88	36.3	D	0.8	28.3	C
3	Livermore Avenue & Portola Avenue	Signal	Mid D	**0.98**	**70.1**	**E**	**1.03**	**84.3**	**F**
4	I-580 WB Ramps & Isabel Avenue	Signal	E	0.64	16.8	B	0.65	16.6	B
5	I-580 EB Ramps & Isabel Avenue	Signal	E	0.59	5.9	A	0.58	6.4	A
6	I-580 WB Ramps & Airway Boulevard	Signal	E	0.47	7.0	A	0.40	6.6	A
7	I-580 EB Ramps & Airway Boulevard	Signal	E	0.67	41.5	D	0.65	42.2	D
8	Isabel Avenue & Jack London Boulevard	Signal	Exempt*	0.97	56.2	E	0.96	54.3	D
9	Airway Boulevard & North Canyons Parkway	Signal	E	0.73	26.8	C	0.73	30.3	C
10	Collier Canyon Road & North Canyons Parkway	Signal	Mid D	0.59	19.3	B	0.57	18.6	B
11	Isabel Avenue & Portola Avenue	Signal	E	0.68	27.2	C	0.61	27.0	C
12	Rutan Drive & E. Airway Boulevard	Signal	Mid D	0.66	16.3	B	0.68	17.4	B
13	BART Access & E. Airway Boulevard	Signal	Mid D	0.83	24.7	C	0.86	28.9	C
14	Isabel Avenue & BART Parking (North)	Signal	Mid D	0.77	28.8	C	0.72	30.8	C
15	Portola Avenue & Main Street	Signal	Mid D	0.35	10.1	B	0.31	9.6	A
16	Sutter Street & E. Airway Boulevard	Stop Control	Mid D	0.32	4.7	A	0.44	5.6	A
17	Portola Avenue & E. Airway Boulevard	Stop	Mid D	0.78	20.7	C	0.77	21.2	C
18	Stealth Street & E. Airway Boulevard	Future	Mid D	0.55	9.0	A	0.66	10.2	B
19	Isabel Avenue & INP Road	Future	Mid D	0.66	23.6	C	0.75	28.7	C
20	Portola Avenue & Tranquility Circle	Signal	Mid D	0.73	31.3	C	0.62	28.0	C
21	Portola Avenue & Sandalwood Drive	Stop	Mid D	0.39	9.8	A	0.26	10.1	B
22	Portola Avenue & Montage Drive/Road 3	Future	Mid D	0.64	24.1	C	0.57	20.6	C
23	Portola Avenue & Road 1	Future	Mid D	0.33	9.4	A	0.33	9.2	A
24	Portola Avenue & Road 2	Future	Mid D	0.65	26.2	C	0.59	24.5	C
25	Portola Avenue & Road 4	Future	Mid D	0.37	9.7	A	0.30	9.2	A

Notes:
* Exempt per Livermore Policy: Goal CIR-5, Objective CIR-5.1 Policy P4, Circulation Element, Amended 2014
Bold text indicates intersection operating beyond standard. Shaded cell indicates significant impact.
Source: Kittelson & Associates, Inc., 2024.

LOS Impact Comparison – Option 2

Intersection #3 - North Livermore Avenue and Portola Avenue
The intersection of North Livermore Avenue and Portola Avenue was identified as an impact for the D/SEIR, and also for Option 2 during the PM peak hour. In the D/SEIR, adding additional left turn lanes to the impacted intersection under 2040 Plus D/SEIR Project conditions were proposed as a mitigation to address impacts to intersection operations. However, the addition of left turn lanes would require that both roads be widened. Due to roadway right-of-way constraints on North Livermore Avenue and Portola Avenue, the addition of more travel lanes is not feasible. Therefore, no additional improvements would be feasible to address this significant impact, and it remains significant and unavoidable.

Level of service conditions during the PM peak hour under Option 2 exhibit the same impact as the SEIR which could be mitigated using the same proposed mitigation to achieve an LOS E with 62.7 seconds of delay. Since the mitigation was determined to be infeasible, the same condition would remain with Option 2. Therefore, no new or significant or substantial increase in an impact will occur with Option 2.

Intersection #14 – Isabel Avenue and Gateway Ave-Bart Parking (North)
The intersection of Isabel Avenue and Gateway Ave-Bart Parking (North) is identified as impacted for Option 2 during the AM peak hour. This was not identified as an impact for the D/SEIR. However, since this is a new intersection, and detailed traffic operations were evaluated at this location for the Isabel Crossing study[2], the mitigation to reduce the impact is to configure the intersection per the Isabel Crossing traffic study and optimize the cycle length and splits. This reduces the LOS to D with 37.4 seconds of delay in the AM peak, and LOS C with 30.8 seconds of delay in the PM peak, resulting in no new or significant or substantial increase in an impact with Option 2.

Mitigated LOS calculations for Option 2 are provided in **Appendix G** for AM peak, and **Appendix H** for PM peak.

FINDINGS

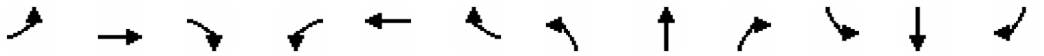
Kittelson modeled the two land use options proposed by the city using the citywide INSP traffic model and extracted intersection forecasts for LOS so that the city can assess if there is a substantial increase in the environmental impact conclusions provided in D/SEIR resulting from the implementation of either rezoning option.

Overall, LOS findings suggest the rezoning options, with appropriate mitigation, would not result in new or substantially increased LOS impacts compared to the INSP D/SEIR.

[2] *Livermore Isabel Project – Focused Transportation Analysis, December 8, 2023*, and related updated memos, prepared by TJKM Engineers.

APPENDICES

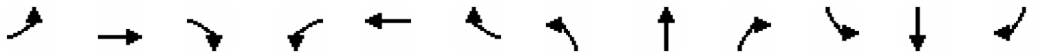
Appendix A – 2040 Option 1 LOS Calculations – AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	161	455	238	344	160	300	1047	204	322	1260	17
Future Volume (vph)	1	161	455	238	344	160	300	1047	204	322	1260	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	175	495	259	374	174	326	1138	222	350	1370	18
RTOR Reduction (vph)	0	0	98	0	0	80	0	0	149	0	0	12
Lane Group Flow (vph)	1	175	397	259	374	94	326	1138	73	350	1370	6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.7	18.0	33.0	14.4	31.7	45.4	15.0	30.8	30.8	13.7	29.5	29.5
Effective Green, g (s)	0.1	17.4	31.8	13.8	31.1	44.2	16.0	31.8	31.8	14.7	30.5	29.5
Actuated g/C Ratio	0.00	0.18	0.33	0.14	0.32	0.46	0.17	0.33	0.33	0.15	0.32	0.31
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	1	337	523	254	602	728	294	1682	523	525	1613	485
v/s Ratio Prot	0.00	0.09	c0.11	c0.15	0.20	0.02	c0.18	0.22		0.10	c0.27	
v/s Ratio Perm			0.14			0.04			0.05			0.00
v/c Ratio	1.00	0.51	0.75	1.01	0.62	0.12	1.10	0.67	0.14	0.66	0.84	0.01
Uniform Delay, d1	47.9	35.5	28.7	41.1	27.5	14.8	40.0	27.7	22.5	38.3	30.6	23.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	900.0	1.3	6.2	61.6	1.9	0.0	84.9	1.4	0.2	3.1	4.8	0.0
Delay (s)	948.0	36.9	34.9	102.7	29.5	14.9	124.9	29.1	22.8	41.5	35.5	23.1
Level of Service	F	D	C	F	C	B	F	C	C	D	D	C
Approach Delay (s/veh)		36.8			49.8			46.8			36.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	42.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

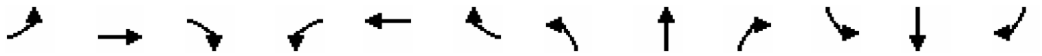
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	558	114	299	1253	1	208	6	138	1	3	0
Future Volume (vph)	0	558	114	299	1253	1	208	6	138	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor		0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt		0.97		1.00	0.99		1.00	1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (prot)		3449		3433	3539		1681	1690	1583		1840	
Flt Permitted		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (perm)		3449		3433	3539		1681	1690	1583		1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	607	124	325	1362	1	226	7	150	1	3	0
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	127	0	0	0
Lane Group Flow (vph)	0	711	0	325	1363	0	118	115	23	0	4	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)		16.6		10.0	30.6		8.9	8.9	8.9		0.5	
Effective Green, g (s)		15.7		10.0	29.7		8.3	8.3	8.3		0.5	
Actuated g/C Ratio		0.29		0.19	0.56		0.16	0.16	0.16		0.01	
Clearance Time (s)		4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)		1012		641	1964		260	262	245		17	
v/s Ratio Prot		0.21		0.09	c0.39		c0.07	0.07			c0.00	
v/s Ratio Perm									0.01			
v/c Ratio		0.70		0.50	0.69		0.45	0.43	0.09		0.23	
Uniform Delay, d1		16.8		19.5	8.6		20.5	20.4	19.3		26.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.8		0.2	0.8		0.4	0.4	0.0		2.5	
Delay (s)		18.6		19.7	9.4		20.9	20.9	19.4		28.8	
Level of Service		B		B	A		C	C	B		C	
Approach Delay (s/veh)		18.6			11.4			20.3			28.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	53.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

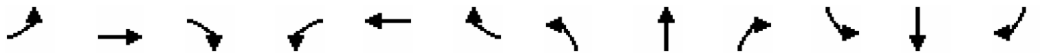
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	292	130	111	651	92	233	645	74	129	800	486
Future Volume (vph)	316	292	130	111	651	92	233	645	74	129	800	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3485		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3485		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	343	317	141	121	708	100	253	701	80	140	870	528
RTOR Reduction (vph)	0	0	92	0	0	74	0	7	0	0	0	39
Lane Group Flow (vph)	343	317	49	121	708	26	253	774	0	140	870	489
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	15.9	38.6	38.6	6.1	28.8	28.8	18.0	36.6		13.2	31.8	47.7
Effective Green, g (s)	15.9	39.9	38.6	6.1	30.1	28.8	18.0	35.7		13.2	30.9	45.9
Actuated g/C Ratio	0.14	0.36	0.35	0.06	0.27	0.26	0.16	0.32		0.12	0.28	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	493	1277	552	97	964	412	288	1125		211	989	727
v/s Ratio Prot	c0.10	0.09		c0.07	c0.20		c0.14	0.22		0.08	c0.25	0.09
v/s Ratio Perm			0.03			0.02						0.22
v/c Ratio	0.69	0.24	0.08	1.24	0.73	0.06	0.87	0.68		0.66	0.87	0.67
Uniform Delay, d1	44.9	24.7	24.1	52.2	36.5	30.7	45.1	32.5		46.5	38.0	26.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.2	0.1	0.0	171.9	2.9	0.0	24.6	1.7		7.6	9.0	2.4
Delay (s)	49.2	24.8	24.2	224.1	39.4	30.7	69.8	34.3		54.1	47.0	28.6
Level of Service	D	C	C	F	D	C	E	C		D	D	C
Approach Delay (s/veh)		35.1			62.6			43.0			41.3	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	110.5	Sum of lost time (s)	16.5
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

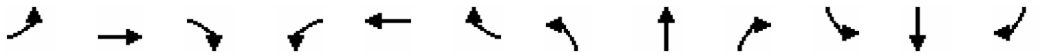
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	814	0	494	0	610	193	105	866	443
Future Volume (vph)	0	0	0	814	0	494	0	610	193	105	866	443
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		0.99	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5058	1583
Flt Permitted				0.95		1.00		1.00	1.00		0.79	1.00
Satd. Flow (perm)				3433		1583		5085	1583		4019	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	885	0	537	0	663	210	114	941	482
RTOR Reduction (vph)	0	0	0	0	0	23	0	0	0	0	0	275
Lane Group Flow (vph)	0	0	0	885	0	514	0	663	210	0	1055	207
Turn Type				Prot		Prot		NA	Free	Perm	NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free	6		
Actuated Green, G (s)				25.4		25.4		26.6	60.0		26.6	26.6
Effective Green, g (s)				25.4		25.4		25.8	60.0		25.8	25.8
Actuated g/C Ratio				0.42		0.42		0.43	1.00		0.43	0.43
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1453		670		2186	1583		1728	680
v/s Ratio Prot				0.26		c0.32		0.13				0.13
v/s Ratio Perm									0.13		c0.26	
v/c Ratio				0.60		0.76		0.30	0.13		0.61	0.30
Uniform Delay, d1				13.4		14.7		11.2	0.0		13.2	11.2
Progression Factor				1.00		1.00		0.80	1.00		1.00	1.00
Incremental Delay, d2				0.5		4.7		0.3	0.1		1.6	1.1
Delay (s)				13.9		19.5		9.3	0.1		14.8	12.3
Level of Service				B		B		A	A		B	B
Approach Delay (s/veh)		0.0			16.0			7.1			14.0	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

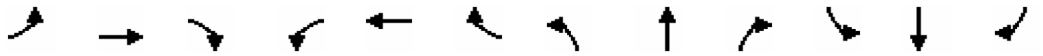
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	0	311	0	0	0	0	835	421	0	1235	483
Future Volume (vph)	287	0	311	0	0	0	0	835	421	0	1235	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	312	0	338	0	0	0	0	908	458	0	1342	525
RTOR Reduction (vph)	0	0	80	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	312	0	258	0	0	0	0	908	458	0	1342	525
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	10.1		10.1					40.9	60.0		40.9	60.0
Effective Green, g (s)	10.1		10.1					41.9	60.0		41.9	60.0
Actuated g/C Ratio	0.17		0.17					0.70	1.00		0.70	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	577		469					3551	1583		3551	1583
v/s Ratio Prot	0.09							0.18			c0.26	
v/s Ratio Perm			c0.09						0.29			0.33
v/c Ratio	0.54		0.55					0.25	0.28		0.37	0.33
Uniform Delay, d1	22.8		22.8					3.3	0.0		3.7	0.0
Progression Factor	1.00		1.00					1.00	1.00		0.98	1.00
Incremental Delay, d2	0.5		0.7					0.1	0.4		0.2	0.4
Delay (s)	23.3		23.6					3.4	0.4		3.9	0.4
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		23.5			0.0			2.4			2.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		

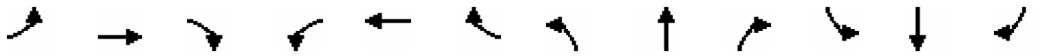
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	66	25	668	0	1279	345	0	362	683
Future Volume (vph)	0	0	0	66	25	668	0	1279	345	0	362	683
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.90	
Flt Protected				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1722	2787		3539	1583		4587	
Flt Permitted				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1722	2787		3539	1583		4587	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	72	27	726	0	1390	375	0	393	742
RTOR Reduction (vph)	0	0	0	0	0	39	0	0	170	0	337	0
Lane Group Flow (vph)	0	0	0	38	61	687	0	1390	205	0	798	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				17.0	17.0	17.0		28.8	28.8		28.8	
Effective Green, g (s)				17.0	17.0	17.0		30.1	30.1		30.1	
Actuated g/C Ratio				0.31	0.31	0.31		0.55	0.55		0.55	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				518	531	859		1933	864		2505	
v/s Ratio Prot				0.02	0.04			c0.39			0.17	
v/s Ratio Perm						c0.25			0.13			
v/c Ratio				0.07	0.11	0.79		0.71	0.23		0.31	
Uniform Delay, d1				13.4	13.6	17.4		9.3	6.5		6.8	
Progression Factor				1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2				0.0	0.0	4.9		1.4	0.1		0.1	
Delay (s)				13.4	13.6	22.3		10.7	6.7		6.9	
Level of Service				B	B	C		B	A		A	
Approach Delay (s/veh)		0.0			21.3			9.8			6.9	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	55.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	684	215	431	56	34	106	61	587	215	89	206	151
Future Volume (vph)	684	215	431	56	34	106	61	587	215	89	206	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3397		1770	3315	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3397		1770	3315	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	743	234	468	61	37	115	66	638	234	97	224	164
RTOR Reduction (vph)	0	0	348	0	0	90	0	43	0	0	117	0
Lane Group Flow (vph)	743	234	120	61	37	25	66	829	0	97	271	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	20.1	20.1	20.1	10.2	10.2	14.5	10.6	27.5		4.3	21.2	
Effective Green, g (s)	20.1	20.1	20.1	9.8	9.8	13.7	10.1	28.8		4.3	22.5	
Actuated g/C Ratio	0.26	0.26	0.26	0.13	0.13	0.18	0.13	0.37		0.06	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	883	479	407	222	233	366	228	1252		97	955	
v/s Ratio Prot	c0.22	0.13		c0.03	0.02	0.00	0.04	c0.24		c0.05	0.08	
v/s Ratio Perm			0.08			0.01						
v/c Ratio	0.84	0.48	0.29	0.27	0.15	0.06	0.28	0.66		1.00	0.28	
Uniform Delay, d1	27.4	24.6	23.3	30.9	30.4	26.8	30.7	20.5		36.9	21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	0.2	0.1	0.2	0.1	0.0	0.2	1.3		91.3	0.2	
Delay (s)	34.5	24.9	23.4	31.1	30.5	26.9	31.0	21.9		128.2	21.7	
Level of Service	C	C	C	C	C	C	C	C		F	C	
Approach Delay (s/veh)		29.3			28.7			22.6			43.0	
Approach LOS		C			C			C			D	

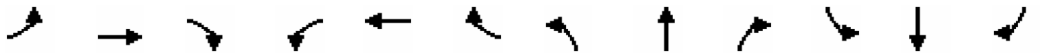
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	78.1	Sum of lost time (s)	15.6
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	64	46	410	781	404	379	988	99	160	1403	303
Future Volume (vph)	33	64	46	410	781	404	379	988	99	160	1403	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	70	50	446	849	439	412	1074	108	174	1525	329
RTOR Reduction (vph)	0	0	42	0	0	53	0	0	68	0	0	108
Lane Group Flow (vph)	36	70	8	446	849	386	412	1074	40	174	1525	221
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	3.9	17.1	17.1	17.9	31.1	41.8	12.9	39.1	39.1	10.7	36.9	36.9
Effective Green, g (s)	3.9	17.1	17.1	17.9	31.1	41.8	12.9	39.1	39.1	10.7	36.9	36.9
Actuated g/C Ratio	0.04	0.16	0.16	0.17	0.29	0.39	0.12	0.37	0.37	0.10	0.35	0.35
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	126	570	255	298	1038	703	417	1875	583	346	1770	551
v/s Ratio Prot	0.01	0.02		c0.25	c0.24	0.06	c0.12	0.21		0.05	c0.30	
v/s Ratio Perm			0.01			0.19			0.03			0.14
v/c Ratio	0.28	0.12	0.03	1.49	0.81	0.54	0.98	0.57	0.06	0.50	0.86	0.40
Uniform Delay, d1	49.6	38.0	37.4	44.0	34.8	24.8	46.4	26.7	21.6	45.1	32.1	26.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	0.0	240.4	5.1	0.8	40.4	0.4	0.0	1.1	4.5	0.4
Delay (s)	50.9	38.1	37.5	284.4	39.9	25.6	86.9	27.1	21.7	46.2	36.7	26.6
Level of Service	D	D	D	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		40.8			99.2			42.2			35.9	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

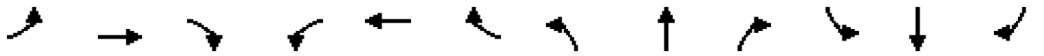
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	95	50	883	909	0	725	0	1132	0	0	0
Future Volume (vph)	0	95	50	883	909	0	725	0	1132	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	103	54	960	988	0	788	0	1230	0	0	0
RTOR Reduction (vph)	0	0	48	0	0	0	0	0	135	0	0	0
Lane Group Flow (vph)	0	103	6	960	988	0	0	788	1095	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		10.0	10.0	41.0	55.0			40.0	81.0			
Effective Green, g (s)		12.0	12.0	43.0	57.0			39.8	85.0			
Actuated g/C Ratio		0.12	0.12	0.42	0.55			0.39	0.83			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		412	184	1433	1030			683	2354			
v/s Ratio Prot		0.03		0.28	c0.53			c0.45	0.19			
v/s Ratio Perm			0.00						0.20			
v/c Ratio		0.25	0.03	0.66	0.95			1.15	0.46			
Uniform Delay, d1		41.4	40.3	24.2	21.8			31.6	2.5			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.3	0.0	1.2	18.7			85.2	0.1			
Delay (s)		41.7	40.4	25.4	40.6			116.8	2.6			
Level of Service		D	D	C	D			F	A			
Approach Delay (s/veh)		41.2			33.1			47.2			0.0	
Approach LOS		D			C			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

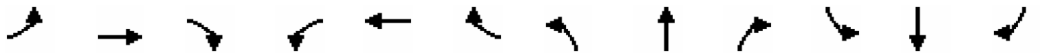
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	328	40	279	1078	40	2	3	38	57	5	8
Future Volume (vph)	233	328	40	279	1078	40	2	3	38	57	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	253	357	43	303	1172	43	2	3	41	62	5	9
RTOR Reduction (vph)	0	0	26	0	0	22	0	36	0	0	0	8
Lane Group Flow (vph)	253	357	17	303	1172	21	2	8	0	62	5	1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	9.7	26.1	26.1	16.0	32.4	32.4	1.0	7.4		3.0	9.4	9.4
Effective Green, g (s)	9.7	27.4	27.4	16.0	33.7	33.7	1.0	8.4		3.0	8.8	8.8
Actuated g/C Ratio	0.14	0.40	0.40	0.23	0.49	0.49	0.01	0.12		0.04	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	486	1415	633	413	1741	778	25	196		77	239	203
v/s Ratio Prot	0.07	0.10		c0.17	c0.33		0.00	c0.01		c0.04	0.00	
v/s Ratio Perm			0.01			0.01						0.00
v/c Ratio	0.52	0.25	0.02	0.73	0.67	0.02	0.08	0.04		0.80	0.02	0.00
Uniform Delay, d1	27.2	13.7	12.4	24.2	13.2	8.9	33.2	26.4		32.4	26.0	26.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.0	0.0	6.6	1.0	0.0	1.3	0.0		43.8	0.0	0.0
Delay (s)	28.2	13.8	12.4	30.9	14.2	8.9	34.6	26.5		76.2	26.1	26.0
Level of Service	C	B	B	C	B	A	C	C		E	C	C
Approach Delay (s/veh)		19.3			17.4			26.9			67.0	
Approach LOS		B			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	15.3
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

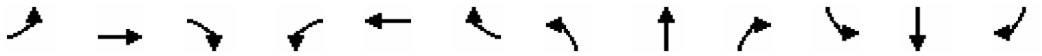
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	310	197	253	645	64	479	270	101	11	76	2
Future Volume (vph)	2	310	197	253	645	64	479	270	101	11	76	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3491		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3491		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	337	214	275	701	70	521	293	110	12	83	2
RTOR Reduction (vph)	0	0	162	0	6	0	0	0	63	0	0	2
Lane Group Flow (vph)	2	337	52	275	765	0	521	293	47	12	83	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.5	18.6	18.6	9.6	26.7		20.1	33.6	33.6	1.5	15.4	15.4
Effective Green, g (s)	1.5	19.9	19.9	9.6	28.0		20.1	34.9	34.9	1.5	14.5	14.5
Actuated g/C Ratio	0.02	0.24	0.24	0.12	0.34		0.25	0.43	0.43	0.02	0.18	0.18
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	32	859	677	584	1193		842	1508	674	32	626	280
v/s Ratio Prot	0.00	0.10		c0.06	c0.22		c0.15	c0.08		0.01	0.02	
v/s Ratio Perm			0.02						0.03			0.00
v/c Ratio	0.06	0.39	0.07	0.47	0.64		0.61	0.19	0.06	0.37	0.13	0.00
Uniform Delay, d1	39.5	25.9	23.9	33.7	22.7		27.4	14.7	13.8	39.7	28.4	27.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.0	0.2	1.1		0.9	0.0	0.0	2.6	0.0	0.0
Delay (s)	39.8	26.2	23.9	33.9	23.9		28.4	14.7	13.9	42.4	28.4	27.7
Level of Service	D	C	C	C	C		C	B	B	D	C	C
Approach Delay (s/veh)		25.4			26.5			22.3			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	17.8
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

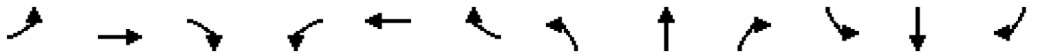
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	451	31	15	679	128	89	10	6	25	1	28
Future Volume (vph)	205	451	31	15	679	128	89	10	6	25	1	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1845		1770	1818		1770	1754		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.74	1.00	
Satd. Flow (perm)	1770	1845		1770	1818		1373	1754		1389	1592	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	490	34	16	738	139	97	11	7	27	1	30
RTOR Reduction (vph)	0	2	0	0	7	0	0	6	0	0	26	0
Lane Group Flow (vph)	223	522	0	16	870	0	97	12	0	27	5	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	13.2	55.6		1.4	43.8		11.0	11.0		11.0	11.0	
Effective Green, g (s)	13.2	55.6		1.4	43.8		11.0	11.0		11.0	11.0	
Actuated g/C Ratio	0.16	0.70		0.02	0.55		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	292	1282		30	995		188	241		190	218	
v/s Ratio Prot	c0.13	0.28		0.01	c0.48			0.01			0.00	
v/s Ratio Perm							c0.07			0.02		
v/c Ratio	0.76	0.40		0.53	0.87		0.51	0.04		0.14	0.02	
Uniform Delay, d1	31.9	5.1		38.9	15.7		32.0	29.9		30.3	29.8	
Progression Factor	1.00	1.00		0.90	0.72		1.00	1.00		1.00	1.00	
Incremental Delay, d2	11.2	0.9		9.0	5.8		2.3	0.0		0.3	0.0	
Delay (s)	43.1	6.1		44.4	17.2		34.4	30.0		30.6	29.8	
Level of Service	D	A		D	B		C	C		C	C	
Approach Delay (s/veh)		17.1			17.7			33.7			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

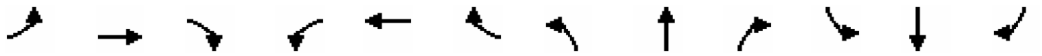
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	288	91	11	567	257	241	173	12	51	13	14
Future Volume (vph)	103	288	91	11	567	257	241	173	12	51	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1796		1770	1776		1770	1845		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.50	1.00	
Satd. Flow (perm)	1770	1796		1770	1776		1375	1845		949	1718	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	112	313	99	12	616	279	262	188	13	55	14	15
RTOR Reduction (vph)	0	12	0	0	21	0	0	3	0	0	11	0
Lane Group Flow (vph)	112	400	0	12	874	0	262	198	0	55	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	9.3	48.2		0.8	39.7		19.0	19.0		19.0	19.0	
Effective Green, g (s)	9.3	48.2		0.8	39.7		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.12	0.60		0.01	0.50		0.24	0.24		0.24	0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	1082		17	881		326	438		225	408	
v/s Ratio Prot	c0.06	0.22		0.01	c0.49			0.11			0.01	
v/s Ratio Perm							c0.19			0.06		
v/c Ratio	0.54	0.36		0.70	0.99		0.80	0.45		0.24	0.04	
Uniform Delay, d1	33.3	8.1		39.4	19.9		28.7	26.0		24.6	23.4	
Progression Factor	0.86	0.39		1.06	1.02		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	0.9		74.4	26.0		13.3	0.7		0.5	0.0	
Delay (s)	31.7	4.1		116.3	46.6		42.0	26.7		25.2	23.5	
Level of Service	C	A		F	D		D	C		C	C	
Approach Delay (s/veh)		10.0			47.5			35.4			24.6	
Approach LOS		B			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

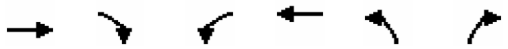
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	5	307	310	25	89	392	665	47	26	663	57
Future Volume (vph)	5	5	307	310	25	89	392	665	47	26	663	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.85	0.85	1.00	0.88		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1512	1504	1770	1644		3433	3504		1770	3497	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1512	1504	1770	1644		3433	3504		1770	3497	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	334	337	27	97	426	723	51	28	721	62
RTOR Reduction (vph)	0	133	138	0	72	0	0	5	0	0	6	0
Lane Group Flow (vph)	5	36	32	337	52	0	426	769	0	28	777	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	0.6	13.5	13.5	5.2	18.1		12.8	35.0		1.7	23.9	
Effective Green, g (s)	0.6	13.5	13.5	5.2	18.1		12.8	35.0		1.7	23.9	
Actuated g/C Ratio	0.01	0.19	0.19	0.07	0.25		0.18	0.49		0.02	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	285	284	128	416		615	1717		42	1170	
v/s Ratio Prot	0.00	0.02		c0.19	c0.03		c0.12	0.22		0.02	c0.22	
v/s Ratio Perm			0.02									
v/c Ratio	0.35	0.12	0.11	2.63	0.12		0.69	0.44		0.66	0.66	
Uniform Delay, d1	35.2	24.0	23.9	33.1	20.5		27.4	11.8		34.5	20.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.9	0.2	0.1	756.7	0.1		3.3	0.8		33.3	2.9	
Delay (s)	50.1	24.2	24.1	789.8	20.6		30.8	12.7		67.9	23.2	
Level of Service	D	C	C	F	C		C	B		E	C	
Approach Delay (s/veh)		24.5			582.9			19.1			24.8	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	113.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

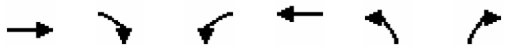
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	419	22	0	1276	0	10
Future Volume (Veh/h)	419	22	0	1276	0	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	24	0	1387	0	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.95		0.85	0.95
vC, conflicting volume			479		929	164
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			284		0	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1216		868	1034

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	182	182	115	462	462	462	11
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	24	0	0	0	11
cSH	1700	1700	1700	1700	1700	1700	1034
Volume to Capacity	0.11	0.11	0.07	0.27	0.27	0.27	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	28.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	318	18	56	639	48	57
Future Volume (vph)	318	18	56	639	48	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.99		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	1849		1770	1863	1687	
Flt Permitted	1.00		0.53	1.00	0.97	
Satd. Flow (perm)	1849		1001	1863	1687	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	346	20	61	695	52	62
RTOR Reduction (vph)	1	0	0	0	47	0
Lane Group Flow (vph)	365	0	61	695	67	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	85.9		85.9	85.9	11.1	
Effective Green, g (s)	85.9		85.9	85.9	11.1	
Actuated g/C Ratio	0.82		0.82	0.82	0.11	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1512		818	1524	178	
v/s Ratio Prot	0.20			c0.37	c0.04	
v/s Ratio Perm			0.06			
v/c Ratio	0.24		0.07	0.45	0.37	
Uniform Delay, d1	2.1		1.8	2.7	43.7	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.0	0.2	1.3	
Delay (s)	2.5		1.8	2.9	45.0	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	2.5			2.8	45.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

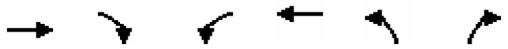
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	280	633	826	400	62
Future Volume (vph)	37	280	633	826	400	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.88	0.85	1.00	1.00	0.97	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1629	1504	3433	3539	3468	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1629	1504	3433	3539	3468	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	304	688	898	435	67
RTOR Reduction (vph)	115	80	0	0	20	0
Lane Group Flow (vph)	59	90	688	898	482	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	7.3	27.3	16.0	36.0	16.0	
Effective Green, g (s)	7.3	27.3	16.0	36.0	16.0	
Actuated g/C Ratio	0.14	0.53	0.31	0.70	0.31	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	231	800	1070	2483	1081	
v/s Ratio Prot	c0.04	0.06	c0.20	0.25	c0.14	
v/s Ratio Perm						
v/c Ratio	0.25	0.11	0.64	0.36	0.44	
Uniform Delay, d1	19.5	5.9	15.1	3.0	14.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.0	1.3	0.0	0.2	
Delay (s)	20.1	6.0	16.5	3.1	14.4	
Level of Service	C	A	B	A	B	
Approach Delay (s/veh)	13.1			8.9	14.4	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	51.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

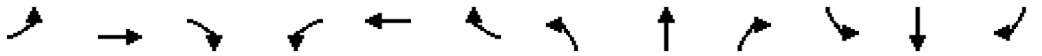
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	279	72	44	643	192	57
Future Volume (vph)	279	72	44	643	192	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1811		1770	1863	1738	
Flt Permitted	1.00		0.50	1.00	0.96	
Satd. Flow (perm)	1811		950	1863	1738	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	78	48	699	209	62
RTOR Reduction (vph)	10	0	0	0	14	0
Lane Group Flow (vph)	371	0	48	699	257	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	55.2		55.2	55.2	16.8	
Effective Green, g (s)	55.2		55.2	55.2	16.8	
Actuated g/C Ratio	0.69		0.69	0.69	0.21	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1249		655	1285	364	
v/s Ratio Prot	0.21			c0.38	c0.15	
v/s Ratio Perm			0.05			
v/c Ratio	0.29		0.07	0.54	0.70	
Uniform Delay, d1	4.8		4.0	6.1	29.3	
Progression Factor	0.88		1.00	1.00	1.00	
Incremental Delay, d2	0.5		0.0	0.4	6.1	
Delay (s)	4.8		4.0	6.6	35.4	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	4.8			6.4	35.4	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

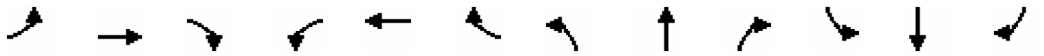
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	24	153	103	41	29	196	548	15	8	490	28
Future Volume (vph)	2	24	153	103	41	29	196	548	15	8	490	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1621		1770	1747		1770	3525		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1621		1770	1747		1770	3525		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	26	166	112	45	32	213	596	16	9	533	30
RTOR Reduction (vph)	0	131	0	0	23	0	0	2	0	0	0	21
Lane Group Flow (vph)	2	61	0	112	54	0	213	610	0	9	533	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	0.5	13.9		4.3	17.7		12.3	30.3		0.5	18.5	18.5
Effective Green, g (s)	0.5	13.9		4.3	17.7		12.3	30.3		0.5	18.5	18.5
Actuated g/C Ratio	0.01	0.21		0.07	0.27		0.19	0.47		0.01	0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	13	346		117	475		334	1643		13	1007	450
v/s Ratio Prot	0.00	c0.04		c0.06	c0.03		c0.12	0.17		0.01	c0.15	
v/s Ratio Perm												0.01
v/c Ratio	0.15	0.17		0.95	0.11		0.63	0.37		0.69	0.52	0.01
Uniform Delay, d1	32.0	20.8		30.2	17.7		24.2	11.2		32.1	19.5	16.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.4	0.2		69.0	0.1		3.9	0.1		96.2	0.5	0.0
Delay (s)	37.5	21.1		99.3	17.8		28.2	11.3		128.4	20.0	16.7
Level of Service	D	C		F	B		C	B		F	C	B
Approach Delay (s/veh)		21.2			66.1			15.7			21.6	
Approach LOS		C			E			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	331	91	40	762	0	200	0	37	0	0	0
Future Volume (vph)	0	331	91	40	762	0	200	0	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00				
Frt		0.96		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3425		1770	3539		1770	1583				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3425		1770	3539		1770	1583				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	360	99	43	828	0	217	0	40	0	0	0
RTOR Reduction (vph)	0	24	0	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	435	0	43	828	0	217	13	0	0	0	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		20.0		1.5	25.5		8.3	15.9				
Effective Green, g (s)		20.0		1.5	25.5		8.3	15.9				
Actuated g/C Ratio		0.40		0.03	0.52		0.17	0.32				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1386		53	1826		297	509				
v/s Ratio Prot		0.13		0.02	c0.23		c0.12	c0.01				
v/s Ratio Perm												
v/c Ratio		0.31		0.81	0.45		0.73	0.02				
Uniform Delay, d1		10.0		23.8	7.5		19.4	11.4				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.1		59.6	0.1		8.9	0.0				
Delay (s)		10.1		83.4	7.7		28.4	11.4				
Level of Service		B		F	A		C	B				
Approach Delay (s/veh)		10.1			11.4			25.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	49.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	359	10	0	802	0	66
Future Volume (Veh/h)	359	10	0	802	0	66
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	390	11	0	872	0	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked						
vC, conflicting volume			401		832	201
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			401		832	201
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			1154		308	807

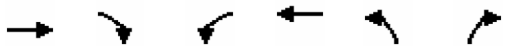
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	260	141	436	436	0	72
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	72
cSH	1700	1700	1700	1700	1700	807
Volume to Capacity	0.15	0.08	0.26	0.26	0.00	0.09
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.9
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.9	
Approach LOS					A	

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	25.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	389	29	77	1008	29	161	6	18	29	79	107
Future Volume (vph)	11	389	29	77	1008	29	161	6	18	29	79	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032		1770	5064		1770	1656		1770	1702	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5032		1770	5064		1770	1656		1770	1702	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	423	32	84	1096	32	175	7	20	32	86	116
RTOR Reduction (vph)	0	10	0	0	3	0	0	13	0	0	77	0
Lane Group Flow (vph)	12	445	0	84	1125	0	175	14	0	32	125	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	16.7		4.0	20.2		9.4	21.8		1.7	14.1	
Effective Green, g (s)	0.5	16.7		4.0	20.2		9.4	21.8		1.7	14.1	
Actuated g/C Ratio	0.01	0.28		0.07	0.34		0.16	0.36		0.03	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	1395		117	1699		276	599		49	398	
v/s Ratio Prot	0.01	0.09		c0.05	c0.22		c0.10	0.01		0.02	c0.07	
v/s Ratio Perm												
v/c Ratio	0.85	0.31		0.71	0.66		0.63	0.02		0.65	0.31	
Uniform Delay, d1	29.8	17.2		27.5	17.0		23.7	12.3		28.9	19.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	164.6	0.1		18.8	0.9		4.7	0.0		27.1	0.4	
Delay (s)	194.4	17.3		46.4	18.0		28.4	12.3		56.0	19.5	
Level of Service	F	B		D	B		C	B		E	B	
Approach Delay (s/veh)		21.9			20.0			26.3			24.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	60.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

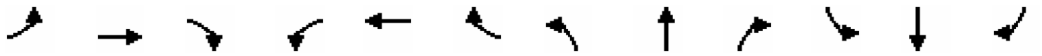
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	415	8	0	1397	0	6
Future Volume (Veh/h)	415	8	0	1397	0	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	451	9	0	1518	0	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked					0.80	
vC, conflicting volume			460		962	155
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			460		69	155
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1097		741	863

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	180	180	99	506	506	506	7
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	9	0	0	0	7
cSH	1700	1700	1700	1700	1700	1700	863
Volume to Capacity	0.11	0.11	0.06	0.30	0.30	0.30	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

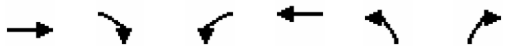
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	389	21	116	1131	29	160	6	24	28	79	106
Future Volume (vph)	11	389	21	116	1131	29	160	6	24	28	79	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5046		1770	5066		1770	1643		1770	1703	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5046		1770	5066		1770	1643		1770	1703	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	423	23	126	1229	32	174	7	26	30	86	115
RTOR Reduction (vph)	0	6	0	0	3	0	0	17	0	0	64	0
Lane Group Flow (vph)	12	440	0	126	1258	0	174	16	0	30	137	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	17.5		7.6	24.6		11.0	24.4		1.7	15.1	
Effective Green, g (s)	0.5	17.5		7.6	24.6		11.0	24.4		1.7	15.1	
Actuated g/C Ratio	0.01	0.26		0.11	0.37		0.16	0.36		0.03	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	13	1314		200	1854		289	596		44	382	
v/s Ratio Prot	0.01	0.09		c0.07	c0.25		c0.10	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.92	0.33		0.63	0.67		0.60	0.02		0.68	0.35	
Uniform Delay, d1	33.3	20.1		28.4	17.9		26.0	13.7		32.4	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	207.3	0.1		6.3	1.0		3.5	0.0		35.6	0.5	
Delay (s)	240.6	20.2		34.7	18.9		29.5	13.7		68.1	22.5	
Level of Service	F	C		C	B		C	B		E	C	
Approach Delay (s/veh)		26.0			20.4			27.0			28.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	67.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

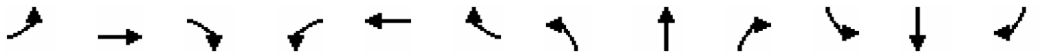


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	432	4	0	1114	0	3
Future Volume (Veh/h)	432	4	0	1114	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	470	4	0	1211	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.97		0.98	0.97
vC, conflicting volume			474		876	159
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			330		553	3
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1184		453	1042

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	188	188	98	404	404	404	3
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	3
cSH	1700	1700	1700	1700	1700	1700	1042
Volume to Capacity	0.11	0.11	0.06	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	24.9%	ICU Level of Service	A
Analysis Period (min)	15		

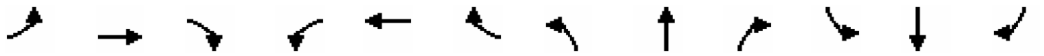
Appendix B – 2040 Option 1 LOS Calculations – PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	173	422	291	189	282	463	994	267	310	1321	18
Future Volume (vph)	9	173	422	291	189	282	463	994	267	310	1321	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	188	459	316	205	307	503	1080	290	337	1436	20
RTOR Reduction (vph)	0	0	56	0	0	50	0	0	172	0	0	12
Lane Group Flow (vph)	10	188	403	316	205	257	503	1080	118	337	1436	8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.8	23.3	50.3	14.4	36.9	64.1	27.0	55.9	55.9	27.2	56.1	56.1
Effective Green, g (s)	0.2	22.7	49.1	13.8	36.3	62.9	28.0	56.9	56.9	28.2	57.1	56.1
Actuated g/C Ratio	0.00	0.16	0.35	0.10	0.26	0.45	0.20	0.41	0.41	0.20	0.41	0.40
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	2	302	555	174	483	711	354	2066	643	691	2073	634
v/s Ratio Prot	0.01	0.10	c0.14	c0.18	0.11	0.07	c0.28	0.21		0.10	c0.28	
v/s Ratio Perm			0.12			0.09			0.07			0.01
v/c Ratio	5.00	0.62	0.72	1.81	0.42	0.36	1.42	0.52	0.18	0.48	0.69	0.01
Uniform Delay, d1	69.9	54.6	39.5	63.1	43.1	25.3	56.0	31.3	26.6	49.5	34.2	25.2
Progression Factor	1.07	0.81	0.69	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2493.2	3.3	4.0	388.9	0.6	0.3	205.2	0.9	0.6	0.5	1.9	0.0
Delay (s)	2568.2	47.7	31.6	452.0	43.7	25.6	261.2	32.2	27.2	50.0	36.1	25.3
Level of Service	F	D	C	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		74.9			192.8			92.9			38.6	
Approach LOS		E			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	87.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1091	249	239	911	2	201	2	488	7	1	3
Future Volume (vph)	2	1091	249	239	911	2	201	2	488	7	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (prot)	1770	3440		3433	3538		1681	1687	1583		1742	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (perm)	1770	3440		3433	3538		1681	1687	1583		1742	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	1186	271	260	990	2	218	2	530	8	1	3
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	306	0	3	0
Lane Group Flow (vph)	2	1444	0	260	992	0	113	107	224	0	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)	0.7	52.7		11.7	63.7		17.4	17.4	17.4		0.7	
Effective Green, g (s)	0.7	51.8		11.7	62.8		16.8	16.8	16.8		0.7	
Actuated g/C Ratio	0.01	0.52		0.12	0.63		0.17	0.17	0.17		0.01	
Clearance Time (s)	4.0	4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	12	1781		401	2221		282	283	265		12	
v/s Ratio Prot	0.00	c0.42		c0.08	0.28		0.07	0.06			c0.01	
v/s Ratio Perm									c0.14			
v/c Ratio	0.16	0.81		0.64	0.44		0.40	0.37	0.84		0.75	
Uniform Delay, d1	49.3	20.0		42.1	9.6		37.1	36.9	40.3		49.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	2.3	2.7		2.7	0.0		0.3	0.3	20.3		118.8	
Delay (s)	51.7	22.7		44.8	9.6		37.4	37.2	60.6		168.4	
Level of Service	D	C		D	A		D	D	E		F	
Approach Delay (s/veh)		22.8			16.9			53.8			168.4	
Approach LOS		C			B			D			F	

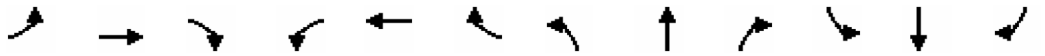
Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	837	654	180	42	391	70	270	729	194	224	995	505
Future Volume (vph)	837	654	180	42	391	70	270	729	194	224	995	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3428		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3428		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	910	711	196	46	425	76	293	792	211	243	1082	549
RTOR Reduction (vph)	0	0	137	0	0	63	0	16	0	0	0	54
Lane Group Flow (vph)	910	711	59	46	425	13	293	987	0	243	1082	495
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	24.0	37.8	37.8	8.1	21.9	21.9	23.0	45.1		21.0	43.1	67.1
Effective Green, g (s)	24.0	39.1	37.8	8.1	23.2	21.9	23.0	44.2		21.0	42.2	65.3
Actuated g/C Ratio	0.19	0.31	0.30	0.06	0.18	0.17	0.18	0.35		0.16	0.33	0.51
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	643	1081	467	112	641	270	318	1183		290	1166	807
v/s Ratio Prot	c0.27	c0.20		0.03	c0.12		c0.17	0.29		0.14	c0.31	0.11
v/s Ratio Perm			0.04			0.01						0.20
v/c Ratio	1.41	0.65	0.12	0.41	0.66	0.04	0.92	0.83		0.83	0.92	0.61
Uniform Delay, d1	52.0	38.6	33.0	57.6	48.7	44.3	51.6	38.5		51.8	41.4	22.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	195.9	1.4	0.1	2.4	2.5	0.0	30.8	5.2		18.6	12.5	1.3
Delay (s)	247.9	40.0	33.1	60.0	51.3	44.4	82.4	43.7		70.4	53.9	23.7
Level of Service	F	D	C	E	D	D	F	D		E	D	C
Approach Delay (s/veh)		143.4			51.1			52.5			47.2	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	80.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

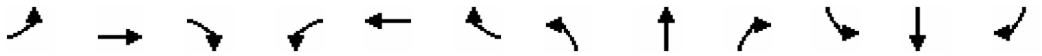
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	843	0	596	0	783	89	0	821	598
Future Volume (vph)	0	0	0	843	0	596	0	783	89	0	821	598
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5085	1583
Flt Permitted				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)				3433		1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	916	0	648	0	851	97	0	892	650
RTOR Reduction (vph)	0	0	0	0	0	80	0	0	0	0	0	361
Lane Group Flow (vph)	0	0	0	916	0	568	0	851	97	0	892	289
Turn Type				Prot		Prot		NA	Free		NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free			
Actuated Green, G (s)				30.1		30.1		31.9	70.0		31.9	31.9
Effective Green, g (s)				30.1		30.1		31.1	70.0		31.1	31.1
Actuated g/C Ratio				0.43		0.43		0.44	1.00		0.44	0.44
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1476		680		2259	1583		2259	703
v/s Ratio Prot				0.27		c0.36		0.17			0.18	c0.18
v/s Ratio Perm									0.06			
v/c Ratio				0.62		0.83		0.37	0.06		0.39	0.41
Uniform Delay, d1				15.5		17.7		12.9	0.0		13.1	13.2
Progression Factor				1.00		1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2				0.5		8.3		0.4	0.0		0.5	1.7
Delay (s)				16.0		26.1		13.4	0.0		13.6	14.9
Level of Service				B		C		B	A		B	B
Approach Delay (s/veh)		0.0			20.2			12.0			14.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

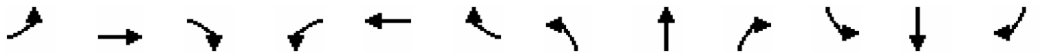
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	396	0	359	0	0	0	0	847	731	0	1121	671
Future Volume (vph)	396	0	359	0	0	0	0	847	731	0	1121	671
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	430	0	390	0	0	0	0	921	795	0	1218	729
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	430	0	305	0	0	0	0	921	795	0	1218	729
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	11.2		11.2					34.8	55.0		34.8	55.0
Effective Green, g (s)	11.2		11.2					35.8	55.0		35.8	55.0
Actuated g/C Ratio	0.20		0.20					0.65	1.00		0.65	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	699		567					3309	1583		3309	1583
v/s Ratio Prot	0.13							0.18			0.24	
v/s Ratio Perm			0.11						c0.50			0.46
v/c Ratio	0.61		0.53					0.27	0.50		0.36	0.46
Uniform Delay, d1	19.9		19.5					4.0	0.0		4.4	0.0
Progression Factor	1.00		1.00					1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1		0.4					0.2	1.1		0.3	0.9
Delay (s)	21.0		20.0					4.3	1.1		4.7	0.9
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		20.6			0.0			2.8			3.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

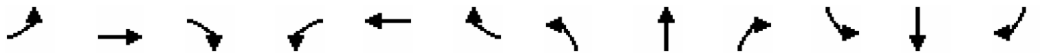
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	137	1	194	0	723	400	0	790	778
Future Volume (vph)	0	0	0	137	1	194	0	723	400	0	790	778
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.92	
Flt Protected				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1686	2787		3539	1583		4707	
Flt Permitted				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1686	2787		3539	1583		4707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	149	1	211	0	786	435	0	859	846
RTOR Reduction (vph)	0	0	0	0	0	180	0	0	113	0	165	0
Lane Group Flow (vph)	0	0	0	79	71	31	0	786	322	0	1540	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				10.2	10.2	10.2		50.5	50.5		50.5	
Effective Green, g (s)				10.2	10.2	10.2		51.8	51.8		51.8	
Actuated g/C Ratio				0.15	0.15	0.15		0.74	0.74		0.74	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				244	245	406		2618	1171		3483	
v/s Ratio Prot				c0.05	0.04			0.22			c0.33	
v/s Ratio Perm						0.01			0.20			
v/c Ratio				0.32	0.28	0.07		0.30	0.27		0.44	
Uniform Delay, d1				26.8	26.6	25.8		3.0	2.9		3.5	
Progression Factor				1.00	1.00	1.00		0.78	2.35		1.00	
Incremental Delay, d2				0.2	0.2	0.0		0.2	0.5		0.4	
Delay (s)				27.0	26.9	25.8		2.6	7.4		3.9	
Level of Service				C	C	C		A	A		A	
Approach Delay (s/veh)		0.0			26.3			4.3			3.9	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		

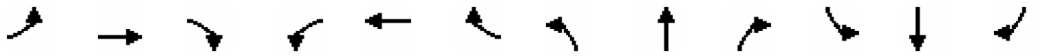
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	542	236	366	98	111	216	124	484	198	144	420	353
Future Volume (vph)	542	236	366	98	111	216	124	484	198	144	420	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3385		1770	3297	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3385		1770	3297	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	589	257	398	107	121	235	135	526	215	157	457	384
RTOR Reduction (vph)	0	0	297	0	0	83	0	26	0	0	106	0
Lane Group Flow (vph)	589	257	101	107	121	152	135	715	0	157	735	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	30.7	30.7	30.7	15.3	15.3	31.7	19.3	61.6		16.4	58.7	
Effective Green, g (s)	30.7	30.7	30.7	14.9	14.9	30.9	18.8	62.9		16.4	60.0	
Actuated g/C Ratio	0.22	0.22	0.22	0.11	0.11	0.22	0.13	0.45		0.12	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	752	408	347	188	198	399	237	1520		207	1413	
v/s Ratio Prot	c0.17	0.14		0.06	c0.06	0.04	0.08	c0.21		c0.09	c0.22	
v/s Ratio Perm			0.06			0.05						
v/c Ratio	0.78	0.62	0.28	0.56	0.61	0.38	0.56	0.47		0.75	0.51	
Uniform Delay, d1	51.5	49.5	45.5	59.4	59.7	46.4	56.8	26.9		59.8	29.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.83		1.04	0.93	
Incremental Delay, d2	4.9	2.1	0.1	2.3	3.8	0.2	0.8	0.4		12.2	1.2	
Delay (s)	56.4	51.6	45.7	61.8	63.6	46.6	46.8	22.8		74.6	28.8	
Level of Service	E	D	D	E	E	D	D	C		E	C	
Approach Delay (s/veh)		52.0			54.6			26.5			36.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	734	260	222	238	244	101	1296	679	304	1603	82
Future Volume (vph)	242	734	260	222	238	244	101	1296	679	304	1603	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	263	798	283	241	259	265	110	1409	738	330	1742	89
RTOR Reduction (vph)	0	0	113	0	0	37	0	0	194	0	0	52
Lane Group Flow (vph)	263	798	170	241	259	228	110	1409	544	330	1742	37
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.0	33.8	33.8	17.7	36.5	52.6	8.6	49.7	49.7	16.1	57.2	57.2
Effective Green, g (s)	15.0	33.8	33.8	17.7	36.5	52.6	8.6	49.7	49.7	16.1	57.2	57.2
Actuated g/C Ratio	0.11	0.24	0.24	0.13	0.26	0.38	0.06	0.36	0.36	0.12	0.41	0.41
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	371	863	386	226	932	661	213	1824	568	399	2100	653
v/s Ratio Prot	0.08	c0.23		c0.14	0.07	c0.04	0.03	0.28		c0.10	c0.34	
v/s Ratio Perm			0.11			0.10			c0.34			0.02
v/c Ratio	0.70	0.92	0.44	1.06	0.27	0.34	0.51	0.77	0.95	0.82	0.82	0.05
Uniform Delay, d1	59.6	51.1	44.3	60.4	40.5	30.6	62.9	39.3	43.3	59.8	36.2	24.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.0	15.3	0.8	78.5	0.1	0.3	2.1	2.0	27.3	13.1	2.8	0.0
Delay (s)	65.7	66.4	45.1	138.9	40.6	30.9	65.0	41.4	70.7	72.9	39.1	24.4
Level of Service	E	E	D	F	D	C	E	D	E	E	D	C
Approach Delay (s/veh)		61.8			68.2			52.1			43.7	
Approach LOS		E			E			D			D	

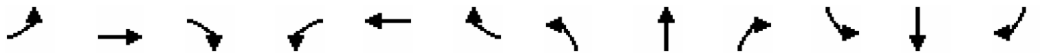
Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	21.2
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	775	297	1178	40	0	99	0	752	0	0	0
Future Volume (vph)	0	775	297	1178	40	0	99	0	752	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	842	323	1280	43	0	108	0	817	0	0	0
RTOR Reduction (vph)	0	0	226	0	0	0	0	0	279	0	0	0
Lane Group Flow (vph)	0	842	97	1280	43	0	0	108	538	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		33.0	33.0	55.5	92.5			19.5	75.0			
Effective Green, g (s)		35.0	35.0	57.5	94.5			19.3	79.0			
Actuated g/C Ratio		0.29	0.29	0.48	0.79			0.16	0.66			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		1032	461	1644	1467			284	1881			
v/s Ratio Prot		c0.24		c0.37	0.02			c0.06	0.14			
v/s Ratio Perm			0.06						0.06			
v/c Ratio		0.81	0.21	0.77	0.02			0.38	0.28			
Uniform Delay, d1		39.5	32.0	25.9	2.7			45.0	8.6			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		7.1	1.0	2.3	0.0			0.8	0.0			
Delay (s)		46.6	33.1	28.3	2.8			45.8	8.7			
Level of Service		D	C	C	A			D	A			
Approach Delay (s/veh)		42.8			27.5			13.0			0.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

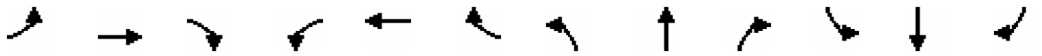
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	1129	109	61	351	44	13	6	330	39	4	90
Future Volume (vph)	117	1129	109	61	351	44	13	6	330	39	4	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1589		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1589		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	1227	118	66	382	48	14	7	359	42	4	98
RTOR Reduction (vph)	0	0	64	0	0	27	0	217	0	0	0	73
Lane Group Flow (vph)	127	1227	54	66	382	21	14	149	0	42	4	25
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	6.5	32.0	32.0	4.3	29.8	29.8	1.2	16.5		3.4	18.7	18.7
Effective Green, g (s)	6.5	33.3	33.3	4.3	31.1	31.1	1.2	17.5		3.4	18.1	18.1
Actuated g/C Ratio	0.09	0.46	0.46	0.06	0.43	0.43	0.02	0.24		0.05	0.25	0.25
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	309	1632	730	105	1524	681	29	385		83	467	396
v/s Ratio Prot	0.04	c0.35		c0.04	0.11		0.01	c0.09		c0.02	0.00	
v/s Ratio Perm			0.03			0.01						0.02
v/c Ratio	0.41	0.75	0.07	0.62	0.25	0.03	0.48	0.38		0.50	0.00	0.06
Uniform Delay, d1	31.0	16.0	10.8	33.1	13.1	11.8	35.1	22.8		33.5	20.3	20.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.0	0.0	11.2	0.0	0.0	12.1	0.6		4.7	0.0	0.0
Delay (s)	31.9	18.0	10.8	44.3	13.2	11.8	47.3	23.5		38.3	20.3	20.6
Level of Service	C	B	B	D	B	B	D	C		D	C	C
Approach Delay (s/veh)		18.6			17.2			24.3			25.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	15.3
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

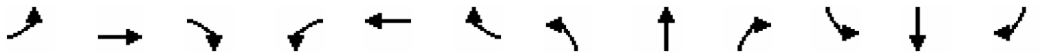
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	927	409	409	444	10	290	225	93	3	183	6
Future Volume (vph)	6	927	409	409	444	10	290	225	93	3	183	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3527		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3527		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	1008	445	445	483	11	315	245	101	3	199	7
RTOR Reduction (vph)	0	0	200	0	1	0	0	0	74	0	0	6
Lane Group Flow (vph)	7	1008	245	445	493	0	315	245	27	3	199	1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.6	39.2	39.2	12.9	50.5		11.1	24.8	24.8	1.6	15.7	15.7
Effective Green, g (s)	1.6	40.5	40.5	12.9	51.8		11.1	26.1	26.1	1.6	14.8	14.8
Actuated g/C Ratio	0.02	0.42	0.42	0.13	0.53		0.11	0.27	0.27	0.02	0.15	0.15
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	29	1476	1162	662	1881		392	951	425	29	539	241
v/s Ratio Prot	0.00	c0.28		c0.09	0.14		c0.09	0.07		0.00	c0.06	
v/s Ratio Perm			0.09						0.02			0.00
v/c Ratio	0.24	0.68	0.21	0.67	0.26		0.80	0.25	0.06	0.10	0.36	0.00
Uniform Delay, d1	47.1	23.0	18.0	40.0	12.2		41.9	27.8	26.4	47.0	36.9	34.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.3	0.0	2.1	0.0		10.7	0.1	0.0	0.5	0.4	0.0
Delay (s)	48.7	24.3	18.1	42.2	12.3		52.6	28.0	26.4	47.6	37.3	34.9
Level of Service	D	C	B	D	B		D	C	C	D	D	C
Approach Delay (s/veh)		22.6			26.5			39.5			37.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	97.1	Sum of lost time (s)	17.8
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

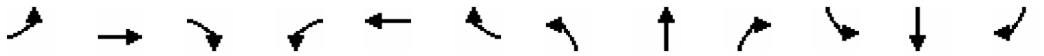
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	673	51	40	499	27	47	1	1	135	24	227
Future Volume (vph)	25	673	51	40	499	27	47	1	1	135	24	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.92		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1843		1770	1849		1770	1723		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00		0.27	1.00		0.75	1.00	
Satd. Flow (perm)	1770	1843		1770	1849		521	1723		1409	1610	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	732	55	43	542	29	51	1	1	147	26	247
RTOR Reduction (vph)	0	3	0	0	2	0	0	1	0	0	203	0
Lane Group Flow (vph)	27	784	0	43	569	0	51	1	0	147	70	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.8	49.7		4.0	49.9		14.3	14.3		14.3	14.3	
Effective Green, g (s)	3.8	49.7		4.0	49.9		14.3	14.3		14.3	14.3	
Actuated g/C Ratio	0.05	0.62		0.05	0.62		0.18	0.18		0.18	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	84	1144		88	1153		93	307		251	287	
v/s Ratio Prot	0.02	c0.43		0.02	c0.31			0.00			0.04	
v/s Ratio Perm							0.10			c0.10		
v/c Ratio	0.32	0.68		0.48	0.49		0.54	0.00		0.58	0.24	
Uniform Delay, d1	36.8	9.9		37.0	8.1		29.9	26.9		30.1	28.2	
Progression Factor	1.00	1.00		1.00	0.87		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	3.3		3.7	1.3		6.4	0.0		3.4	0.4	
Delay (s)	39.0	13.3		41.0	8.5		36.3	27.0		33.5	28.6	
Level of Service	D	B		D	A		D	C		C	C	
Approach Delay (s/veh)		14.2			10.7			36.0			30.3	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

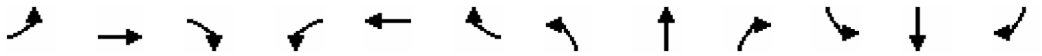
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	488	308	30	286	54	167	12	13	270	107	113
Future Volume (vph)	13	488	308	30	286	54	167	12	13	270	107	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.92		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1755		1770	1818		1770	1718		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00		0.45	1.00		0.73	1.00	
Satd. Flow (perm)	1770	1755		1770	1818		842	1718		1378	1719	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	530	335	33	311	59	182	13	14	293	116	123
RTOR Reduction (vph)	0	26	0	0	8	0	0	11	0	0	50	0
Lane Group Flow (vph)	14	839	0	33	362	0	182	17	0	293	190	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.1	45.6		2.4	44.9		20.0	20.0		20.0	20.0	
Effective Green, g (s)	3.1	45.6		2.4	44.9		20.0	20.0		20.0	20.0	
Actuated g/C Ratio	0.04	0.57		0.03	0.56		0.25	0.25		0.25	0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	68	1000		53	1020		210	429		344	429	
v/s Ratio Prot	0.01	c0.48		c0.02	0.20			0.01			0.11	
v/s Ratio Perm							c0.22			0.21		
v/c Ratio	0.20	0.83		0.62	0.35		0.86	0.03		0.85	0.44	
Uniform Delay, d1	37.2	14.1		38.3	9.6		28.7	22.7		28.5	25.2	
Progression Factor	1.16	0.81		1.09	1.02		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	6.7		20.1	0.9		29.1	0.0		17.9	0.7	
Delay (s)	44.5	18.3		62.0	10.8		57.8	22.7		46.5	26.0	
Level of Service	D	B		E	B		E	C		D	C	
Approach Delay (s/veh)		18.8			15.0			53.3			37.3	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

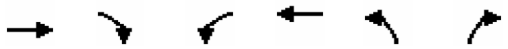
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	45	448	125	23	93	443	601	335	167	988	37
Future Volume (vph)	87	45	448	125	23	93	443	601	335	167	988	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.87	0.85	1.00	0.87		1.00	0.94		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1552	1504	1770	1639		3433	3349		1770	3520	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1552	1504	1770	1639		3433	3349		1770	3520	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	49	487	136	25	101	482	653	364	182	1074	40
RTOR Reduction (vph)	0	192	227	0	90	0	0	86	0	0	3	0
Lane Group Flow (vph)	95	81	36	136	36	0	482	931	0	182	1111	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.6	10.8	10.8	6.1	8.3		15.5	38.9		7.2	30.6	
Effective Green, g (s)	8.6	10.8	10.8	6.1	8.3		15.5	38.9		7.2	30.6	
Actuated g/C Ratio	0.11	0.14	0.14	0.08	0.11		0.20	0.49		0.09	0.39	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	192	212	205	136	172		673	1649		161	1363	
v/s Ratio Prot	0.05	c0.05		c0.08	0.02		c0.14	0.28		c0.10	c0.32	
v/s Ratio Perm			0.02									
v/c Ratio	0.49	0.38	0.17	1.00	0.20		0.71	0.56		1.13	0.81	
Uniform Delay, d1	33.1	31.0	30.1	36.4	32.3		29.6	14.0		35.9	21.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	1.1	0.4	77.1	0.6		3.6	0.4		110.2	3.8	
Delay (s)	35.1	32.2	30.5	113.6	32.9		33.3	14.5		146.1	25.5	
Level of Service	D	C	C	F	C		C	B		F	C	
Approach Delay (s/veh)		31.9			74.8			20.5			42.4	
Approach LOS		C			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

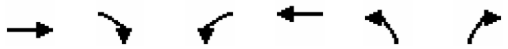
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1368	101	0	592	0	62
Future Volume (Veh/h)	1368	101	0	592	0	62
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1487	110	0	643	0	67
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.74		0.75	0.74
vC, conflicting volume			1597		1756	551
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			582		691	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			732		284	804

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	595	595	407	214	214	214	67
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	110	0	0	0	67
cSH	1700	1700	1700	1700	1700	1700	804
Volume to Capacity	0.35	0.35	0.24	0.13	0.13	0.13	0.08
Queue Length 95th (ft)	0	0	0	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.9
Approach LOS							A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	519	62	154	327	33	56
Future Volume (vph)	519	62	154	327	33	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.91	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1836		1770	1863	1674	
Flt Permitted	1.00		0.38	1.00	0.98	
Satd. Flow (perm)	1836		724	1863	1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	67	167	355	36	61
RTOR Reduction (vph)	3	0	0	0	54	0
Lane Group Flow (vph)	628	0	167	355	43	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	58.3		58.3	58.3	8.7	
Effective Green, g (s)	58.3		58.3	58.3	8.7	
Actuated g/C Ratio	0.78		0.78	0.78	0.12	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1427		562	1448	194	
v/s Ratio Prot	c0.34			0.19	c0.03	
v/s Ratio Perm			0.23			
v/c Ratio	0.44		0.29	0.24	0.22	
Uniform Delay, d1	2.8		2.4	2.2	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.9		0.2	0.0	0.5	
Delay (s)	3.8		2.7	2.3	30.6	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	3.8			2.4	30.6	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

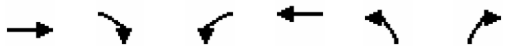
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	123	775	337	807	854	144
Future Volume (vph)	123	775	337	807	854	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.89	0.85	1.00	1.00	0.97	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1637	1504	3433	3539	3462	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1637	1504	3433	3539	3462	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	842	366	877	928	157
RTOR Reduction (vph)	109	34	0	0	16	0
Lane Group Flow (vph)	387	446	366	877	1069	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	22.3	38.0	11.7	48.0	32.3	
Effective Green, g (s)	22.3	38.0	11.7	48.0	32.3	
Actuated g/C Ratio	0.28	0.49	0.15	0.61	0.41	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	466	729	512	2169	1428	
v/s Ratio Prot	c0.24	c0.30	0.11	0.25	c0.31	
v/s Ratio Perm						
v/c Ratio	0.83	0.61	0.71	0.40	0.74	
Uniform Delay, d1	26.2	14.7	31.7	7.7	19.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.9	1.5	4.7	0.1	2.1	
Delay (s)	38.1	16.2	36.4	7.9	21.7	
Level of Service	D	B	D	A	C	
Approach Delay (s/veh)	27.4			16.3	21.7	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	78.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

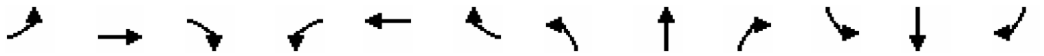
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	525	246	123	237	133	56
Future Volume (vph)	525	246	123	237	133	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1783		1770	1863	1727	
Flt Permitted	1.00		0.25	1.00	0.96	
Satd. Flow (perm)	1783		479	1863	1727	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	267	134	258	145	61
RTOR Reduction (vph)	16	0	0	0	21	0
Lane Group Flow (vph)	822	0	134	258	185	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	57.7		57.7	57.7	14.3	
Effective Green, g (s)	57.7		57.7	57.7	14.3	
Actuated g/C Ratio	0.72		0.72	0.72	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1285		345	1343	308	
v/s Ratio Prot	c0.46			0.14	c0.11	
v/s Ratio Perm			0.28			
v/c Ratio	0.63		0.38	0.19	0.59	
Uniform Delay, d1	5.7		4.3	3.6	30.2	
Progression Factor	0.89		1.00	1.00	1.00	
Incremental Delay, d2	1.4		0.7	0.0	3.1	
Delay (s)	6.6		5.0	3.6	33.3	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	6.6			4.1	33.3	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

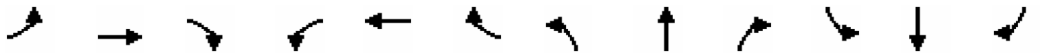
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	92	224	42	54	31	222	448	111	56	926	19
Future Volume (vph)	44	92	224	42	54	31	222	448	111	56	926	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.94		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1665		1770	1761		1770	3434		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1665		1770	1761		1770	3434		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	100	243	46	59	34	241	487	121	61	1007	21
RTOR Reduction (vph)	0	101	0	0	24	0	0	19	0	0	0	13
Lane Group Flow (vph)	48	242	0	46	69	0	241	589	0	61	1007	8
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	2.9	17.5		2.9	17.5		15.3	41.8		3.7	30.2	30.2
Effective Green, g (s)	2.9	17.5		2.9	17.5		15.3	41.8		3.7	30.2	30.2
Actuated g/C Ratio	0.04	0.21		0.04	0.21		0.19	0.51		0.05	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	62	355		62	376		330	1752		79	1304	583
v/s Ratio Prot	c0.03	c0.15		0.03	0.04		c0.14	0.17		0.03	c0.28	
v/s Ratio Perm												0.00
v/c Ratio	0.77	0.68		0.74	0.18		0.73	0.33		0.77	0.77	0.01
Uniform Delay, d1	39.1	29.6		39.1	26.3		31.3	11.8		38.6	22.8	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.2	5.2		37.5	0.2		8.0	0.1		36.3	2.9	0.0
Delay (s)	83.4	34.9		76.7	26.5		39.4	11.9		75.0	25.7	16.4
Level of Service	F	C		E	C		D	B		E	C	B
Approach Delay (s/veh)		40.8			43.1			19.7			28.3	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	666	329	149	598	13	236	0	62	13	0	29
Future Volume (vph)	29	666	329	149	598	13	236	0	62	13	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3364		1770	3528		1770	1583		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3364		1770	3528		1770	1583		1770	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	724	358	162	650	14	257	0	67	14	0	32
RTOR Reduction (vph)	0	46	0	0	1	0	0	48	0	0	29	0
Lane Group Flow (vph)	32	1036	0	162	663	0	257	19	0	14	3	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.2	36.0		11.6	44.4		17.9	26.1		0.6	8.8	
Effective Green, g (s)	3.2	36.0		11.6	44.4		17.9	26.1		0.6	8.8	
Actuated g/C Ratio	0.04	0.40		0.13	0.49		0.20	0.29		0.01	0.10	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	62	1341		227	1734		350	457		11	154	
v/s Ratio Prot	0.02	c0.31		c0.09	0.19		c0.15	c0.01		0.01	0.00	
v/s Ratio Perm												
v/c Ratio	0.51	0.77		0.71	0.38		0.73	0.04		1.27	0.02	
Uniform Delay, d1	42.7	23.5		37.7	14.3		33.9	23.1		44.8	36.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	2.8		10.1	0.1		7.7	0.0		373.5	0.0	
Delay (s)	49.8	26.4		47.9	14.5		41.7	23.1		418.4	36.9	
Level of Service	D	C		D	B		D	C		F	D	
Approach Delay (s/veh)		27.1			21.0			37.8			153.0	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	90.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	731	10	0	760	0	55
Future Volume (Veh/h)	731	10	0	760	0	55
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	795	11	0	826	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			806		1214	403
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			399		882	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	93
cM capacity (veh/h)			975		241	915

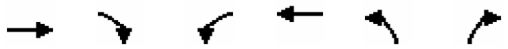
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	530	276	413	413	0	60
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	60
cSH	1700	1700	1700	1700	1700	915
Volume to Capacity	0.31	0.16	0.24	0.24	0.00	0.07
Queue Length 95th (ft)	0	0	0	0	0	5
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.2	
Approach LOS					A	

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	1157	142	86	459	139	98	21	125	35	65	35
Future Volume (vph)	131	1157	142	86	459	139	98	21	125	35	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.96		1.00	0.87		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5002		1770	4908		1770	1624		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5002		1770	4908		1770	1624		1770	1765	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	142	1258	154	93	499	151	107	23	136	38	71	38
RTOR Reduction (vph)	0	16	0	0	62	0	0	102	0	0	31	0
Lane Group Flow (vph)	142	1396	0	93	588	0	107	57	0	38	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.5	21.0		5.8	19.3		5.5	14.6		1.7	10.8	
Effective Green, g (s)	7.5	21.0		5.8	19.3		5.5	14.6		1.7	10.8	
Actuated g/C Ratio	0.13	0.36		0.10	0.33		0.09	0.25		0.03	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	224	1777		173	1602		164	401		50	322	
v/s Ratio Prot	c0.08	c0.28		0.05	0.12		c0.06	c0.03		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.63	0.78		0.53	0.36		0.65	0.14		0.76	0.24	
Uniform Delay, d1	24.4	17.0		25.3	15.2		25.8	17.3		28.4	20.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	2.3		3.1	0.1		8.9	0.1		48.9	0.3	
Delay (s)	30.2	19.3		28.5	15.3		34.8	17.5		77.4	21.0	
Level of Service	C	B		C	B		C	B		E	C	
Approach Delay (s/veh)		20.3			17.0			24.4			35.6	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	59.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

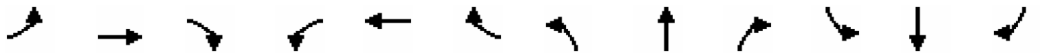
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1457	41	0	455	0	42
Future Volume (Veh/h)	1457	41	0	455	0	42
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1584	45	0	495	0	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.78		0.78	0.78
vC, conflicting volume			1629		1772	551
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			818		1001	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			628		187	846

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	634	634	362	165	165	165	46
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	45	0	0	0	46
cSH	1700	1700	1700	1700	1700	1700	846
Volume to Capacity	0.37	0.37	0.21	0.10	0.10	0.10	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.5
Approach LOS							A

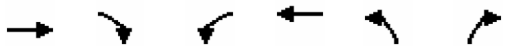
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1268	101	130	323	139	98	21	166	35	64	34
Future Volume (vph)	130	1268	101	130	323	139	98	21	166	35	64	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.95		1.00	0.86		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5029		1770	4856		1770	1615		1770	1766	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5029		1770	4856		1770	1615		1770	1766	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	1378	110	141	351	151	107	23	180	38	70	37
RTOR Reduction (vph)	0	10	0	0	82	0	0	137	0	0	30	0
Lane Group Flow (vph)	141	1478	0	141	420	0	107	66	0	38	77	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.8	20.8		7.2	21.2		4.7	14.2		1.4	10.9	
Effective Green, g (s)	6.8	20.8		7.2	21.2		4.7	14.2		1.4	10.9	
Actuated g/C Ratio	0.11	0.35		0.12	0.36		0.08	0.24		0.02	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	1755		213	1727		139	384		41	322	
v/s Ratio Prot	c0.08	c0.29		0.08	0.09		c0.06	c0.04		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.70	0.84		0.66	0.24		0.76	0.17		0.92	0.23	
Uniform Delay, d1	25.4	17.8		25.0	13.5		26.9	18.0		29.0	20.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.5	3.8		7.5	0.0		22.2	0.2		110.9	0.3	
Delay (s)	35.9	21.7		32.5	13.6		49.1	18.2		140.0	21.1	
Level of Service	D	C		C	B		D	B		F	C	
Approach Delay (s/veh)		22.9			17.7			28.9			52.3	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	59.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

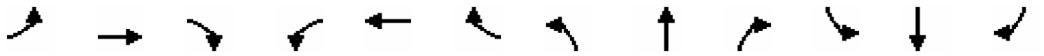


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1297	20	0	684	0	21
Future Volume (Veh/h)	1297	20	0	684	0	21
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1410	22	0	743	0	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.77		0.77	0.77
vC, conflicting volume			1432		1669	481
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			521		828	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			803		239	836

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	564	564	304	248	248	248	23
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	22	0	0	0	23
cSH	1700	1700	1700	1700	1700	1700	836
Volume to Capacity	0.33	0.33	0.18	0.15	0.15	0.15	0.03
Queue Length 95th (ft)	0	0	0	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.4
Approach LOS							A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

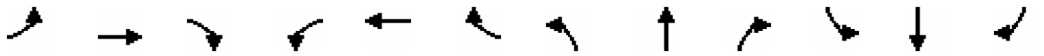
Appendix C – 2040 Option 1 Mitigated LOS Calculations – AM peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	161	455	238	344	160	300	1047	204	322	1260	17
Future Volume (vph)	1	161	455	238	344	160	300	1047	204	322	1260	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	175	495	259	374	174	326	1138	222	350	1370	18
RTOR Reduction (vph)	0	0	98	0	0	80	0	0	149	0	0	12
Lane Group Flow (vph)	1	175	397	259	374	94	326	1138	73	350	1370	6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.7	18.0	33.0	14.4	31.7	45.4	15.0	30.8	30.8	13.7	29.5	29.5
Effective Green, g (s)	0.1	17.4	31.8	13.8	31.1	44.2	16.0	31.8	31.8	14.7	30.5	29.5
Actuated g/C Ratio	0.00	0.18	0.33	0.14	0.32	0.46	0.17	0.33	0.33	0.15	0.32	0.31
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	1	337	523	254	602	728	294	1682	523	525	1613	485
v/s Ratio Prot	0.00	0.09	c0.11	c0.15	0.20	0.02	c0.18	0.22		0.10	c0.27	
v/s Ratio Perm			0.14			0.04			0.05			0.00
v/c Ratio	1.00	0.51	0.75	1.01	0.62	0.12	1.10	0.67	0.14	0.66	0.84	0.01
Uniform Delay, d1	47.9	35.5	28.7	41.1	27.5	14.8	40.0	27.7	22.5	38.3	30.6	23.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	900.0	1.3	6.2	61.6	1.9	0.0	84.9	1.4	0.2	3.1	4.8	0.0
Delay (s)	948.0	36.9	34.9	102.7	29.5	14.9	124.9	29.1	22.8	41.5	35.5	23.1
Level of Service	F	D	C	F	C	B	F	C	C	D	D	C
Approach Delay (s/veh)		36.8			49.8			46.8			36.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	42.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

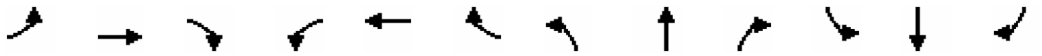
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	558	114	299	1253	1	208	6	138	1	3	0
Future Volume (vph)	0	558	114	299	1253	1	208	6	138	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor		0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt		0.97		1.00	0.99		1.00	1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (prot)		3449		3433	3539		1681	1690	1583		1840	
Flt Permitted		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (perm)		3449		3433	3539		1681	1690	1583		1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	607	124	325	1362	1	226	7	150	1	3	0
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	127	0	0	0
Lane Group Flow (vph)	0	711	0	325	1363	0	118	115	23	0	4	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)		16.6		10.0	30.6		8.9	8.9	8.9		0.5	
Effective Green, g (s)		15.7		10.0	29.7		8.3	8.3	8.3		0.5	
Actuated g/C Ratio		0.29		0.19	0.56		0.16	0.16	0.16		0.01	
Clearance Time (s)		4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)		1012		641	1964		260	262	245		17	
v/s Ratio Prot		0.21		0.09	c0.39		c0.07	0.07			c0.00	
v/s Ratio Perm									0.01			
v/c Ratio		0.70		0.50	0.69		0.45	0.43	0.09		0.23	
Uniform Delay, d1		16.8		19.5	8.6		20.5	20.4	19.3		26.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.8		0.2	0.8		0.4	0.4	0.0		2.5	
Delay (s)		18.6		19.7	9.4		20.9	20.9	19.4		28.8	
Level of Service		B		B	A		C	C	B		C	
Approach Delay (s/veh)		18.6			11.4			20.3			28.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	53.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

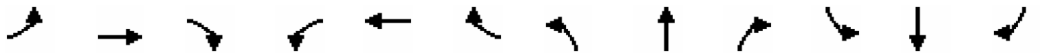
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	292	130	111	651	92	233	645	74	129	800	486
Future Volume (vph)	316	292	130	111	651	92	233	645	74	129	800	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.94	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	4990	3539	1583	1770	3539	1583	1770	3485		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	4990	3539	1583	1770	3539	1583	1770	3485		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	343	317	141	121	708	100	253	701	80	140	870	528
RTOR Reduction (vph)	0	0	102	0	0	71	0	9	0	0	0	49
Lane Group Flow (vph)	343	317	39	121	708	29	253	772	0	140	870	479
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	6.1	24.1	24.1	7.1	25.1	25.1	13.2	30.6		9.8	27.2	33.3
Effective Green, g (s)	6.1	25.4	24.1	7.1	26.4	25.1	13.2	29.7		9.8	26.3	31.5
Actuated g/C Ratio	0.07	0.29	0.28	0.08	0.30	0.29	0.15	0.34		0.11	0.30	0.36
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	347	1026	435	143	1066	453	266	1181		198	1062	657
v/s Ratio Prot	c0.07	0.09		0.07	c0.20		c0.14	c0.22		0.08	c0.25	0.04
v/s Ratio Perm			0.02			0.02						0.26
v/c Ratio	0.98	0.30	0.08	0.84	0.66	0.06	0.95	0.65		0.70	0.81	0.72
Uniform Delay, d1	40.7	24.2	23.5	39.7	26.7	22.7	36.8	24.5		37.5	28.4	24.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.7	0.1	0.0	34.4	1.5	0.0	41.7	1.3		10.9	5.0	4.0
Delay (s)	85.4	24.4	23.6	74.1	28.3	22.7	78.6	25.9		48.4	33.4	28.3
Level of Service	F	C	C	E	C	C	E	C		D	C	C
Approach Delay (s/veh)		50.4			33.6			38.8			33.0	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	87.6	Sum of lost time (s)	16.5
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

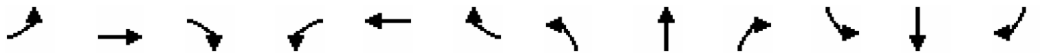
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	814	0	494	0	610	193	105	866	443
Future Volume (vph)	0	0	0	814	0	494	0	610	193	105	866	443
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		0.99	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5058	1583
Flt Permitted				0.95		1.00		1.00	1.00		0.79	1.00
Satd. Flow (perm)				3433		1583		5085	1583		4019	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	885	0	537	0	663	210	114	941	482
RTOR Reduction (vph)	0	0	0	0	0	23	0	0	0	0	0	275
Lane Group Flow (vph)	0	0	0	885	0	514	0	663	210	0	1055	207
Turn Type				Prot		Prot		NA	Free	Perm	NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free	6		
Actuated Green, G (s)				25.4		25.4		26.6	60.0		26.6	26.6
Effective Green, g (s)				25.4		25.4		25.8	60.0		25.8	25.8
Actuated g/C Ratio				0.42		0.42		0.43	1.00		0.43	0.43
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1453		670		2186	1583		1728	680
v/s Ratio Prot				0.26		c0.32		0.13				0.13
v/s Ratio Perm									0.13		c0.26	
v/c Ratio				0.60		0.76		0.30	0.13		0.61	0.30
Uniform Delay, d1				13.4		14.7		11.2	0.0		13.2	11.2
Progression Factor				1.00		1.00		0.80	1.00		1.00	1.00
Incremental Delay, d2				0.5		4.7		0.3	0.1		1.6	1.1
Delay (s)				13.9		19.5		9.3	0.1		14.8	12.3
Level of Service				B		B		A	A		B	B
Approach Delay (s/veh)		0.0			16.0			7.1			14.0	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

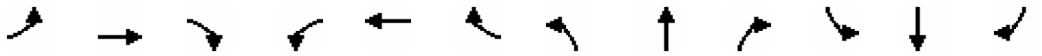
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	0	311	0	0	0	0	835	421	0	1235	483
Future Volume (vph)	287	0	311	0	0	0	0	835	421	0	1235	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	312	0	338	0	0	0	0	908	458	0	1342	525
RTOR Reduction (vph)	0	0	80	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	312	0	258	0	0	0	0	908	458	0	1342	525
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	10.1		10.1					40.9	60.0		40.9	60.0
Effective Green, g (s)	10.1		10.1					41.9	60.0		41.9	60.0
Actuated g/C Ratio	0.17		0.17					0.70	1.00		0.70	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	577		469					3551	1583		3551	1583
v/s Ratio Prot	0.09							0.18			c0.26	
v/s Ratio Perm			c0.09						0.29			0.33
v/c Ratio	0.54		0.55					0.25	0.28		0.37	0.33
Uniform Delay, d1	22.8		22.8					3.3	0.0		3.7	0.0
Progression Factor	1.00		1.00					1.00	1.00		0.98	1.00
Incremental Delay, d2	0.5		0.7					0.1	0.4		0.2	0.4
Delay (s)	23.3		23.6					3.4	0.4		3.9	0.4
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		23.5			0.0			2.4			2.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		

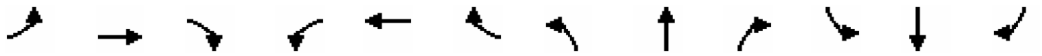
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	66	25	668	0	1279	345	0	362	683
Future Volume (vph)	0	0	0	66	25	668	0	1279	345	0	362	683
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.90	
Flt Protected				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1722	2787		3539	1583		4587	
Flt Permitted				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1722	2787		3539	1583		4587	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	72	27	726	0	1390	375	0	393	742
RTOR Reduction (vph)	0	0	0	0	0	39	0	0	170	0	337	0
Lane Group Flow (vph)	0	0	0	38	61	687	0	1390	205	0	798	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				17.0	17.0	17.0		28.8	28.8		28.8	
Effective Green, g (s)				17.0	17.0	17.0		30.1	30.1		30.1	
Actuated g/C Ratio				0.31	0.31	0.31		0.55	0.55		0.55	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				518	531	859		1933	864		2505	
v/s Ratio Prot				0.02	0.04			c0.39			0.17	
v/s Ratio Perm						c0.25			0.13			
v/c Ratio				0.07	0.11	0.79		0.71	0.23		0.31	
Uniform Delay, d1				13.4	13.6	17.4		9.3	6.5		6.8	
Progression Factor				1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2				0.0	0.0	4.9		1.4	0.1		0.1	
Delay (s)				13.4	13.6	22.3		10.7	6.7		6.9	
Level of Service				B	B	C		B	A		A	
Approach Delay (s/veh)		0.0			21.3			9.8			6.9	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	55.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

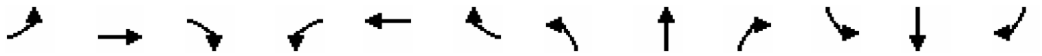
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	684	215	431	56	34	106	61	587	215	89	206	151
Future Volume (vph)	684	215	431	56	34	106	61	587	215	89	206	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3397		1770	3315	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3397		1770	3315	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	743	234	468	61	37	115	66	638	234	97	224	164
RTOR Reduction (vph)	0	0	348	0	0	90	0	43	0	0	117	0
Lane Group Flow (vph)	743	234	120	61	37	25	66	829	0	97	271	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	20.1	20.1	20.1	10.2	10.2	14.5	10.6	27.5		4.3	21.2	
Effective Green, g (s)	20.1	20.1	20.1	9.8	9.8	13.7	10.1	28.8		4.3	22.5	
Actuated g/C Ratio	0.26	0.26	0.26	0.13	0.13	0.18	0.13	0.37		0.06	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	883	479	407	222	233	366	228	1252		97	955	
v/s Ratio Prot	c0.22	0.13		c0.03	0.02	0.00	0.04	c0.24		c0.05	0.08	
v/s Ratio Perm			0.08			0.01						
v/c Ratio	0.84	0.48	0.29	0.27	0.15	0.06	0.28	0.66		1.00	0.28	
Uniform Delay, d1	27.4	24.6	23.3	30.9	30.4	26.8	30.7	20.5		36.9	21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	0.2	0.1	0.2	0.1	0.0	0.2	1.3		91.3	0.2	
Delay (s)	34.5	24.9	23.4	31.1	30.5	26.9	31.0	21.9		128.2	21.7	
Level of Service	C	C	C	C	C	C	C	C		F	C	
Approach Delay (s/veh)		29.3			28.7			22.6			43.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	78.1	Sum of lost time (s)	15.6
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

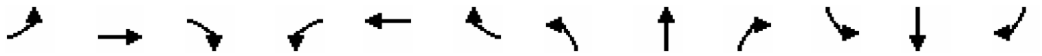
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	64	46	410	781	404	379	988	99	160	1403	303
Future Volume (vph)	33	64	46	410	781	404	379	988	99	160	1403	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	70	50	446	849	439	412	1074	108	174	1525	329
RTOR Reduction (vph)	0	0	42	0	0	53	0	0	68	0	0	108
Lane Group Flow (vph)	36	70	8	446	849	386	412	1074	40	174	1525	221
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	3.9	17.1	17.1	17.9	31.1	41.8	12.9	39.1	39.1	10.7	36.9	36.9
Effective Green, g (s)	3.9	17.1	17.1	17.9	31.1	41.8	12.9	39.1	39.1	10.7	36.9	36.9
Actuated g/C Ratio	0.04	0.16	0.16	0.17	0.29	0.39	0.12	0.37	0.37	0.10	0.35	0.35
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	126	570	255	298	1038	703	417	1875	583	346	1770	551
v/s Ratio Prot	0.01	0.02		c0.25	c0.24	0.06	c0.12	0.21		0.05	c0.30	
v/s Ratio Perm			0.01			0.19			0.03			0.14
v/c Ratio	0.28	0.12	0.03	1.49	0.81	0.54	0.98	0.57	0.06	0.50	0.86	0.40
Uniform Delay, d1	49.6	38.0	37.4	44.0	34.8	24.8	46.4	26.7	21.6	45.1	32.1	26.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	0.0	240.4	5.1	0.8	40.4	0.4	0.0	1.1	4.5	0.4
Delay (s)	50.9	38.1	37.5	284.4	39.9	25.6	86.9	27.1	21.7	46.2	36.7	26.6
Level of Service	D	D	D	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		40.8			99.2			42.2			35.9	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

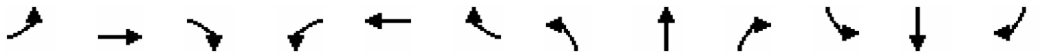
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	95	50	883	909	0	725	0	1132	0	0	0
Future Volume (vph)	0	95	50	883	909	0	725	0	1132	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	103	54	960	988	0	788	0	1230	0	0	0
RTOR Reduction (vph)	0	0	48	0	0	0	0	0	135	0	0	0
Lane Group Flow (vph)	0	103	6	960	988	0	0	788	1095	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		10.0	10.0	41.0	55.0			40.0	81.0			
Effective Green, g (s)		12.0	12.0	43.0	57.0			39.8	85.0			
Actuated g/C Ratio		0.12	0.12	0.42	0.55			0.39	0.83			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		412	184	1433	1030			683	2354			
v/s Ratio Prot		0.03		0.28	c0.53			c0.45	0.19			
v/s Ratio Perm			0.00						0.20			
v/c Ratio		0.25	0.03	0.66	0.95			1.15	0.46			
Uniform Delay, d1		41.4	40.3	24.2	21.8			31.6	2.5			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.3	0.0	1.2	18.7			85.2	0.1			
Delay (s)		41.7	40.4	25.4	40.6			116.8	2.6			
Level of Service		D	D	C	D			F	A			
Approach Delay (s/veh)		41.2			33.1			47.2			0.0	
Approach LOS		D			C			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

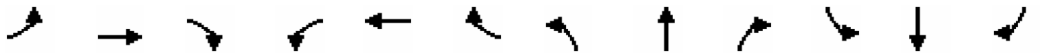
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	328	40	279	1078	40	2	3	38	57	5	8
Future Volume (vph)	233	328	40	279	1078	40	2	3	38	57	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	253	357	43	303	1172	43	2	3	41	62	5	9
RTOR Reduction (vph)	0	0	26	0	0	22	0	36	0	0	0	8
Lane Group Flow (vph)	253	357	17	303	1172	21	2	8	0	62	5	1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	9.7	26.1	26.1	16.0	32.4	32.4	1.0	7.4		3.0	9.4	9.4
Effective Green, g (s)	9.7	27.4	27.4	16.0	33.7	33.7	1.0	8.4		3.0	8.8	8.8
Actuated g/C Ratio	0.14	0.40	0.40	0.23	0.49	0.49	0.01	0.12		0.04	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	486	1415	633	413	1741	778	25	196		77	239	203
v/s Ratio Prot	0.07	0.10		c0.17	c0.33		0.00	c0.01		c0.04	0.00	
v/s Ratio Perm			0.01			0.01						0.00
v/c Ratio	0.52	0.25	0.02	0.73	0.67	0.02	0.08	0.04		0.80	0.02	0.00
Uniform Delay, d1	27.2	13.7	12.4	24.2	13.2	8.9	33.2	26.4		32.4	26.0	26.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.0	0.0	6.6	1.0	0.0	1.3	0.0		43.8	0.0	0.0
Delay (s)	28.2	13.8	12.4	30.9	14.2	8.9	34.6	26.5		76.2	26.1	26.0
Level of Service	C	B	B	C	B	A	C	C		E	C	C
Approach Delay (s/veh)		19.3			17.4			26.9			67.0	
Approach LOS		B			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	15.3
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	310	197	253	645	64	479	270	101	11	76	2
Future Volume (vph)	2	310	197	253	645	64	479	270	101	11	76	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3491		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3491		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	337	214	275	701	70	521	293	110	12	83	2
RTOR Reduction (vph)	0	0	162	0	6	0	0	0	63	0	0	2
Lane Group Flow (vph)	2	337	52	275	765	0	521	293	47	12	83	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.5	18.6	18.6	9.6	26.7		20.1	33.6	33.6	1.5	15.4	15.4
Effective Green, g (s)	1.5	19.9	19.9	9.6	28.0		20.1	34.9	34.9	1.5	14.5	14.5
Actuated g/C Ratio	0.02	0.24	0.24	0.12	0.34		0.25	0.43	0.43	0.02	0.18	0.18
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	32	859	677	584	1193		842	1508	674	32	626	280
v/s Ratio Prot	0.00	0.10		c0.06	c0.22		c0.15	c0.08		0.01	0.02	
v/s Ratio Perm			0.02						0.03			0.00
v/c Ratio	0.06	0.39	0.07	0.47	0.64		0.61	0.19	0.06	0.37	0.13	0.00
Uniform Delay, d1	39.5	25.9	23.9	33.7	22.7		27.4	14.7	13.8	39.7	28.4	27.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.0	0.2	1.1		0.9	0.0	0.0	2.6	0.0	0.0
Delay (s)	39.8	26.2	23.9	33.9	23.9		28.4	14.7	13.9	42.4	28.4	27.7
Level of Service	D	C	C	C	C		C	B	B	D	C	C
Approach Delay (s/veh)		25.4			26.5			22.3			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	17.8
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	451	31	15	679	128	89	10	6	25	1	28
Future Volume (vph)	205	451	31	15	679	128	89	10	6	25	1	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1845		1770	1818		1770	1754		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.74	1.00	
Satd. Flow (perm)	1770	1845		1770	1818		1373	1754		1389	1592	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	490	34	16	738	139	97	11	7	27	1	30
RTOR Reduction (vph)	0	2	0	0	7	0	0	6	0	0	26	0
Lane Group Flow (vph)	223	522	0	16	870	0	97	12	0	27	5	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	13.2	55.6		1.4	43.8		11.0	11.0		11.0	11.0	
Effective Green, g (s)	13.2	55.6		1.4	43.8		11.0	11.0		11.0	11.0	
Actuated g/C Ratio	0.16	0.70		0.02	0.55		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	292	1282		30	995		188	241		190	218	
v/s Ratio Prot	c0.13	0.28		0.01	c0.48			0.01			0.00	
v/s Ratio Perm							c0.07			0.02		
v/c Ratio	0.76	0.40		0.53	0.87		0.51	0.04		0.14	0.02	
Uniform Delay, d1	31.9	5.1		38.9	15.7		32.0	29.9		30.3	29.8	
Progression Factor	1.00	1.00		0.90	0.72		1.00	1.00		1.00	1.00	
Incremental Delay, d2	11.2	0.9		9.0	5.8		2.3	0.0		0.3	0.0	
Delay (s)	43.1	6.1		44.4	17.2		34.4	30.0		30.6	29.8	
Level of Service	D	A		D	B		C	C		C	C	
Approach Delay (s/veh)		17.1			17.7			33.7			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	288	91	11	567	257	241	173	12	51	13	14
Future Volume (vph)	103	288	91	11	567	257	241	173	12	51	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1796		1770	1776		1770	1845		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.50	1.00	
Satd. Flow (perm)	1770	1796		1770	1776		1375	1845		949	1718	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	112	313	99	12	616	279	262	188	13	55	14	15
RTOR Reduction (vph)	0	12	0	0	21	0	0	3	0	0	11	0
Lane Group Flow (vph)	112	400	0	12	874	0	262	198	0	55	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	9.3	48.2		0.8	39.7		19.0	19.0		19.0	19.0	
Effective Green, g (s)	9.3	48.2		0.8	39.7		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.12	0.60		0.01	0.50		0.24	0.24		0.24	0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	1082		17	881		326	438		225	408	
v/s Ratio Prot	c0.06	0.22		0.01	c0.49			0.11			0.01	
v/s Ratio Perm							c0.19			0.06		
v/c Ratio	0.54	0.36		0.70	0.99		0.80	0.45		0.24	0.04	
Uniform Delay, d1	33.3	8.1		39.4	19.9		28.7	26.0		24.6	23.4	
Progression Factor	0.86	0.39		1.06	1.02		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	0.9		74.4	26.0		13.3	0.7		0.5	0.0	
Delay (s)	31.7	4.1		116.3	46.6		42.0	26.7		25.2	23.5	
Level of Service	C	A		F	D		D	C		C	C	
Approach Delay (s/veh)		10.0			47.5			35.4			24.6	
Approach LOS		B			D			D			C	

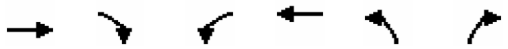
Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	5	307	310	25	89	392	665	47	26	663	57
Future Volume (vph)	5	5	307	310	25	89	392	665	47	26	663	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.85	0.85	1.00	0.88		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1512	1504	1770	1644		3433	3504		1770	3497	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1512	1504	1770	1644		3433	3504		1770	3497	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	334	337	27	97	426	723	51	28	721	62
RTOR Reduction (vph)	0	138	143	0	60	0	0	4	0	0	6	0
Lane Group Flow (vph)	5	31	27	337	64	0	426	770	0	28	777	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	0.6	13.7	13.7	19.3	32.4		12.2	34.6		1.5	23.9	
Effective Green, g (s)	0.6	13.7	13.7	19.3	32.4		12.2	34.6		1.5	23.9	
Actuated g/C Ratio	0.01	0.16	0.16	0.23	0.38		0.14	0.41		0.02	0.28	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	12	243	242	401	625		492	1424		31	982	
v/s Ratio Prot	0.00	c0.02		c0.19	0.04		c0.12	0.22		0.02	c0.22	
v/s Ratio Perm			0.02									
v/c Ratio	0.41	0.12	0.11	0.84	0.10		0.86	0.54		0.90	0.79	
Uniform Delay, d1	42.0	30.5	30.5	31.4	16.9		35.6	19.2		41.7	28.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	21.7	0.2	0.2	14.6	0.0		14.7	1.4		120.6	6.5	
Delay (s)	63.8	30.8	30.7	46.0	17.0		50.3	20.6		162.4	34.8	
Level of Service	E	C	C	D	B		D	C		F	C	
Approach Delay (s/veh)		31.2			38.2			31.2			39.2	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

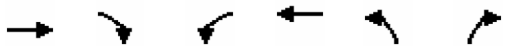
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	419	22	0	1276	0	10
Future Volume (Veh/h)	419	22	0	1276	0	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	24	0	1387	0	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.95		0.85	0.95
vC, conflicting volume			479		929	164
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			284		0	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1216		868	1034

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	182	182	115	462	462	462	11
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	24	0	0	0	11
cSH	1700	1700	1700	1700	1700	1700	1034
Volume to Capacity	0.11	0.11	0.07	0.27	0.27	0.27	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	28.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	318	18	56	639	48	57
Future Volume (vph)	318	18	56	639	48	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.99		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	1849		1770	1863	1687	
Flt Permitted	1.00		0.53	1.00	0.97	
Satd. Flow (perm)	1849		1001	1863	1687	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	346	20	61	695	52	62
RTOR Reduction (vph)	1	0	0	0	47	0
Lane Group Flow (vph)	365	0	61	695	67	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	85.9		85.9	85.9	11.1	
Effective Green, g (s)	85.9		85.9	85.9	11.1	
Actuated g/C Ratio	0.82		0.82	0.82	0.11	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1512		818	1524	178	
v/s Ratio Prot	0.20			c0.37	c0.04	
v/s Ratio Perm			0.06			
v/c Ratio	0.24		0.07	0.45	0.37	
Uniform Delay, d1	2.1		1.8	2.7	43.7	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.0	0.2	1.3	
Delay (s)	2.5		1.8	2.9	45.0	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	2.5			2.8	45.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

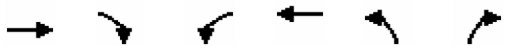
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	280	633	826	400	62
Future Volume (vph)	37	280	633	826	400	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.88	0.85	1.00	1.00	0.97	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1629	1504	3433	3539	3468	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1629	1504	3433	3539	3468	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	304	688	898	435	67
RTOR Reduction (vph)	115	80	0	0	20	0
Lane Group Flow (vph)	59	90	688	898	482	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	7.3	27.3	16.0	36.0	16.0	
Effective Green, g (s)	7.3	27.3	16.0	36.0	16.0	
Actuated g/C Ratio	0.14	0.53	0.31	0.70	0.31	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	231	800	1070	2483	1081	
v/s Ratio Prot	c0.04	0.06	c0.20	0.25	c0.14	
v/s Ratio Perm						
v/c Ratio	0.25	0.11	0.64	0.36	0.44	
Uniform Delay, d1	19.5	5.9	15.1	3.0	14.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.0	1.3	0.0	0.2	
Delay (s)	20.1	6.0	16.5	3.1	14.4	
Level of Service	C	A	B	A	B	
Approach Delay (s/veh)	13.1			8.9	14.4	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	51.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

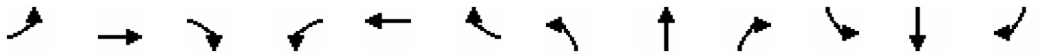
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	279	72	44	643	192	57
Future Volume (vph)	279	72	44	643	192	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1811		1770	1863	1738	
Flt Permitted	1.00		0.50	1.00	0.96	
Satd. Flow (perm)	1811		950	1863	1738	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	78	48	699	209	62
RTOR Reduction (vph)	10	0	0	0	14	0
Lane Group Flow (vph)	371	0	48	699	257	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	55.2		55.2	55.2	16.8	
Effective Green, g (s)	55.2		55.2	55.2	16.8	
Actuated g/C Ratio	0.69		0.69	0.69	0.21	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1249		655	1285	364	
v/s Ratio Prot	0.21			c0.38	c0.15	
v/s Ratio Perm			0.05			
v/c Ratio	0.29		0.07	0.54	0.70	
Uniform Delay, d1	4.8		4.0	6.1	29.3	
Progression Factor	0.88		1.00	1.00	1.00	
Incremental Delay, d2	0.5		0.0	0.4	6.1	
Delay (s)	4.8		4.0	6.6	35.4	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	4.8			6.4	35.4	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

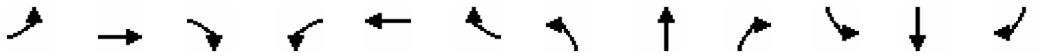
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	24	153	103	41	29	196	548	15	8	490	28
Future Volume (vph)	2	24	153	103	41	29	196	548	15	8	490	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1621		1770	1747		1770	3525		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1621		1770	1747		1770	3525		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	26	166	112	45	32	213	596	16	9	533	30
RTOR Reduction (vph)	0	131	0	0	23	0	0	2	0	0	0	21
Lane Group Flow (vph)	2	61	0	112	54	0	213	610	0	9	533	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	0.5	13.9		4.3	17.7		12.3	30.3		0.5	18.5	18.5
Effective Green, g (s)	0.5	13.9		4.3	17.7		12.3	30.3		0.5	18.5	18.5
Actuated g/C Ratio	0.01	0.21		0.07	0.27		0.19	0.47		0.01	0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	13	346		117	475		334	1643		13	1007	450
v/s Ratio Prot	0.00	c0.04		c0.06	c0.03		c0.12	0.17		0.01	c0.15	
v/s Ratio Perm												0.01
v/c Ratio	0.15	0.17		0.95	0.11		0.63	0.37		0.69	0.52	0.01
Uniform Delay, d1	32.0	20.8		30.2	17.7		24.2	11.2		32.1	19.5	16.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.4	0.2		69.0	0.1		3.9	0.1		96.2	0.5	0.0
Delay (s)	37.5	21.1		99.3	17.8		28.2	11.3		128.4	20.0	16.7
Level of Service	D	C		F	B		C	B		F	C	B
Approach Delay (s/veh)		21.2			66.1			15.7			21.6	
Approach LOS		C			E			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	331	91	40	762	0	200	0	37	0	0	0
Future Volume (vph)	0	331	91	40	762	0	200	0	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00				
Frt		0.96		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3425		1770	3539		1770	1583				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3425		1770	3539		1770	1583				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	360	99	43	828	0	217	0	40	0	0	0
RTOR Reduction (vph)	0	24	0	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	435	0	43	828	0	217	13	0	0	0	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		20.0		1.5	25.5		8.3	15.9				
Effective Green, g (s)		20.0		1.5	25.5		8.3	15.9				
Actuated g/C Ratio		0.40		0.03	0.52		0.17	0.32				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1386		53	1826		297	509				
v/s Ratio Prot		0.13		0.02	c0.23		c0.12	c0.01				
v/s Ratio Perm												
v/c Ratio		0.31		0.81	0.45		0.73	0.02				
Uniform Delay, d1		10.0		23.8	7.5		19.4	11.4				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.1		59.6	0.1		8.9	0.0				
Delay (s)		10.1		83.4	7.7		28.4	11.4				
Level of Service		B		F	A		C	B				
Approach Delay (s/veh)		10.1			11.4			25.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	49.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

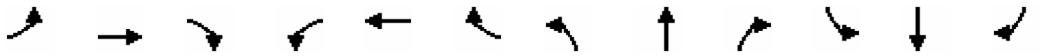
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	359	10	0	802	0	66
Future Volume (Veh/h)	359	10	0	802	0	66
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	390	11	0	872	0	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked						
vC, conflicting volume			401		832	201
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			401		832	201
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			1154		308	807

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	260	141	436	436	0	72
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	72
cSH	1700	1700	1700	1700	1700	807
Volume to Capacity	0.15	0.08	0.26	0.26	0.00	0.09
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.9
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.9	
Approach LOS					A	

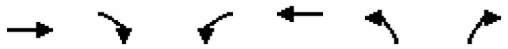
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	25.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	389	29	77	1008	29	161	6	18	29	79	107
Future Volume (vph)	11	389	29	77	1008	29	161	6	18	29	79	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032		1770	5064		1770	1656		1770	1702	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5032		1770	5064		1770	1656		1770	1702	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	423	32	84	1096	32	175	7	20	32	86	116
RTOR Reduction (vph)	0	10	0	0	3	0	0	13	0	0	77	0
Lane Group Flow (vph)	12	445	0	84	1125	0	175	14	0	32	125	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	16.7		4.0	20.2		9.4	21.8		1.7	14.1	
Effective Green, g (s)	0.5	16.7		4.0	20.2		9.4	21.8		1.7	14.1	
Actuated g/C Ratio	0.01	0.28		0.07	0.34		0.16	0.36		0.03	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	1395		117	1699		276	599		49	398	
v/s Ratio Prot	0.01	0.09		c0.05	c0.22		c0.10	0.01		0.02	c0.07	
v/s Ratio Perm												
v/c Ratio	0.85	0.31		0.71	0.66		0.63	0.02		0.65	0.31	
Uniform Delay, d1	29.8	17.2		27.5	17.0		23.7	12.3		28.9	19.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	164.6	0.1		18.8	0.9		4.7	0.0		27.1	0.4	
Delay (s)	194.4	17.3		46.4	18.0		28.4	12.3		56.0	19.5	
Level of Service	F	B		D	B		C	B		E	B	
Approach Delay (s/veh)		21.9			20.0			26.3			24.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	60.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	415	8	0	1397	0	6
Future Volume (Veh/h)	415	8	0	1397	0	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	451	9	0	1518	0	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked					0.80	
vC, conflicting volume			460		962	155
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			460		69	155
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1097		741	863

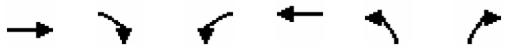
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	180	180	99	506	506	506	7
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	9	0	0	0	7
cSH	1700	1700	1700	1700	1700	1700	863
Volume to Capacity	0.11	0.11	0.06	0.30	0.30	0.30	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	389	21	116	1131	29	160	6	24	28	79	106
Future Volume (vph)	11	389	21	116	1131	29	160	6	24	28	79	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5046		1770	5066		1770	1643		1770	1703	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5046		1770	5066		1770	1643		1770	1703	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	423	23	126	1229	32	174	7	26	30	86	115
RTOR Reduction (vph)	0	6	0	0	3	0	0	17	0	0	64	0
Lane Group Flow (vph)	12	440	0	126	1258	0	174	16	0	30	137	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	17.5		7.6	24.6		11.0	24.4		1.7	15.1	
Effective Green, g (s)	0.5	17.5		7.6	24.6		11.0	24.4		1.7	15.1	
Actuated g/C Ratio	0.01	0.26		0.11	0.37		0.16	0.36		0.03	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	13	1314		200	1854		289	596		44	382	
v/s Ratio Prot	0.01	0.09		c0.07	c0.25		c0.10	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.92	0.33		0.63	0.67		0.60	0.02		0.68	0.35	
Uniform Delay, d1	33.3	20.1		28.4	17.9		26.0	13.7		32.4	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	207.3	0.1		6.3	1.0		3.5	0.0		35.6	0.5	
Delay (s)	240.6	20.2		34.7	18.9		29.5	13.7		68.1	22.5	
Level of Service	F	C		C	B		C	B		E	C	
Approach Delay (s/veh)		26.0			20.4			27.0			28.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	67.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

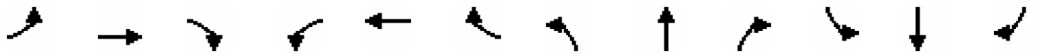


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	432	4	0	1114	0	3
Future Volume (Veh/h)	432	4	0	1114	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	470	4	0	1211	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.97		0.98	0.97
vC, conflicting volume			474		876	159
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			330		553	3
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1184		453	1042

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	188	188	98	404	404	404	3
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	3
cSH	1700	1700	1700	1700	1700	1700	1042
Volume to Capacity	0.11	0.11	0.06	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	24.9%	ICU Level of Service	A
Analysis Period (min)	15		

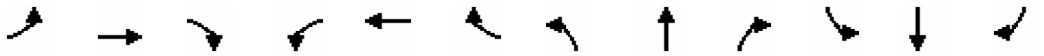
Appendix D – 2040 Option 1 Mitigated LOS Calculations – PM peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	173	422	291	189	282	463	994	267	310	1321	18
Future Volume (vph)	9	173	422	291	189	282	463	994	267	310	1321	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	188	459	316	205	307	503	1080	290	337	1436	20
RTOR Reduction (vph)	0	0	56	0	0	50	0	0	172	0	0	12
Lane Group Flow (vph)	10	188	403	316	205	257	503	1080	118	337	1436	8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.8	23.3	50.3	14.4	36.9	64.1	27.0	55.9	55.9	27.2	56.1	56.1
Effective Green, g (s)	0.2	22.7	49.1	13.8	36.3	62.9	28.0	56.9	56.9	28.2	57.1	56.1
Actuated g/C Ratio	0.00	0.16	0.35	0.10	0.26	0.45	0.20	0.41	0.41	0.20	0.41	0.40
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	2	302	555	174	483	711	354	2066	643	691	2073	634
v/s Ratio Prot	0.01	0.10	c0.14	c0.18	0.11	0.07	c0.28	0.21		0.10	c0.28	
v/s Ratio Perm			0.12			0.09			0.07			0.01
v/c Ratio	5.00	0.62	0.72	1.81	0.42	0.36	1.42	0.52	0.18	0.48	0.69	0.01
Uniform Delay, d1	69.9	54.6	39.5	63.1	43.1	25.3	56.0	31.3	26.6	49.5	34.2	25.2
Progression Factor	1.07	0.81	0.69	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2493.2	3.3	4.0	388.9	0.6	0.3	205.2	0.9	0.6	0.5	1.9	0.0
Delay (s)	2568.2	47.7	31.6	452.0	43.7	25.6	261.2	32.2	27.2	50.0	36.1	25.3
Level of Service	F	D	C	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		74.9			192.8			92.9			38.6	
Approach LOS		E			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	87.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

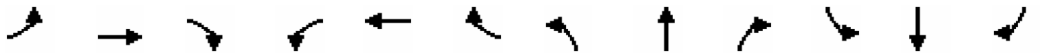
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1091	249	239	911	2	201	2	488	7	1	3
Future Volume (vph)	2	1091	249	239	911	2	201	2	488	7	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (prot)	1770	3440		3433	3538		1681	1687	1583		1742	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (perm)	1770	3440		3433	3538		1681	1687	1583		1742	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	1186	271	260	990	2	218	2	530	8	1	3
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	306	0	3	0
Lane Group Flow (vph)	2	1444	0	260	992	0	113	107	224	0	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)	0.7	52.7		11.7	63.7		17.4	17.4	17.4		0.7	
Effective Green, g (s)	0.7	51.8		11.7	62.8		16.8	16.8	16.8		0.7	
Actuated g/C Ratio	0.01	0.52		0.12	0.63		0.17	0.17	0.17		0.01	
Clearance Time (s)	4.0	4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	12	1781		401	2221		282	283	265		12	
v/s Ratio Prot	0.00	c0.42		c0.08	0.28		0.07	0.06			c0.01	
v/s Ratio Perm									c0.14			
v/c Ratio	0.16	0.81		0.64	0.44		0.40	0.37	0.84		0.75	
Uniform Delay, d1	49.3	20.0		42.1	9.6		37.1	36.9	40.3		49.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	2.3	2.7		2.7	0.0		0.3	0.3	20.3		118.8	
Delay (s)	51.7	22.7		44.8	9.6		37.4	37.2	60.6		168.4	
Level of Service	D	C		D	A		D	D	E		F	
Approach Delay (s/veh)		22.8			16.9			53.8			168.4	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

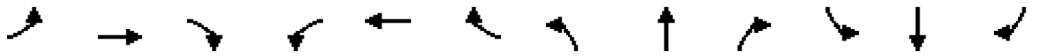
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	837	654	180	42	391	70	270	729	194	224	995	505
Future Volume (vph)	837	654	180	42	391	70	270	729	194	224	995	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.94	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	4990	3539	1583	1770	3539	1583	1770	3428		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	4990	3539	1583	1770	3539	1583	1770	3428		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	910	711	196	46	425	76	293	792	211	243	1082	549
RTOR Reduction (vph)	0	0	132	0	0	61	0	19	0	0	0	67
Lane Group Flow (vph)	910	711	64	46	425	15	293	984	0	243	1082	482
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	18.0	34.9	34.9	4.6	21.5	21.5	17.0	36.1		16.0	35.1	53.1
Effective Green, g (s)	18.0	36.2	34.9	4.6	22.8	21.5	17.0	35.2		16.0	34.2	51.3
Actuated g/C Ratio	0.17	0.34	0.32	0.04	0.21	0.20	0.16	0.33		0.15	0.32	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	834	1190	513	75	749	316	279	1121		263	1124	754
v/s Ratio Prot	c0.18	c0.20		0.03	c0.12		c0.17	0.29		0.14	c0.31	0.10
v/s Ratio Perm			0.04			0.01						0.20
v/c Ratio	1.09	0.59	0.12	0.61	0.56	0.04	1.05	0.87		0.92	0.96	0.63
Uniform Delay, d1	44.8	29.6	25.5	50.6	37.9	34.7	45.3	34.1		45.1	36.0	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	58.9	0.8	0.1	13.9	0.9	0.0	67.6	7.9		35.5	18.4	1.7
Delay (s)	103.7	30.4	25.6	64.5	38.9	34.8	112.9	42.1		80.7	54.4	22.9
Level of Service	F	C	C	E	D	C	F	D		F	D	C
Approach Delay (s/veh)		66.6			40.5			58.1			48.6	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	56.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	16.5
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

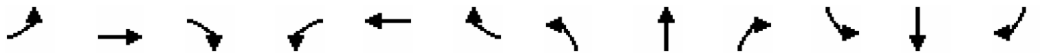
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	843	0	596	0	783	89	0	821	598
Future Volume (vph)	0	0	0	843	0	596	0	783	89	0	821	598
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5085	1583
Flt Permitted				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)				3433		1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	916	0	648	0	851	97	0	892	650
RTOR Reduction (vph)	0	0	0	0	0	80	0	0	0	0	0	361
Lane Group Flow (vph)	0	0	0	916	0	568	0	851	97	0	892	289
Turn Type				Prot		Prot		NA	Free		NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free			
Actuated Green, G (s)				30.1		30.1		31.9	70.0		31.9	31.9
Effective Green, g (s)				30.1		30.1		31.1	70.0		31.1	31.1
Actuated g/C Ratio				0.43		0.43		0.44	1.00		0.44	0.44
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1476		680		2259	1583		2259	703
v/s Ratio Prot				0.27		c0.36		0.17			0.18	c0.18
v/s Ratio Perm									0.06			
v/c Ratio				0.62		0.83		0.37	0.06		0.39	0.41
Uniform Delay, d1				15.5		17.7		12.9	0.0		13.1	13.2
Progression Factor				1.00		1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2				0.5		8.3		0.4	0.0		0.5	1.7
Delay (s)				16.0		26.1		13.4	0.0		13.6	14.9
Level of Service				B		C		B	A		B	B
Approach Delay (s/veh)		0.0			20.2			12.0			14.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	396	0	359	0	0	0	0	847	731	0	1121	671
Future Volume (vph)	396	0	359	0	0	0	0	847	731	0	1121	671
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	430	0	390	0	0	0	0	921	795	0	1218	729
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	430	0	305	0	0	0	0	921	795	0	1218	729
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	11.2		11.2					34.8	55.0		34.8	55.0
Effective Green, g (s)	11.2		11.2					35.8	55.0		35.8	55.0
Actuated g/C Ratio	0.20		0.20					0.65	1.00		0.65	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	699		567					3309	1583		3309	1583
v/s Ratio Prot	0.13							0.18			0.24	
v/s Ratio Perm			0.11						c0.50			0.46
v/c Ratio	0.61		0.53					0.27	0.50		0.36	0.46
Uniform Delay, d1	19.9		19.5					4.0	0.0		4.4	0.0
Progression Factor	1.00		1.00					1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1		0.4					0.2	1.1		0.3	0.9
Delay (s)	21.0		20.0					4.3	1.1		4.7	0.9
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		20.6			0.0			2.8			3.3	
Approach LOS		C			A			A			A	

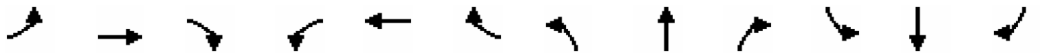
Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	137	1	194	0	723	400	0	790	778
Future Volume (vph)	0	0	0	137	1	194	0	723	400	0	790	778
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.92	
Flt Protected				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1686	2787		3539	1583		4707	
Flt Permitted				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1686	2787		3539	1583		4707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	149	1	211	0	786	435	0	859	846
RTOR Reduction (vph)	0	0	0	0	0	180	0	0	113	0	165	0
Lane Group Flow (vph)	0	0	0	79	71	31	0	786	322	0	1540	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				10.2	10.2	10.2		50.5	50.5		50.5	
Effective Green, g (s)				10.2	10.2	10.2		51.8	51.8		51.8	
Actuated g/C Ratio				0.15	0.15	0.15		0.74	0.74		0.74	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				244	245	406		2618	1171		3483	
v/s Ratio Prot				c0.05	0.04			0.22			c0.33	
v/s Ratio Perm						0.01			0.20			
v/c Ratio				0.32	0.28	0.07		0.30	0.27		0.44	
Uniform Delay, d1				26.8	26.6	25.8		3.0	2.9		3.5	
Progression Factor				1.00	1.00	1.00		0.78	2.35		1.00	
Incremental Delay, d2				0.2	0.2	0.0		0.2	0.5		0.4	
Delay (s)				27.0	26.9	25.8		2.6	7.4		3.9	
Level of Service				C	C	C		A	A		A	
Approach Delay (s/veh)		0.0			26.3			4.3			3.9	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		

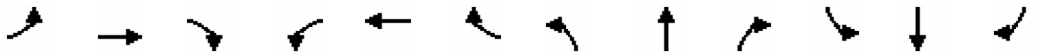
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	542	236	366	98	111	216	124	484	198	144	420	353
Future Volume (vph)	542	236	366	98	111	216	124	484	198	144	420	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3385		1770	3297	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3385		1770	3297	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	589	257	398	107	121	235	135	526	215	157	457	384
RTOR Reduction (vph)	0	0	297	0	0	83	0	26	0	0	106	0
Lane Group Flow (vph)	589	257	101	107	121	152	135	715	0	157	735	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	30.7	30.7	30.7	15.3	15.3	31.7	19.3	61.6		16.4	58.7	
Effective Green, g (s)	30.7	30.7	30.7	14.9	14.9	30.9	18.8	62.9		16.4	60.0	
Actuated g/C Ratio	0.22	0.22	0.22	0.11	0.11	0.22	0.13	0.45		0.12	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	752	408	347	188	198	399	237	1520		207	1413	
v/s Ratio Prot	c0.17	0.14		0.06	c0.06	0.04	0.08	c0.21		c0.09	c0.22	
v/s Ratio Perm			0.06			0.05						
v/c Ratio	0.78	0.62	0.28	0.56	0.61	0.38	0.56	0.47		0.75	0.51	
Uniform Delay, d1	51.5	49.5	45.5	59.4	59.7	46.4	56.8	26.9		59.8	29.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.83		1.04	0.93	
Incremental Delay, d2	4.9	2.1	0.1	2.3	3.8	0.2	0.8	0.4		12.2	1.2	
Delay (s)	56.4	51.6	45.7	61.8	63.6	46.6	46.8	22.8		74.6	28.8	
Level of Service	E	D	D	E	E	D	D	C		E	C	
Approach Delay (s/veh)		52.0			54.6			26.5			36.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

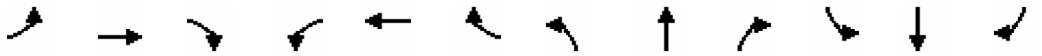
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	734	260	222	238	244	101	1296	679	304	1603	82
Future Volume (vph)	242	734	260	222	238	244	101	1296	679	304	1603	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	263	798	283	241	259	265	110	1409	738	330	1742	89
RTOR Reduction (vph)	0	0	113	0	0	37	0	0	194	0	0	52
Lane Group Flow (vph)	263	798	170	241	259	228	110	1409	544	330	1742	37
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.0	33.8	33.8	17.7	36.5	52.6	8.6	49.7	49.7	16.1	57.2	57.2
Effective Green, g (s)	15.0	33.8	33.8	17.7	36.5	52.6	8.6	49.7	49.7	16.1	57.2	57.2
Actuated g/C Ratio	0.11	0.24	0.24	0.13	0.26	0.38	0.06	0.36	0.36	0.12	0.41	0.41
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	371	863	386	226	932	661	213	1824	568	399	2100	653
v/s Ratio Prot	0.08	c0.23		c0.14	0.07	c0.04	0.03	0.28		c0.10	c0.34	
v/s Ratio Perm			0.11			0.10			c0.34			0.02
v/c Ratio	0.70	0.92	0.44	1.06	0.27	0.34	0.51	0.77	0.95	0.82	0.82	0.05
Uniform Delay, d1	59.6	51.1	44.3	60.4	40.5	30.6	62.9	39.3	43.3	59.8	36.2	24.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.0	15.3	0.8	78.5	0.1	0.3	2.1	2.0	27.3	13.1	2.8	0.0
Delay (s)	65.7	66.4	45.1	138.9	40.6	30.9	65.0	41.4	70.7	72.9	39.1	24.4
Level of Service	E	E	D	F	D	C	E	D	E	E	D	C
Approach Delay (s/veh)		61.8			68.2			52.1			43.7	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	21.2
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

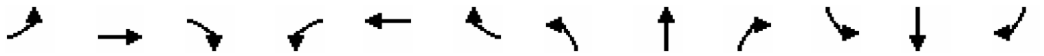
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	775	297	1178	40	0	99	0	752	0	0	0
Future Volume (vph)	0	775	297	1178	40	0	99	0	752	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	842	323	1280	43	0	108	0	817	0	0	0
RTOR Reduction (vph)	0	0	226	0	0	0	0	0	279	0	0	0
Lane Group Flow (vph)	0	842	97	1280	43	0	0	108	538	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		33.0	33.0	55.5	92.5			19.5	75.0			
Effective Green, g (s)		35.0	35.0	57.5	94.5			19.3	79.0			
Actuated g/C Ratio		0.29	0.29	0.48	0.79			0.16	0.66			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		1032	461	1644	1467			284	1881			
v/s Ratio Prot		c0.24		c0.37	0.02			c0.06	0.14			
v/s Ratio Perm			0.06						0.06			
v/c Ratio		0.81	0.21	0.77	0.02			0.38	0.28			
Uniform Delay, d1		39.5	32.0	25.9	2.7			45.0	8.6			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		7.1	1.0	2.3	0.0			0.8	0.0			
Delay (s)		46.6	33.1	28.3	2.8			45.8	8.7			
Level of Service		D	C	C	A			D	A			
Approach Delay (s/veh)		42.8			27.5			13.0			0.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

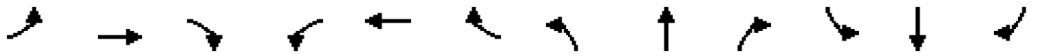
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	1129	109	61	351	44	13	6	330	39	4	90
Future Volume (vph)	117	1129	109	61	351	44	13	6	330	39	4	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1589		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1589		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	1227	118	66	382	48	14	7	359	42	4	98
RTOR Reduction (vph)	0	0	64	0	0	27	0	217	0	0	0	73
Lane Group Flow (vph)	127	1227	54	66	382	21	14	149	0	42	4	25
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	6.5	32.0	32.0	4.3	29.8	29.8	1.2	16.5		3.4	18.7	18.7
Effective Green, g (s)	6.5	33.3	33.3	4.3	31.1	31.1	1.2	17.5		3.4	18.1	18.1
Actuated g/C Ratio	0.09	0.46	0.46	0.06	0.43	0.43	0.02	0.24		0.05	0.25	0.25
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	309	1632	730	105	1524	681	29	385		83	467	396
v/s Ratio Prot	0.04	c0.35		c0.04	0.11		0.01	c0.09		c0.02	0.00	
v/s Ratio Perm			0.03			0.01						0.02
v/c Ratio	0.41	0.75	0.07	0.62	0.25	0.03	0.48	0.38		0.50	0.00	0.06
Uniform Delay, d1	31.0	16.0	10.8	33.1	13.1	11.8	35.1	22.8		33.5	20.3	20.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.0	0.0	11.2	0.0	0.0	12.1	0.6		4.7	0.0	0.0
Delay (s)	31.9	18.0	10.8	44.3	13.2	11.8	47.3	23.5		38.3	20.3	20.6
Level of Service	C	B	B	D	B	B	D	C		D	C	C
Approach Delay (s/veh)		18.6			17.2			24.3			25.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	15.3
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

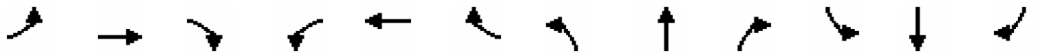
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	927	409	409	444	10	290	225	93	3	183	6
Future Volume (vph)	6	927	409	409	444	10	290	225	93	3	183	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3527		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3527		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	1008	445	445	483	11	315	245	101	3	199	7
RTOR Reduction (vph)	0	0	200	0	1	0	0	0	74	0	0	6
Lane Group Flow (vph)	7	1008	245	445	493	0	315	245	27	3	199	1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.6	39.2	39.2	12.9	50.5		11.1	24.8	24.8	1.6	15.7	15.7
Effective Green, g (s)	1.6	40.5	40.5	12.9	51.8		11.1	26.1	26.1	1.6	14.8	14.8
Actuated g/C Ratio	0.02	0.42	0.42	0.13	0.53		0.11	0.27	0.27	0.02	0.15	0.15
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	29	1476	1162	662	1881		392	951	425	29	539	241
v/s Ratio Prot	0.00	c0.28		c0.09	0.14		c0.09	0.07		0.00	c0.06	
v/s Ratio Perm			0.09						0.02			0.00
v/c Ratio	0.24	0.68	0.21	0.67	0.26		0.80	0.25	0.06	0.10	0.36	0.00
Uniform Delay, d1	47.1	23.0	18.0	40.0	12.2		41.9	27.8	26.4	47.0	36.9	34.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.3	0.0	2.1	0.0		10.7	0.1	0.0	0.5	0.4	0.0
Delay (s)	48.7	24.3	18.1	42.2	12.3		52.6	28.0	26.4	47.6	37.3	34.9
Level of Service	D	C	B	D	B		D	C	C	D	D	C
Approach Delay (s/veh)		22.6			26.5			39.5			37.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	97.1	Sum of lost time (s)	17.8
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

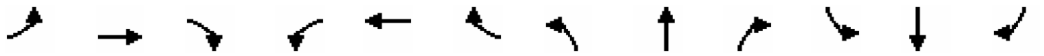
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	673	51	40	499	27	47	1	1	135	24	227
Future Volume (vph)	25	673	51	40	499	27	47	1	1	135	24	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.92		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1843		1770	1849		1770	1723		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00		0.27	1.00		0.75	1.00	
Satd. Flow (perm)	1770	1843		1770	1849		521	1723		1409	1610	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	732	55	43	542	29	51	1	1	147	26	247
RTOR Reduction (vph)	0	3	0	0	2	0	0	1	0	0	203	0
Lane Group Flow (vph)	27	784	0	43	569	0	51	1	0	147	70	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.8	49.7		4.0	49.9		14.3	14.3		14.3	14.3	
Effective Green, g (s)	3.8	49.7		4.0	49.9		14.3	14.3		14.3	14.3	
Actuated g/C Ratio	0.05	0.62		0.05	0.62		0.18	0.18		0.18	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	84	1144		88	1153		93	307		251	287	
v/s Ratio Prot	0.02	c0.43		0.02	c0.31			0.00			0.04	
v/s Ratio Perm							0.10			c0.10		
v/c Ratio	0.32	0.68		0.48	0.49		0.54	0.00		0.58	0.24	
Uniform Delay, d1	36.8	9.9		37.0	8.1		29.9	26.9		30.1	28.2	
Progression Factor	1.00	1.00		1.00	0.87		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	3.3		3.7	1.3		6.4	0.0		3.4	0.4	
Delay (s)	39.0	13.3		41.0	8.5		36.3	27.0		33.5	28.6	
Level of Service	D	B		D	A		D	C		C	C	
Approach Delay (s/veh)		14.2			10.7			36.0			30.3	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

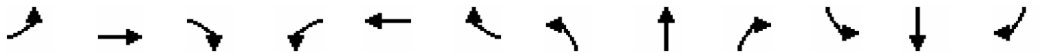
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	488	308	30	286	54	167	12	13	270	107	113
Future Volume (vph)	13	488	308	30	286	54	167	12	13	270	107	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.92		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1755		1770	1818		1770	1718		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00		0.45	1.00		0.73	1.00	
Satd. Flow (perm)	1770	1755		1770	1818		842	1718		1378	1719	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	530	335	33	311	59	182	13	14	293	116	123
RTOR Reduction (vph)	0	26	0	0	8	0	0	11	0	0	50	0
Lane Group Flow (vph)	14	839	0	33	362	0	182	17	0	293	190	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.1	45.6		2.4	44.9		20.0	20.0		20.0	20.0	
Effective Green, g (s)	3.1	45.6		2.4	44.9		20.0	20.0		20.0	20.0	
Actuated g/C Ratio	0.04	0.57		0.03	0.56		0.25	0.25		0.25	0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	68	1000		53	1020		210	429		344	429	
v/s Ratio Prot	0.01	c0.48		c0.02	0.20			0.01			0.11	
v/s Ratio Perm							c0.22			0.21		
v/c Ratio	0.20	0.83		0.62	0.35		0.86	0.03		0.85	0.44	
Uniform Delay, d1	37.2	14.1		38.3	9.6		28.7	22.7		28.5	25.2	
Progression Factor	1.16	0.81		1.09	1.02		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	6.7		20.1	0.9		29.1	0.0		17.9	0.7	
Delay (s)	44.5	18.3		62.0	10.8		57.8	22.7		46.5	26.0	
Level of Service	D	B		E	B		E	C		D	C	
Approach Delay (s/veh)		18.8			15.0			53.3			37.3	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

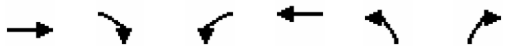
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	45	448	125	23	93	443	601	335	167	988	37
Future Volume (vph)	87	45	448	125	23	93	443	601	335	167	988	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.87	0.85	1.00	0.87		1.00	0.94		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1552	1504	1770	1639		3433	3349		1770	3520	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1552	1504	1770	1639		3433	3349		1770	3520	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	49	487	136	25	101	482	653	364	182	1074	40
RTOR Reduction (vph)	0	192	226	0	84	0	0	92	0	0	3	0
Lane Group Flow (vph)	95	81	37	136	42	0	482	925	0	182	1111	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	5.4	10.4	10.4	7.1	12.1		12.1	29.0		10.5	27.4	
Effective Green, g (s)	5.4	10.4	10.4	7.1	12.1		12.1	29.0		10.5	27.4	
Actuated g/C Ratio	0.07	0.14	0.14	0.10	0.17		0.17	0.40		0.14	0.38	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	130	221	214	172	271		569	1330		254	1321	
v/s Ratio Prot	0.05	c0.05		c0.08	0.03		c0.14	0.28		0.10	c0.32	
v/s Ratio Perm			0.02									
v/c Ratio	0.73	0.36	0.17	0.79	0.15		0.84	0.69		0.71	0.84	
Uniform Delay, d1	33.0	28.3	27.5	32.2	26.0		29.5	18.3		29.8	20.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	18.9	1.0	0.3	21.4	0.2		11.2	1.5		9.2	5.0	
Delay (s)	52.0	29.3	27.9	53.6	26.3		40.7	19.9		39.0	25.8	
Level of Service	D	C	C	D	C		D	B		D	C	
Approach Delay (s/veh)		32.1			40.5			26.6			27.6	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	73.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

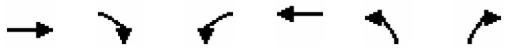
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1368	101	0	592	0	62
Future Volume (Veh/h)	1368	101	0	592	0	62
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1487	110	0	643	0	67
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.74		0.75	0.74
vC, conflicting volume			1597		1756	551
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			582		691	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			732		284	804

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	595	595	407	214	214	214	67
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	110	0	0	0	67
cSH	1700	1700	1700	1700	1700	1700	804
Volume to Capacity	0.35	0.35	0.24	0.13	0.13	0.13	0.08
Queue Length 95th (ft)	0	0	0	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.9
Approach LOS							A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	519	62	154	327	33	56
Future Volume (vph)	519	62	154	327	33	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.91	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1836		1770	1863	1674	
Flt Permitted	1.00		0.38	1.00	0.98	
Satd. Flow (perm)	1836		724	1863	1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	67	167	355	36	61
RTOR Reduction (vph)	3	0	0	0	54	0
Lane Group Flow (vph)	628	0	167	355	43	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	58.3		58.3	58.3	8.7	
Effective Green, g (s)	58.3		58.3	58.3	8.7	
Actuated g/C Ratio	0.78		0.78	0.78	0.12	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1427		562	1448	194	
v/s Ratio Prot	c0.34			0.19	c0.03	
v/s Ratio Perm			0.23			
v/c Ratio	0.44		0.29	0.24	0.22	
Uniform Delay, d1	2.8		2.4	2.2	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.9		0.2	0.0	0.5	
Delay (s)	3.8		2.7	2.3	30.6	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	3.8			2.4	30.6	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

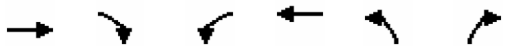
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	123	775	337	807	854	144
Future Volume (vph)	123	775	337	807	854	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.89	0.85	1.00	1.00	0.97	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1637	1504	3433	3539	3462	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1637	1504	3433	3539	3462	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	842	366	877	928	157
RTOR Reduction (vph)	109	34	0	0	16	0
Lane Group Flow (vph)	387	446	366	877	1069	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	22.3	38.0	11.7	48.0	32.3	
Effective Green, g (s)	22.3	38.0	11.7	48.0	32.3	
Actuated g/C Ratio	0.28	0.49	0.15	0.61	0.41	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	466	729	512	2169	1428	
v/s Ratio Prot	c0.24	c0.30	0.11	0.25	c0.31	
v/s Ratio Perm						
v/c Ratio	0.83	0.61	0.71	0.40	0.74	
Uniform Delay, d1	26.2	14.7	31.7	7.7	19.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.9	1.5	4.7	0.1	2.1	
Delay (s)	38.1	16.2	36.4	7.9	21.7	
Level of Service	D	B	D	A	C	
Approach Delay (s/veh)	27.4			16.3	21.7	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	78.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

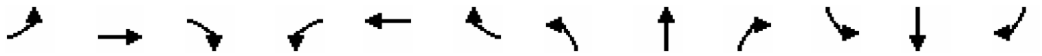
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	525	246	123	237	133	56
Future Volume (vph)	525	246	123	237	133	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1783		1770	1863	1727	
Flt Permitted	1.00		0.25	1.00	0.96	
Satd. Flow (perm)	1783		479	1863	1727	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	267	134	258	145	61
RTOR Reduction (vph)	16	0	0	0	21	0
Lane Group Flow (vph)	822	0	134	258	185	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	57.7		57.7	57.7	14.3	
Effective Green, g (s)	57.7		57.7	57.7	14.3	
Actuated g/C Ratio	0.72		0.72	0.72	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1285		345	1343	308	
v/s Ratio Prot	c0.46			0.14	c0.11	
v/s Ratio Perm			0.28			
v/c Ratio	0.63		0.38	0.19	0.59	
Uniform Delay, d1	5.7		4.3	3.6	30.2	
Progression Factor	0.89		1.00	1.00	1.00	
Incremental Delay, d2	1.4		0.7	0.0	3.1	
Delay (s)	6.6		5.0	3.6	33.3	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	6.6			4.1	33.3	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

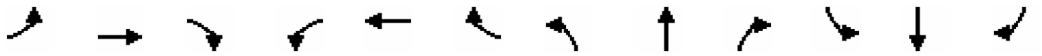
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	92	224	42	54	31	222	448	111	56	926	19
Future Volume (vph)	44	92	224	42	54	31	222	448	111	56	926	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.94		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1665		1770	1761		1770	3434		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1665		1770	1761		1770	3434		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	100	243	46	59	34	241	487	121	61	1007	21
RTOR Reduction (vph)	0	101	0	0	24	0	0	19	0	0	0	13
Lane Group Flow (vph)	48	242	0	46	69	0	241	589	0	61	1007	8
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	2.9	17.5		2.9	17.5		15.3	41.8		3.7	30.2	30.2
Effective Green, g (s)	2.9	17.5		2.9	17.5		15.3	41.8		3.7	30.2	30.2
Actuated g/C Ratio	0.04	0.21		0.04	0.21		0.19	0.51		0.05	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	62	355		62	376		330	1752		79	1304	583
v/s Ratio Prot	c0.03	c0.15		0.03	0.04		c0.14	0.17		0.03	c0.28	
v/s Ratio Perm												0.00
v/c Ratio	0.77	0.68		0.74	0.18		0.73	0.33		0.77	0.77	0.01
Uniform Delay, d1	39.1	29.6		39.1	26.3		31.3	11.8		38.6	22.8	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.2	5.2		37.5	0.2		8.0	0.1		36.3	2.9	0.0
Delay (s)	83.4	34.9		76.7	26.5		39.4	11.9		75.0	25.7	16.4
Level of Service	F	C		E	C		D	B		E	C	B
Approach Delay (s/veh)		40.8			43.1			19.7			28.3	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

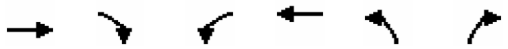
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	666	329	149	598	13	236	0	62	13	0	29
Future Volume (vph)	29	666	329	149	598	13	236	0	62	13	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3364		1770	3528		1770	1583		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3364		1770	3528		1770	1583		1770	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	724	358	162	650	14	257	0	67	14	0	32
RTOR Reduction (vph)	0	46	0	0	1	0	0	48	0	0	29	0
Lane Group Flow (vph)	32	1036	0	162	663	0	257	19	0	14	3	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.2	36.0		11.6	44.4		17.9	26.1		0.6	8.8	
Effective Green, g (s)	3.2	36.0		11.6	44.4		17.9	26.1		0.6	8.8	
Actuated g/C Ratio	0.04	0.40		0.13	0.49		0.20	0.29		0.01	0.10	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	62	1341		227	1734		350	457		11	154	
v/s Ratio Prot	0.02	c0.31		c0.09	0.19		c0.15	c0.01		0.01	0.00	
v/s Ratio Perm												
v/c Ratio	0.51	0.77		0.71	0.38		0.73	0.04		1.27	0.02	
Uniform Delay, d1	42.7	23.5		37.7	14.3		33.9	23.1		44.8	36.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	2.8		10.1	0.1		7.7	0.0		373.5	0.0	
Delay (s)	49.8	26.4		47.9	14.5		41.7	23.1		418.4	36.9	
Level of Service	D	C		D	B		D	C		F	D	
Approach Delay (s/veh)		27.1			21.0			37.8			153.0	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	90.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

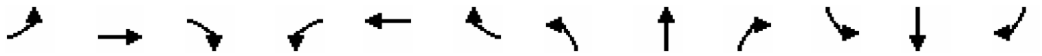
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	731	10	0	760	0	55
Future Volume (Veh/h)	731	10	0	760	0	55
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	795	11	0	826	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			806		1214	403
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			399		882	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	93
cM capacity (veh/h)			975		241	915

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	530	276	413	413	0	60
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	60
cSH	1700	1700	1700	1700	1700	915
Volume to Capacity	0.31	0.16	0.24	0.24	0.00	0.07
Queue Length 95th (ft)	0	0	0	0	0	5
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.2	
Approach LOS					A	

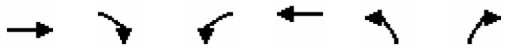
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	1157	142	86	459	139	98	21	125	35	65	35
Future Volume (vph)	131	1157	142	86	459	139	98	21	125	35	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.96		1.00	0.87		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5002		1770	4908		1770	1624		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5002		1770	4908		1770	1624		1770	1765	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	142	1258	154	93	499	151	107	23	136	38	71	38
RTOR Reduction (vph)	0	16	0	0	62	0	0	102	0	0	31	0
Lane Group Flow (vph)	142	1396	0	93	588	0	107	57	0	38	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.5	21.0		5.8	19.3		5.5	14.6		1.7	10.8	
Effective Green, g (s)	7.5	21.0		5.8	19.3		5.5	14.6		1.7	10.8	
Actuated g/C Ratio	0.13	0.36		0.10	0.33		0.09	0.25		0.03	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	224	1777		173	1602		164	401		50	322	
v/s Ratio Prot	c0.08	c0.28		0.05	0.12		c0.06	c0.03		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.63	0.78		0.53	0.36		0.65	0.14		0.76	0.24	
Uniform Delay, d1	24.4	17.0		25.3	15.2		25.8	17.3		28.4	20.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	2.3		3.1	0.1		8.9	0.1		48.9	0.3	
Delay (s)	30.2	19.3		28.5	15.3		34.8	17.5		77.4	21.0	
Level of Service	C	B		C	B		C	B		E	C	
Approach Delay (s/veh)		20.3			17.0			24.4			35.6	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	59.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

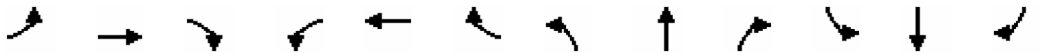
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1457	41	0	455	0	42
Future Volume (Veh/h)	1457	41	0	455	0	42
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1584	45	0	495	0	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.78		0.78	0.78
vC, conflicting volume			1629		1772	551
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			818		1001	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			628		187	846

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	634	634	362	165	165	165	46
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	45	0	0	0	46
cSH	1700	1700	1700	1700	1700	1700	846
Volume to Capacity	0.37	0.37	0.21	0.10	0.10	0.10	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.5
Approach LOS							A

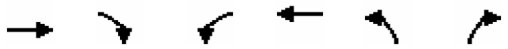
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1268	101	130	323	139	98	21	166	35	64	34
Future Volume (vph)	130	1268	101	130	323	139	98	21	166	35	64	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.95		1.00	0.86		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5029		1770	4856		1770	1615		1770	1766	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5029		1770	4856		1770	1615		1770	1766	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	1378	110	141	351	151	107	23	180	38	70	37
RTOR Reduction (vph)	0	10	0	0	82	0	0	137	0	0	30	0
Lane Group Flow (vph)	141	1478	0	141	420	0	107	66	0	38	77	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.8	20.8		7.2	21.2		4.7	14.2		1.4	10.9	
Effective Green, g (s)	6.8	20.8		7.2	21.2		4.7	14.2		1.4	10.9	
Actuated g/C Ratio	0.11	0.35		0.12	0.36		0.08	0.24		0.02	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	1755		213	1727		139	384		41	322	
v/s Ratio Prot	c0.08	c0.29		0.08	0.09		c0.06	c0.04		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.70	0.84		0.66	0.24		0.76	0.17		0.92	0.23	
Uniform Delay, d1	25.4	17.8		25.0	13.5		26.9	18.0		29.0	20.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.5	3.8		7.5	0.0		22.2	0.2		110.9	0.3	
Delay (s)	35.9	21.7		32.5	13.6		49.1	18.2		140.0	21.1	
Level of Service	D	C		C	B		D	B		F	C	
Approach Delay (s/veh)		22.9			17.7			28.9			52.3	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	59.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

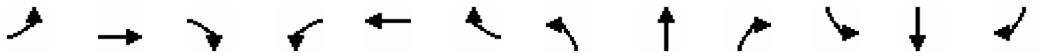


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1297	20	0	684	0	21
Future Volume (Veh/h)	1297	20	0	684	0	21
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1410	22	0	743	0	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.77		0.77	0.77
vC, conflicting volume			1432		1669	481
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			521		828	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			803		239	836

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	564	564	304	248	248	248	23
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	22	0	0	0	23
cSH	1700	1700	1700	1700	1700	1700	836
Volume to Capacity	0.33	0.33	0.18	0.15	0.15	0.15	0.03
Queue Length 95th (ft)	0	0	0	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.4
Approach LOS							A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

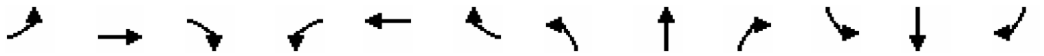
Appendix E – 2040 Option 2 LOS Calculations – AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	150	414	235	346	138	226	1078	211	352	1234	31
Future Volume (vph)	1	150	414	235	346	138	226	1078	211	352	1234	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	163	450	255	376	150	246	1172	229	383	1341	34
RTOR Reduction (vph)	0	0	99	0	0	79	0	0	154	0	0	24
Lane Group Flow (vph)	1	163	351	255	376	71	246	1172	75	383	1341	10
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.7	17.6	32.6	14.4	31.3	45.5	15.0	30.3	30.3	14.2	29.5	29.5
Effective Green, g (s)	0.1	17.0	31.4	13.8	30.7	44.3	16.0	31.3	31.3	15.2	30.5	29.5
Actuated g/C Ratio	0.00	0.18	0.33	0.14	0.32	0.46	0.17	0.33	0.33	0.16	0.32	0.31
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	1	330	519	255	597	732	295	1663	517	545	1620	487
v/s Ratio Prot	0.00	0.09	0.10	c0.14	c0.20	0.01	c0.14	0.23		0.11	c0.26	
v/s Ratio Perm			0.12			0.03			0.05			0.01
v/c Ratio	1.00	0.49	0.67	1.00	0.62	0.09	0.83	0.70	0.14	0.70	0.82	0.02
Uniform Delay, d1	47.8	35.4	27.7	40.9	27.6	14.4	38.5	28.1	22.7	38.1	30.1	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	900.0	1.1	3.4	56.3	2.0	0.0	17.9	1.7	0.2	4.0	4.0	0.0
Delay (s)	947.8	36.6	31.2	97.3	29.7	14.5	56.5	29.8	23.0	42.2	34.2	23.0
Level of Service	F	D	C	F	C	B	E	C	C	D	C	C
Approach Delay (s/veh)		34.1			48.8			32.9			35.7	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	95.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	580	105	295	1240	1	198	6	139	1	3	0
Future Volume (vph)	0	580	105	295	1240	1	198	6	139	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor		0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt		0.97		1.00	0.99		1.00	1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (prot)		3458		3433	3539		1681	1690	1583		1840	
Flt Permitted		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (perm)		3458		3433	3539		1681	1690	1583		1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	630	114	321	1348	1	215	7	151	1	3	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	128	0	0	0
Lane Group Flow (vph)	0	727	0	321	1349	0	112	110	23	0	4	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)		16.8		9.9	30.7		8.7	8.7	8.7		0.5	
Effective Green, g (s)		15.9		9.9	29.8		8.1	8.1	8.1		0.5	
Actuated g/C Ratio		0.30		0.19	0.56		0.15	0.15	0.15		0.01	
Clearance Time (s)		4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)		1029		636	1974		254	256	240		17	
v/s Ratio Prot		0.21		0.09	c0.38		c0.07	0.07			c0.00	
v/s Ratio Perm									0.01			
v/c Ratio		0.70		0.50	0.68		0.44	0.42	0.09		0.23	
Uniform Delay, d1		16.6		19.5	8.4		20.5	20.5	19.4		26.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.8		0.2	0.7		0.4	0.4	0.0		2.5	
Delay (s)		18.5		19.7	9.2		21.0	20.9	19.5		28.8	
Level of Service		B		B	A		C	C	B		C	
Approach Delay (s/veh)		18.5			11.2			20.4			28.8	
Approach LOS		B			B			C			C	

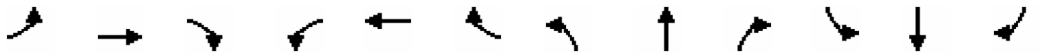
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	53.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	324	287	137	56	649	86	268	485	73	127	723	454
Future Volume (vph)	324	287	137	56	649	86	268	485	73	127	723	454
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3470		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3470		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	312	149	61	705	93	291	527	79	138	786	493
RTOR Reduction (vph)	0	0	93	0	0	68	0	10	0	0	0	34
Lane Group Flow (vph)	352	312	56	61	705	25	291	596	0	138	786	459
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	16.0	40.7	40.7	4.6	29.3	29.3	18.3	34.9		13.0	29.6	45.6
Effective Green, g (s)	16.0	42.0	40.7	4.6	30.6	29.3	18.3	34.0		13.0	28.7	43.8
Actuated g/C Ratio	0.15	0.38	0.37	0.04	0.28	0.27	0.17	0.31		0.12	0.26	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	503	1361	590	74	991	424	296	1080		210	930	705
v/s Ratio Prot	c0.10	0.09		0.03	c0.20		c0.16	0.17		0.08	c0.22	c0.09
v/s Ratio Perm			0.04			0.02						0.20
v/c Ratio	0.69	0.22	0.09	0.82	0.71	0.05	0.98	0.55		0.65	0.84	0.65
Uniform Delay, d1	44.3	22.6	22.2	51.8	35.3	29.6	45.2	31.2		45.9	38.1	26.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.2	0.0	0.0	49.8	2.4	0.0	47.3	0.6		7.2	7.1	2.1
Delay (s)	48.5	22.7	22.3	101.7	37.7	29.7	92.6	31.8		53.1	45.2	28.6
Level of Service	D	C	C	F	D	C	F	C		D	D	C
Approach Delay (s/veh)		33.8			41.4			51.6			40.2	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	109.2	Sum of lost time (s)	16.5
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

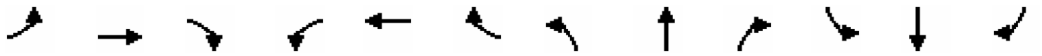
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	678	0	514	0	599	118	116	1022	444
Future Volume (vph)	0	0	0	678	0	514	0	599	118	116	1022	444
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		0.99	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5060	1583
Flt Permitted				0.95		1.00		1.00	1.00		0.79	1.00
Satd. Flow (perm)				3433		1583		5085	1583		4020	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	737	0	559	0	651	128	126	1111	483
RTOR Reduction (vph)	0	0	0	0	0	24	0	0	0	0	0	282
Lane Group Flow (vph)	0	0	0	737	0	535	0	651	128	0	1237	201
Turn Type				Prot		Prot		NA	Free	Perm	NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free	6		
Actuated Green, G (s)				26.2		26.2		25.8	60.0		25.8	25.8
Effective Green, g (s)				26.2		26.2		25.0	60.0		25.0	25.0
Actuated g/C Ratio				0.44		0.44		0.42	1.00		0.42	0.42
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1499		691		2118	1583		1675	659
v/s Ratio Prot				0.21		c0.34		0.13				0.13
v/s Ratio Perm									0.08		c0.31	
v/c Ratio				0.49		0.77		0.30	0.08		0.73	0.30
Uniform Delay, d1				12.1		14.3		11.7	0.0		14.7	11.6
Progression Factor				1.00		1.00		0.82	1.00		1.00	1.00
Incremental Delay, d2				0.0		4.9		0.3	0.0		2.9	1.1
Delay (s)				12.2		19.3		9.9	0.0		17.7	12.8
Level of Service				B		B		A	A		B	B
Approach Delay (s/veh)		0.0			15.2			8.3			16.3	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

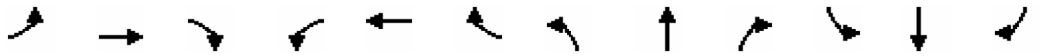
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	0	351	0	0	0	0	761	501	0	1204	534
Future Volume (vph)	275	0	351	0	0	0	0	761	501	0	1204	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	299	0	382	0	0	0	0	827	545	0	1309	580
RTOR Reduction (vph)	0	0	86	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	0	296	0	0	0	0	827	545	0	1309	580
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	10.6		10.6					40.4	60.0		40.4	60.0
Effective Green, g (s)	10.6		10.6					41.4	60.0		41.4	60.0
Actuated g/C Ratio	0.18		0.18					0.69	1.00		0.69	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	606		492					3508	1583		3508	1583
v/s Ratio Prot	0.09							0.16			0.26	
v/s Ratio Perm			c0.11						0.34			c0.37
v/c Ratio	0.49		0.60					0.23	0.34		0.37	0.36
Uniform Delay, d1	22.2		22.7					3.4	0.0		3.8	0.0
Progression Factor	1.00		1.00					1.00	1.00		0.74	1.00
Incremental Delay, d2	0.2		1.4					0.1	0.5		0.2	0.5
Delay (s)	22.5		24.1					3.6	0.5		3.1	0.5
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		23.4			0.0			2.4			2.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

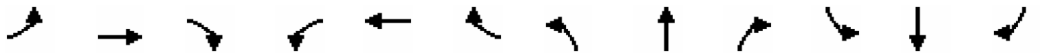
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	45	25	686	0	1108	401	0	372	782
Future Volume (vph)	0	0	0	45	25	686	0	1108	401	0	372	782
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.89	
Flt Protected				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1730	2787		3539	1583		4568	
Flt Permitted				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1730	2787		3539	1583		4568	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	49	27	746	0	1204	436	0	404	850
RTOR Reduction (vph)	0	0	0	0	0	64	0	0	202	0	395	0
Lane Group Flow (vph)	0	0	0	26	50	682	0	1204	234	0	859	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				16.6	16.6	16.6		27.1	27.1		27.1	
Effective Green, g (s)				16.6	16.6	16.6		28.4	28.4		28.4	
Actuated g/C Ratio				0.31	0.31	0.31		0.54	0.54		0.54	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				526	541	872		1896	848		2447	
v/s Ratio Prot				0.02	0.03			c0.34			0.19	
v/s Ratio Perm						c0.24			0.15			
v/c Ratio				0.04	0.09	0.78		0.63	0.27		0.35	
Uniform Delay, d1				12.6	12.8	16.5		8.6	6.6		7.0	
Progression Factor				1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2				0.0	0.0	4.2		0.7	0.2		0.1	
Delay (s)				12.7	12.8	20.8		9.4	6.9		7.1	
Level of Service				B	B	C		A	A		A	
Approach Delay (s/veh)		0.0			20.0			8.7			7.1	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	53.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

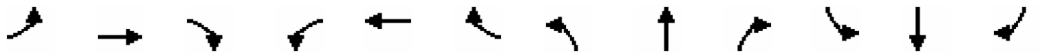
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	619	213	396	38	33	106	49	536	205	89	198	149
Future Volume (vph)	619	213	396	38	33	106	49	536	205	89	198	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3392		1770	3311	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3392		1770	3311	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	673	232	430	41	36	115	53	583	223	97	215	162
RTOR Reduction (vph)	0	0	312	0	0	93	0	46	0	0	113	0
Lane Group Flow (vph)	673	232	118	41	36	22	53	760	0	97	264	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	19.9	19.9	19.9	7.0	7.0	11.3	9.0	25.4		4.3	20.7	
Effective Green, g (s)	19.9	19.9	19.9	6.6	6.6	10.5	8.5	26.7		4.3	22.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.09	0.09	0.14	0.12	0.37		0.06	0.30	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	941	510	433	160	169	324	207	1247		104	1003	
v/s Ratio Prot	c0.20	0.12		c0.02	0.02	0.00	0.03	c0.22		c0.05	0.08	
v/s Ratio Perm			0.07			0.01						
v/c Ratio	0.71	0.45	0.27	0.25	0.21	0.06	0.25	0.60		0.93	0.26	
Uniform Delay, d1	23.7	21.8	20.6	30.7	30.5	26.8	29.1	18.7		34.0	19.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.2	0.1	0.3	0.2	0.0	0.2	0.8		65.9	0.1	
Delay (s)	25.9	22.0	20.7	31.0	30.8	26.8	29.4	19.5		99.9	19.3	
Level of Service	C	C	C	C	C	C	C	B		F	B	
Approach Delay (s/veh)		23.6			28.4			20.2			35.8	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	72.6	Sum of lost time (s)	15.6
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

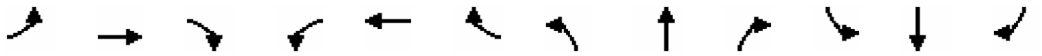
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	63	46	415	797	333	363	1018	96	168	1299	321
Future Volume (vph)	33	63	46	415	797	333	363	1018	96	168	1299	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	68	50	451	866	362	395	1107	104	183	1412	349
RTOR Reduction (vph)	0	0	42	0	0	52	0	0	66	0	0	109
Lane Group Flow (vph)	36	68	8	451	866	310	395	1107	38	183	1412	240
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	3.8	17.4	17.4	18.1	31.7	42.5	13.0	38.1	38.1	10.8	35.9	35.9
Effective Green, g (s)	3.8	17.4	17.4	18.1	31.7	42.5	13.0	38.1	38.1	10.8	35.9	35.9
Actuated g/C Ratio	0.04	0.16	0.16	0.17	0.30	0.40	0.12	0.36	0.36	0.10	0.34	0.34
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	123	583	260	303	1062	716	422	1834	571	351	1728	538
v/s Ratio Prot	0.01	0.02		c0.25	c0.24	0.04	c0.12	0.22		0.05	c0.28	
v/s Ratio Perm			0.01			0.15			0.02			0.15
v/c Ratio	0.29	0.11	0.03	1.48	0.81	0.43	0.93	0.60	0.06	0.52	0.81	0.44
Uniform Delay, d1	49.5	37.5	37.0	43.7	34.2	22.8	45.8	27.5	22.0	44.9	31.8	27.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.0	236.6	4.9	0.4	28.0	0.5	0.0	1.3	3.1	0.5
Delay (s)	50.9	37.6	37.0	280.3	39.1	23.2	73.9	28.1	22.1	46.3	34.9	27.7
Level of Service	D	D	D	F	D	C	E	C	C	D	C	C
Approach Delay (s/veh)		40.5			100.5			39.0			34.7	
Approach LOS		D			F			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	56.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	21.2
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

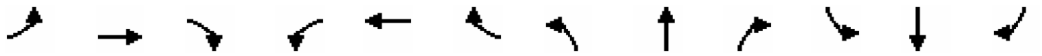
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	84	49	993	965	0	771	0	933	0	0	0
Future Volume (vph)	0	84	49	993	965	0	771	0	933	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	91	53	1079	1049	0	838	0	1014	0	0	0
RTOR Reduction (vph)	0	0	47	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	91	6	1079	1049	0	0	838	909	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		10.0	10.0	41.0	55.0			40.0	81.0			
Effective Green, g (s)		12.0	12.0	43.0	57.0			39.8	85.0			
Actuated g/C Ratio		0.12	0.12	0.42	0.55			0.39	0.83			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		412	184	1433	1030			683	2354			
v/s Ratio Prot		0.03		0.31	c0.56			c0.47	0.16			
v/s Ratio Perm			0.00						0.17			
v/c Ratio		0.22	0.03	0.75	1.01			1.22	0.38			
Uniform Delay, d1		41.2	40.3	25.4	23.0			31.6	2.3			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.2	0.0	2.2	32.7			114.7	0.1			
Delay (s)		41.5	40.4	27.7	55.7			146.3	2.4			
Level of Service		D	D	C	E			F	A			
Approach Delay (s/veh)		41.1			41.5			67.5			0.0	
Approach LOS		D			D			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

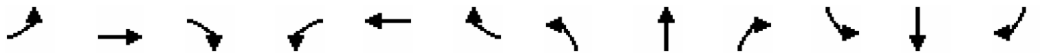
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	428	47	284	895	40	1	3	38	57	5	8
Future Volume (vph)	195	428	47	284	895	40	1	3	38	57	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	465	51	309	973	43	1	3	41	62	5	9
RTOR Reduction (vph)	0	0	34	0	0	23	0	36	0	0	0	8
Lane Group Flow (vph)	212	465	17	309	973	20	1	8	0	62	5	1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	9.8	19.8	19.8	17.3	27.3	27.3	0.9	7.0		2.8	8.9	8.9
Effective Green, g (s)	9.8	21.1	21.1	17.3	28.6	28.6	0.9	8.0		2.8	8.3	8.3
Actuated g/C Ratio	0.16	0.34	0.34	0.28	0.45	0.45	0.01	0.13		0.04	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	534	1187	531	486	1609	719	25	203		78	245	208
v/s Ratio Prot	0.06	0.13		c0.17	c0.27		0.00	c0.01		c0.04	0.00	
v/s Ratio Perm			0.01			0.01						0.00
v/c Ratio	0.39	0.39	0.03	0.63	0.60	0.02	0.04	0.04		0.79	0.02	0.00
Uniform Delay, d1	23.8	15.9	14.0	20.0	12.8	9.4	30.5	24.0		29.7	23.7	23.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.2	0.0	2.7	0.6	0.0	0.6	0.0		41.1	0.0	0.0
Delay (s)	24.3	16.2	14.0	22.7	13.5	9.4	31.2	24.1		70.9	23.7	23.7
Level of Service	C	B	B	C	B	A	C	C		E	C	C
Approach Delay (s/veh)		18.4			15.5			24.3			62.2	
Approach LOS		B			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	15.3
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

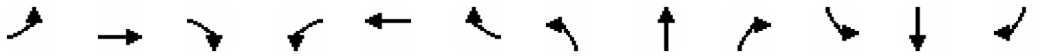
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	311	198	276	539	68	461	302	91	11	76	2
Future Volume (vph)	2	311	198	276	539	68	461	302	91	11	76	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3480		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3480		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	338	215	300	586	74	501	328	99	12	83	2
RTOR Reduction (vph)	0	0	163	0	7	0	0	0	57	0	0	2
Lane Group Flow (vph)	2	338	52	300	653	0	501	328	42	12	83	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.6	18.0	18.0	9.7	26.1		19.2	32.6	32.6	1.6	15.4	15.4
Effective Green, g (s)	1.6	19.3	19.3	9.7	27.4		19.2	33.9	33.9	1.6	14.5	14.5
Actuated g/C Ratio	0.02	0.24	0.24	0.12	0.34		0.24	0.42	0.42	0.02	0.18	0.18
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	35	848	668	601	1184		818	1490	666	35	637	285
v/s Ratio Prot	0.00	0.10		c0.06	c0.19		c0.15	c0.09		0.01	0.02	
v/s Ratio Perm			0.02						0.03			0.00
v/c Ratio	0.05	0.39	0.07	0.49	0.55		0.61	0.22	0.06	0.34	0.13	0.00
Uniform Delay, d1	38.7	25.7	23.7	33.1	21.5		27.3	14.8	13.8	38.9	27.7	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3	0.0	0.2	0.5		0.9	0.0	0.0	2.1	0.0	0.0
Delay (s)	38.9	26.0	23.7	33.3	22.1		28.2	14.9	13.8	41.0	27.7	27.0
Level of Service	D	C	C	C	C		C	B	B	D	C	C
Approach Delay (s/veh)		25.1			25.6			22.0			29.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	17.8
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

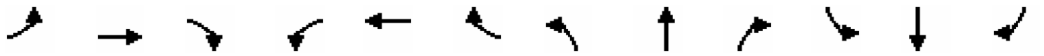
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	467	27	16	660	139	86	7	5	27	1	27
Future Volume (vph)	219	467	27	16	660	139	86	7	5	27	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1848		1770	1814		1770	1755		1770	1593	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.74	1.00	
Satd. Flow (perm)	1770	1848		1770	1814		1374	1755		1395	1593	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	238	508	29	17	717	151	93	8	5	29	1	29
RTOR Reduction (vph)	0	2	0	0	8	0	0	4	0	0	25	0
Lane Group Flow (vph)	238	535	0	17	860	0	93	9	0	29	5	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	13.1	55.9		1.3	44.1		10.8	10.8		10.8	10.8	
Effective Green, g (s)	13.1	55.9		1.3	44.1		10.8	10.8		10.8	10.8	
Actuated g/C Ratio	0.16	0.70		0.02	0.55		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	289	1291		28	999		185	236		188	215	
v/s Ratio Prot	c0.13	0.29		0.01	c0.47			0.00			0.00	
v/s Ratio Perm							c0.07			0.02		
v/c Ratio	0.82	0.41		0.60	0.86		0.50	0.03		0.15	0.02	
Uniform Delay, d1	32.3	5.1		39.0	15.3		32.1	30.0		30.5	30.0	
Progression Factor	1.00	1.00		0.89	0.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.0	0.9		18.0	5.4		2.1	0.0		0.3	0.0	
Delay (s)	49.3	6.0		53.0	16.6		34.2	30.1		30.9	30.0	
Level of Service	D	A		D	B		C	C		C	C	
Approach Delay (s/veh)		19.3			17.3			33.7			30.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

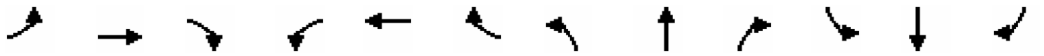
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	294	95	10	575	277	227	150	13	53	13	13
Future Volume (vph)	110	294	95	10	575	277	227	150	13	53	13	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.98		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1772		1770	1841		1770	1723	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.55	1.00	
Satd. Flow (perm)	1770	1795		1770	1772		1377	1841		1025	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	320	103	11	625	301	247	163	14	58	14	14
RTOR Reduction (vph)	0	12	0	0	21	0	0	4	0	0	11	0
Lane Group Flow (vph)	120	411	0	11	905	0	247	173	0	58	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	8.2	48.8		0.8	41.4		18.4	18.4		18.4	18.4	
Effective Green, g (s)	8.2	48.8		0.8	41.4		18.4	18.4		18.4	18.4	
Actuated g/C Ratio	0.10	0.61		0.01	0.52		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	181	1094		17	917		316	423		235	396	
v/s Ratio Prot	c0.07	0.23		0.01	c0.51			0.09			0.01	
v/s Ratio Perm							c0.18			0.06		
v/c Ratio	0.66	0.37		0.64	0.98		0.78	0.40		0.24	0.04	
Uniform Delay, d1	34.5	7.8		39.4	19.0		28.9	26.1		25.1	23.9	
Progression Factor	0.86	0.38		1.06	0.98		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.3	0.9		53.7	24.1		11.8	0.6		0.5	0.0	
Delay (s)	38.4	4.0		95.8	42.9		40.7	26.8		25.6	24.0	
Level of Service	D	A		F	D		D	C		C	C	
Approach Delay (s/veh)		11.6			43.5			34.9			25.1	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

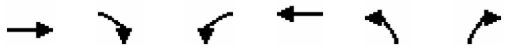
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	5	383	332	26	68	376	690	47	26	734	57
Future Volume (vph)	5	5	383	332	26	68	376	690	47	26	734	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.85	0.85	1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1511	1504	1770	1660		3433	3505		1770	3501	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1511	1504	1770	1660		3433	3505		1770	3501	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	416	361	28	74	409	750	51	28	798	62
RTOR Reduction (vph)	0	165	171	0	55	0	0	5	0	0	5	0
Lane Group Flow (vph)	5	44	41	361	47	0	409	796	0	28	855	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	0.6	13.8	13.8	5.2	18.4		12.6	34.9		1.7	24.0	
Effective Green, g (s)	0.6	13.8	13.8	5.2	18.4		12.6	34.9		1.7	24.0	
Actuated g/C Ratio	0.01	0.19	0.19	0.07	0.26		0.18	0.49		0.02	0.34	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	291	289	128	426		604	1708		42	1173	
v/s Ratio Prot	0.00	c0.03		c0.20	0.03		c0.12	0.23		0.02	c0.24	
v/s Ratio Perm			0.03									
v/c Ratio	0.35	0.15	0.14	2.82	0.11		0.67	0.46		0.66	0.72	
Uniform Delay, d1	35.3	24.0	23.9	33.1	20.3		27.5	12.1		34.6	20.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.9	0.2	0.2	840.3	0.1		3.0	0.9		33.3	3.9	
Delay (s)	50.2	24.2	24.2	873.5	20.4		30.6	13.0		68.0	24.9	
Level of Service	D	C	C	F	C		C	B		E	C	
Approach Delay (s/veh)		24.5			685.6			19.0			26.2	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	125.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	71.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

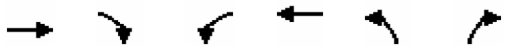
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	461	43	0	1123	0	7
Future Volume (Veh/h)	461	43	0	1123	0	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	501	47	0	1221	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.94		0.88	0.94
vC, conflicting volume			548		932	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			311		35	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1176		861	1023

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	200	200	147	407	407	407	8
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	47	0	0	0	8
cSH	1700	1700	1700	1700	1700	1700	1023
Volume to Capacity	0.12	0.12	0.09	0.24	0.24	0.24	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	25.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	324	19	55	679	45	59
Future Volume (vph)	324	19	55	679	45	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.99		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	1849		1770	1863	1684	
Flt Permitted	1.00		0.53	1.00	0.97	
Satd. Flow (perm)	1849		994	1863	1684	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	21	60	738	49	64
RTOR Reduction (vph)	1	0	0	0	51	0
Lane Group Flow (vph)	372	0	60	738	62	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	86.1		86.1	86.1	10.9	
Effective Green, g (s)	86.1		86.1	86.1	10.9	
Actuated g/C Ratio	0.82		0.82	0.82	0.10	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1516		815	1527	174	
v/s Ratio Prot	0.20			c0.40	c0.04	
v/s Ratio Perm			0.06			
v/c Ratio	0.24		0.07	0.48	0.35	
Uniform Delay, d1	2.1		1.8	2.8	43.7	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.0	0.2	1.2	
Delay (s)	2.5		1.8	3.0	45.0	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	2.5			2.9	45.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

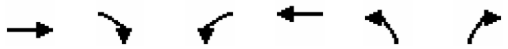
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	36	289	694	742	404	40
Future Volume (vph)	36	289	694	742	404	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.88	0.85	1.00	1.00	0.98	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1627	1504	3433	3539	3492	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1627	1504	3433	3539	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	314	754	807	439	43
RTOR Reduction (vph)	119	80	0	0	12	0
Lane Group Flow (vph)	58	96	754	807	470	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	7.3	28.6	17.3	37.1	15.8	
Effective Green, g (s)	7.3	28.6	17.3	37.1	15.8	
Actuated g/C Ratio	0.14	0.55	0.33	0.71	0.30	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	226	820	1133	2505	1052	
v/s Ratio Prot	c0.04	0.06	c0.22	0.23	c0.13	
v/s Ratio Perm						
v/c Ratio	0.25	0.11	0.66	0.32	0.44	
Uniform Delay, d1	20.1	5.7	15.0	2.8	14.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.0	1.4	0.0	0.3	
Delay (s)	20.7	5.8	16.5	2.9	15.0	
Level of Service	C	A	B	A	B	
Approach Delay (s/veh)	13.3			9.5	15.0	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	52.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

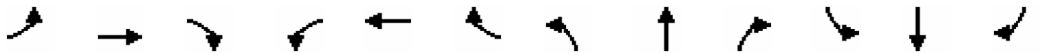
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	284	76	44	680	182	59
Future Volume (vph)	284	76	44	680	182	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1810		1770	1863	1736	
Flt Permitted	1.00		0.50	1.00	0.96	
Satd. Flow (perm)	1810		938	1863	1736	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	309	83	48	739	198	64
RTOR Reduction (vph)	10	0	0	0	16	0
Lane Group Flow (vph)	382	0	48	739	246	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	55.6		55.6	55.6	16.4	
Effective Green, g (s)	55.6		55.6	55.6	16.4	
Actuated g/C Ratio	0.70		0.70	0.70	0.21	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1257		651	1294	355	
v/s Ratio Prot	0.21			c0.40	c0.14	
v/s Ratio Perm			0.05			
v/c Ratio	0.30		0.07	0.57	0.69	
Uniform Delay, d1	4.7		3.9	6.1	29.4	
Progression Factor	0.82		1.00	1.00	1.00	
Incremental Delay, d2	0.5		0.0	0.6	5.7	
Delay (s)	4.4		3.9	6.7	35.2	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	4.4			6.6	35.2	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

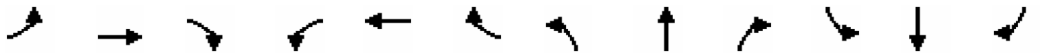
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	22	192	111	37	22	188	559	16	8	514	28
Future Volume (vph)	2	22	192	111	37	22	188	559	16	8	514	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1612		1770	1758		1770	3525		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1612		1770	1758		1770	3525		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	24	209	121	40	24	204	608	17	9	559	30
RTOR Reduction (vph)	0	165	0	0	18	0	0	2	0	0	0	21
Lane Group Flow (vph)	2	68	0	121	46	0	204	623	0	9	559	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	0.5	13.9		4.3	17.7		12.1	30.7		0.5	19.1	19.1
Effective Green, g (s)	0.5	13.9		4.3	17.7		12.1	30.7		0.5	19.1	19.1
Actuated g/C Ratio	0.01	0.21		0.07	0.27		0.19	0.47		0.01	0.29	0.29
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	13	342		116	475		327	1654		13	1033	462
v/s Ratio Prot	0.00	c0.04		c0.07	c0.03		c0.12	0.18		0.01	c0.16	
v/s Ratio Perm												0.01
v/c Ratio	0.15	0.20		1.04	0.09		0.62	0.37		0.69	0.54	0.01
Uniform Delay, d1	32.2	21.1		30.5	17.8		24.5	11.1		32.3	19.4	16.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.4	0.2		95.5	0.0		3.6	0.1		96.2	0.5	0.0
Delay (s)	37.6	21.4		126.1	17.9		28.2	11.3		128.6	20.0	16.4
Level of Service	D	C		F	B		C	B		F	C	B
Approach Delay (s/veh)		21.6			88.7			15.4			21.5	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	323	90	41	676	0	207	0	37	0	0	0
Future Volume (vph)	0	323	90	41	676	0	207	0	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00				
Frt		0.96		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3423		1770	3539		1770	1583				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3423		1770	3539		1770	1583				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	351	98	45	735	0	225	0	40	0	0	0
RTOR Reduction (vph)	0	25	0	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	424	0	45	735	0	225	13	0	0	0	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		19.1		1.4	24.5		8.4	15.9				
Effective Green, g (s)		19.1		1.4	24.5		8.4	15.9				
Actuated g/C Ratio		0.39		0.03	0.51		0.17	0.33				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1350		51	1791		307	520				
v/s Ratio Prot		0.12		c0.03	c0.21		c0.13	c0.01				
v/s Ratio Perm												
v/c Ratio		0.31		0.88	0.41		0.73	0.02				
Uniform Delay, d1		10.1		23.4	7.4		18.9	11.0				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.1		83.1	0.1		8.7	0.0				
Delay (s)		10.2		106.6	7.6		27.6	11.0				
Level of Service		B		F	A		C	B				
Approach Delay (s/veh)		10.2			13.3			25.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	48.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	351	10	0	717	0	56
Future Volume (Veh/h)	351	10	0	717	0	56
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	382	11	0	779	0	61
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked						
vC, conflicting volume			393		777	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			393		777	197
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			1162		334	812

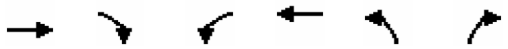
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	255	138	390	390	0	61
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	61
cSH	1700	1700	1700	1700	1700	812
Volume to Capacity	0.15	0.08	0.23	0.23	0.00	0.08
Queue Length 95th (ft)	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.8
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.8	
Approach LOS					A	

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	398	60	77	881	31	137	6	15	27	84	105
Future Volume (vph)	10	398	60	77	881	31	137	6	15	27	84	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.89		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4986		1770	5059		1770	1668		1770	1707	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4986		1770	5059		1770	1668		1770	1707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	433	65	84	958	34	149	7	16	29	91	114
RTOR Reduction (vph)	0	23	0	0	4	0	0	10	0	0	71	0
Lane Group Flow (vph)	11	475	0	84	988	0	149	13	0	29	135	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	16.6		4.0	20.1		9.0	23.5		0.7	15.2	
Effective Green, g (s)	0.5	16.6		4.0	20.1		9.0	23.5		0.7	15.2	
Actuated g/C Ratio	0.01	0.27		0.07	0.33		0.15	0.39		0.01	0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	1361		116	1672		262	644		20	426	
v/s Ratio Prot	0.01	0.10		c0.05	c0.20		c0.08	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.78	0.34		0.72	0.59		0.56	0.02		1.45	0.31	
Uniform Delay, d1	30.0	17.7		27.8	16.9		24.0	11.5		30.0	18.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	130.5	0.1		19.9	0.5		2.8	0.0		363.8	0.4	
Delay (s)	160.6	17.9		47.7	17.4		26.9	11.5		393.9	18.9	
Level of Service	F	B		D	B		C	B		F	B	
Approach Delay (s/veh)		20.9			19.8			24.8			65.4	
Approach LOS		C			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	506	17	0	1218	0	5
Future Volume (Veh/h)	506	17	0	1218	0	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	18	0	1324	0	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.98		0.85	0.98
vC, conflicting volume			568		1000	192
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			508		288	127
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1037		581	887

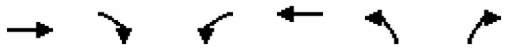
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	220	220	128	441	441	441	5
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	18	0	0	0	5
cSH	1700	1700	1700	1700	1700	1700	887
Volume to Capacity	0.13	0.13	0.08	0.26	0.26	0.26	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.1
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	458	43	115	978	30	136	6	20	26	83	104
Future Volume (vph)	10	458	43	115	978	30	136	6	20	26	83	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5020		1770	5062		1770	1651		1770	1707	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5020		1770	5062		1770	1651		1770	1707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	498	47	125	1063	33	148	7	22	28	90	113
RTOR Reduction (vph)	0	11	0	0	3	0	0	15	0	0	61	0
Lane Group Flow (vph)	11	534	0	125	1093	0	148	14	0	28	142	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	19.2		7.3	26.0		8.0	20.6		1.6	14.2	
Effective Green, g (s)	0.5	19.2		7.3	26.0		8.0	20.6		1.6	14.2	
Actuated g/C Ratio	0.01	0.30		0.11	0.40		0.12	0.32		0.02	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	13	1489		199	2034		218	525		43	374	
v/s Ratio Prot	0.01	0.11		c0.07	c0.22		c0.08	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.84	0.35		0.62	0.53		0.67	0.02		0.65	0.37	
Uniform Delay, d1	32.0	17.9		27.4	14.7		27.1	15.1		31.2	21.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	166.4	0.1		6.0	0.2		8.1	0.0		30.1	0.6	
Delay (s)	198.5	18.0		33.4	15.0		35.2	15.1		61.4	22.1	
Level of Service	F	B		C	B		D	B		E	C	
Approach Delay (s/veh)		21.6			16.9			31.9			26.9	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

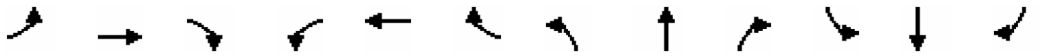


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	431	9	0	989	0	3
Future Volume (Veh/h)	431	9	0	989	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	468	10	0	1075	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			478		831	161
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			329		695	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1184		363	1045

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	187	187	104	358	358	358	3
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	10	0	0	0	3
cSH	1700	1700	1700	1700	1700	1700	1045
Volume to Capacity	0.11	0.11	0.06	0.21	0.21	0.21	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	22.4%	ICU Level of Service	A
Analysis Period (min)	15		

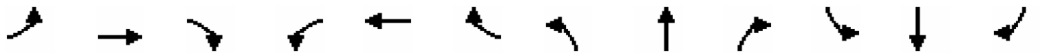
Appendix F – 2040 Option 2 LOS Calculations – PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	192	389	265	191	276	467	998	262	312	1330	18
Future Volume (vph)	10	192	389	265	191	276	467	998	262	312	1330	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	209	423	288	208	300	508	1085	285	339	1446	20
RTOR Reduction (vph)	0	0	56	0	0	50	0	0	170	0	0	12
Lane Group Flow (vph)	11	209	367	288	208	250	508	1085	115	339	1446	8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	1.6	23.9	50.9	14.4	36.7	63.5	27.0	55.7	55.7	26.8	55.5	55.5
Effective Green, g (s)	1.0	23.3	49.7	13.8	36.1	62.3	28.0	56.7	56.7	27.8	56.5	55.5
Actuated g/C Ratio	0.01	0.17	0.36	0.10	0.26	0.45	0.20	0.41	0.41	0.20	0.40	0.40
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	12	310	561	174	480	704	354	2059	641	681	2052	627
v/s Ratio Prot	0.01	c0.11	0.12	c0.16	0.11	0.07	c0.29	0.21		0.10	c0.28	
v/s Ratio Perm			0.11			0.09			0.07			0.01
v/c Ratio	0.91	0.67	0.65	1.65	0.43	0.35	1.43	0.52	0.18	0.49	0.70	0.01
Uniform Delay, d1	69.4	54.7	37.9	63.1	43.4	25.6	56.0	31.5	26.7	49.8	34.7	25.6
Progression Factor	1.12	0.78	0.65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	195.4	4.9	2.3	318.9	0.6	0.3	211.3	0.9	0.6	0.5	2.0	0.0
Delay (s)	273.3	47.6	27.2	382.0	44.0	25.9	267.3	32.4	27.3	50.4	36.8	25.6
Level of Service	F	D	C	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		38.0			159.5			95.2			39.2	
Approach LOS		D			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

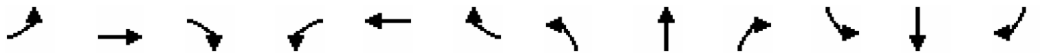
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1087	248	239	941	2	208	2	494	7	1	3
Future Volume (vph)	2	1087	248	239	941	2	208	2	494	7	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (prot)	1770	3440		3433	3538		1681	1687	1583		1742	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (perm)	1770	3440		3433	3538		1681	1687	1583		1742	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	1182	270	260	1023	2	226	2	537	8	1	3
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	304	0	3	0
Lane Group Flow (vph)	2	1439	0	260	1025	0	118	110	233	0	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)	0.7	52.7		11.7	63.7		18.0	18.0	18.0		0.7	
Effective Green, g (s)	0.7	51.8		11.7	62.8		17.4	17.4	17.4		0.7	
Actuated g/C Ratio	0.01	0.51		0.12	0.62		0.17	0.17	0.17		0.01	
Clearance Time (s)	4.0	4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	12	1771		399	2208		290	291	273		12	
v/s Ratio Prot	0.00	c0.42		c0.08	0.29		0.07	0.07			c0.01	
v/s Ratio Perm									c0.15			
v/c Ratio	0.16	0.81		0.65	0.46		0.40	0.37	0.85		0.75	
Uniform Delay, d1	49.6	20.3		42.5	9.9		37.0	36.8	40.3		49.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	2.3	2.8		2.8	0.0		0.3	0.3	21.0		118.8	
Delay (s)	52.0	23.1		45.4	10.0		37.3	37.1	61.4		168.7	
Level of Service	D	C		D	B		D	D	E		F	
Approach Delay (s/veh)		23.1			17.2			54.2			168.7	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	100.6	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

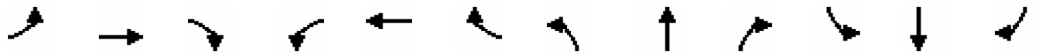
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	836	678	151	45	410	69	285	700	191	221	1047	478
Future Volume (vph)	836	678	151	45	410	69	285	700	191	221	1047	478
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	3425		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	3425		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	909	737	164	49	446	75	310	761	208	240	1138	520
RTOR Reduction (vph)	0	0	110	0	0	62	0	16	0	0	0	48
Lane Group Flow (vph)	909	737	54	49	446	13	310	953	0	240	1138	472
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	24.0	38.7	38.7	8.1	22.8	22.8	23.0	45.2		20.9	43.1	67.1
Effective Green, g (s)	24.0	40.0	38.7	8.1	24.1	22.8	23.0	44.3		20.9	42.2	65.3
Actuated g/C Ratio	0.19	0.31	0.30	0.06	0.19	0.18	0.18	0.34		0.16	0.33	0.51
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	639	1098	475	111	661	280	315	1177		286	1158	801
v/s Ratio Prot	c0.26	c0.21		0.03	c0.13		c0.18	0.28		0.14	c0.32	0.11
v/s Ratio Perm			0.03			0.01						0.19
v/c Ratio	1.42	0.67	0.11	0.44	0.67	0.04	0.98	0.80		0.83	0.98	0.58
Uniform Delay, d1	52.4	38.7	32.6	58.2	48.7	44.0	52.7	38.4		52.3	42.9	22.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	199.1	1.6	0.1	2.7	2.7	0.0	46.0	4.2		18.9	22.2	1.1
Delay (s)	251.6	40.3	32.7	61.0	51.4	44.1	98.8	42.6		71.3	65.1	23.4
Level of Service	F	D	C	E	D	D	F	D		E	E	C
Approach Delay (s/veh)		145.7			51.3			56.2			54.5	
Approach LOS		F			D			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	84.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	128.9	Sum of lost time (s)	16.5
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

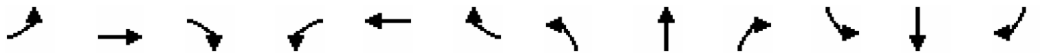
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	854	0	638	0	799	88	0	817	626
Future Volume (vph)	0	0	0	854	0	638	0	799	88	0	817	626
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5085	1583
Flt Permitted				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)				3433		1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	928	0	693	0	868	96	0	888	680
RTOR Reduction (vph)	0	0	0	0	0	72	0	0	0	0	0	401
Lane Group Flow (vph)	0	0	0	928	0	621	0	868	96	0	888	279
Turn Type				Prot		Prot		NA	Free		NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free			
Actuated Green, G (s)				32.5		32.5		29.5	70.0		29.5	29.5
Effective Green, g (s)				32.5		32.5		28.7	70.0		28.7	28.7
Actuated g/C Ratio				0.46		0.46		0.41	1.00		0.41	0.41
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1593		734		2084	1583		2084	649
v/s Ratio Prot				0.27		c0.39		0.17			0.17	c0.18
v/s Ratio Perm									0.06			
v/c Ratio				0.58		0.84		0.41	0.06		0.42	0.42
Uniform Delay, d1				13.7		16.5		14.6	0.0		14.7	14.7
Progression Factor				1.00		1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2				0.3		8.5		0.6	0.0		0.6	2.0
Delay (s)				14.1		25.1		15.3	0.0		15.4	16.8
Level of Service				B		C		B	A		B	B
Approach Delay (s/veh)		0.0			18.8			13.7			16.0	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

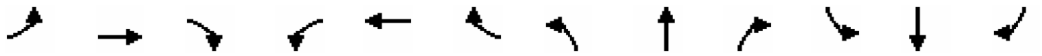
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	408	0	361	0	0	0	0	850	728	0	1133	666
Future Volume (vph)	408	0	361	0	0	0	0	850	728	0	1133	666
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	443	0	392	0	0	0	0	924	791	0	1232	724
RTOR Reduction (vph)	0	0	82	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	443	0	310	0	0	0	0	924	791	0	1232	724
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	11.4		11.4					34.6	55.0		34.6	55.0
Effective Green, g (s)	11.4		11.4					35.6	55.0		35.6	55.0
Actuated g/C Ratio	0.21		0.21					0.65	1.00		0.65	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	711		577					3291	1583		3291	1583
v/s Ratio Prot	0.13							0.18			0.24	
v/s Ratio Perm			0.11						c0.50			0.46
v/c Ratio	0.62		0.53					0.28	0.49		0.37	0.45
Uniform Delay, d1	19.8		19.4					4.1	0.0		4.5	0.0
Progression Factor	1.00		1.00					1.00	1.00		1.00	1.00
Incremental Delay, d2	1.2		0.4					0.2	1.1		0.3	0.9
Delay (s)	21.0		19.9					4.3	1.1		4.8	0.9
Level of Service	C		B					A	A		A	A
Approach Delay (s/veh)		20.5			0.0			2.8			3.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

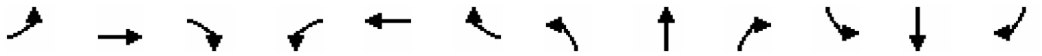
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	159	1	197	0	823	378	0	737	732
Future Volume (vph)	0	0	0	159	1	197	0	823	378	0	737	732
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.92	
Flt Protected				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1686	2787		3539	1583		4705	
Flt Permitted				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1686	2787		3539	1583		4705	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	173	1	214	0	895	411	0	801	796
RTOR Reduction (vph)	0	0	0	0	0	182	0	0	108	0	168	0
Lane Group Flow (vph)	0	0	0	92	82	32	0	895	303	0	1429	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				10.4	10.4	10.4		50.3	50.3		50.3	
Effective Green, g (s)				10.4	10.4	10.4		51.6	51.6		51.6	
Actuated g/C Ratio				0.15	0.15	0.15		0.74	0.74		0.74	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				249	250	414		2608	1166		3468	
v/s Ratio Prot				c0.05	0.05			0.25			c0.30	
v/s Ratio Perm						0.01			0.19			
v/c Ratio				0.36	0.32	0.07		0.34	0.25		0.41	
Uniform Delay, d1				26.8	26.6	25.6		3.2	2.9		3.4	
Progression Factor				1.00	1.00	1.00		0.74	2.28		1.00	
Incremental Delay, d2				0.3	0.2	0.0		0.2	0.4		0.3	
Delay (s)				27.1	26.9	25.6		2.7	7.2		3.8	
Level of Service				C	C	C		A	A		A	
Approach Delay (s/veh)		0.0			26.3			4.1			3.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

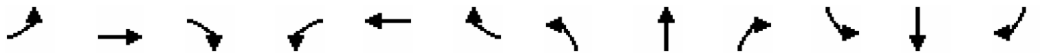
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	596	239	366	97	112	221	120	503	194	150	403	333
Future Volume (vph)	596	239	366	97	112	221	120	503	194	150	403	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3391		1770	3299	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3391		1770	3299	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	648	260	398	105	122	240	130	547	211	163	438	362
RTOR Reduction (vph)	0	0	301	0	0	71	0	25	0	0	109	0
Lane Group Flow (vph)	648	260	97	105	122	169	130	733	0	163	691	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	33.2	33.2	33.2	15.1	15.1	31.7	20.1	59.1		16.6	55.6	
Effective Green, g (s)	33.2	33.2	33.2	14.7	14.7	30.9	19.6	60.4		16.6	56.9	
Actuated g/C Ratio	0.24	0.24	0.24	0.11	0.11	0.22	0.14	0.43		0.12	0.41	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	814	441	375	185	195	399	247	1462		209	1340	
v/s Ratio Prot	c0.19	0.14		0.06	c0.07	0.05	0.07	c0.22		c0.09	c0.21	
v/s Ratio Perm			0.06			0.06						
v/c Ratio	0.79	0.58	0.25	0.56	0.62	0.42	0.52	0.50		0.77	0.51	
Uniform Delay, d1	50.2	47.3	43.4	59.6	60.0	46.8	55.8	28.8		59.9	31.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.81		1.04	0.94	
Incremental Delay, d2	5.0	1.3	0.1	2.3	4.4	0.2	0.4	0.5		14.4	1.3	
Delay (s)	55.2	48.6	43.5	61.9	64.4	47.1	44.9	24.1		76.8	30.8	
Level of Service	E	D	D	E	E	D	D	C		E	C	
Approach Delay (s/veh)		50.3			55.0			27.2			38.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

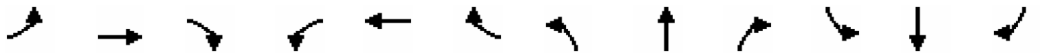
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	756	257	224	240	231	102	1327	693	280	1570	91
Future Volume (vph)	225	756	257	224	240	231	102	1327	693	280	1570	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	822	279	243	261	251	111	1442	753	304	1707	99
RTOR Reduction (vph)	0	0	112	0	0	36	0	0	194	0	0	58
Lane Group Flow (vph)	245	822	167	243	261	215	111	1442	559	304	1707	41
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.6	34.1	34.1	17.7	37.2	52.9	8.7	49.8	49.8	15.7	56.8	56.8
Effective Green, g (s)	14.6	34.1	34.1	17.7	37.2	52.9	8.7	49.8	49.8	15.7	56.8	56.8
Actuated g/C Ratio	0.11	0.25	0.25	0.13	0.27	0.38	0.06	0.36	0.36	0.11	0.41	0.41
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	361	871	389	226	950	665	215	1828	569	389	2085	649
v/s Ratio Prot	0.07	c0.23		c0.14	0.07	c0.04	0.03	0.28		c0.09	c0.34	
v/s Ratio Perm			0.11			0.10			c0.35			0.03
v/c Ratio	0.67	0.94	0.42	1.07	0.27	0.32	0.51	0.78	0.98	0.78	0.81	0.06
Uniform Delay, d1	59.6	51.2	43.9	60.4	39.9	30.1	62.8	39.6	43.9	59.7	36.2	24.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	18.2	0.7	81.2	0.1	0.2	2.0	2.3	33.0	9.8	2.6	0.0
Delay (s)	64.6	69.4	44.7	141.6	40.1	30.4	64.9	41.9	76.9	69.5	38.9	24.7
Level of Service	E	E	D	F	D	C	E	D	E	E	D	C
Approach Delay (s/veh)		63.4			69.6			54.5			42.6	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	21.2
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

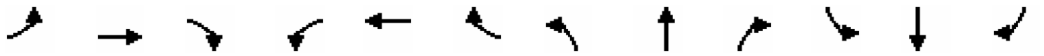
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	884	322	1052	35	0	99	0	855	0	0	0
Future Volume (vph)	0	884	322	1052	35	0	99	0	855	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	961	350	1143	38	0	108	0	929	0	0	0
RTOR Reduction (vph)	0	0	211	0	0	0	0	0	325	0	0	0
Lane Group Flow (vph)	0	961	139	1143	38	0	0	108	604	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		34.0	34.0	54.5	92.5			19.5	74.0			
Effective Green, g (s)		36.0	36.0	56.5	94.5			19.3	78.0			
Actuated g/C Ratio		0.30	0.30	0.47	0.79			0.16	0.65			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		1061	474	1616	1467			284	1858			
v/s Ratio Prot		c0.27		c0.33	0.02			c0.06	0.15			
v/s Ratio Perm			0.09						0.06			
v/c Ratio		0.90	0.29	0.70	0.02			0.38	0.32			
Uniform Delay, d1		40.3	32.2	25.1	2.7			45.0	9.3			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		12.5	1.5	1.4	0.0			0.8	0.1			
Delay (s)		52.9	33.7	26.6	2.7			45.8	9.4			
Level of Service		D	C	C	A			D	A			
Approach Delay (s/veh)		47.8			25.8			13.2			0.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

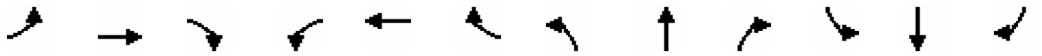
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	955	107	64	409	44	3	7	326	39	4	85
Future Volume (vph)	117	955	107	64	409	44	3	7	326	39	4	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1590		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1590		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	1038	116	70	445	48	3	8	354	42	4	92
RTOR Reduction (vph)	0	0	66	0	0	29	0	221	0	0	0	67
Lane Group Flow (vph)	127	1038	50	70	445	19	3	141	0	42	4	25
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	6.6	28.4	28.4	4.2	26.0	26.0	0.9	16.5		3.3	18.9	18.9
Effective Green, g (s)	6.6	29.7	29.7	4.2	27.3	27.3	0.9	17.5		3.3	18.3	18.3
Actuated g/C Ratio	0.10	0.43	0.43	0.06	0.40	0.40	0.01	0.26		0.05	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	331	1536	687	108	1412	631	23	406		85	498	423
v/s Ratio Prot	0.04	c0.29		c0.04	0.13		0.00	c0.09		c0.02	0.00	
v/s Ratio Perm			0.03			0.01						0.02
v/c Ratio	0.38	0.67	0.07	0.64	0.31	0.03	0.13	0.34		0.49	0.00	0.05
Uniform Delay, d1	28.9	15.4	11.3	31.3	14.1	12.4	33.3	20.7		31.7	18.3	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.7	1.1	0.0	12.6	0.1	0.0	2.5	0.5		4.4	0.0	0.0
Delay (s)	29.7	16.6	11.3	44.0	14.2	12.5	35.9	21.3		36.1	18.3	18.6
Level of Service	C	B	B	D	B	B	D	C		D	B	B
Approach Delay (s/veh)		17.4			17.8			21.4			24.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	15.3
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

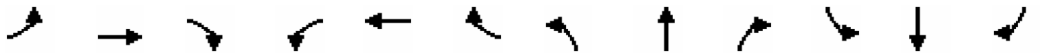
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	807	402	431	483	10	290	224	91	4	185	6
Future Volume (vph)	6	807	402	431	483	10	290	224	91	4	185	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3528		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3528		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	877	437	468	525	11	315	243	99	4	201	7
RTOR Reduction (vph)	0	0	239	0	1	0	0	0	71	0	0	6
Lane Group Flow (vph)	7	877	198	468	535	0	315	243	28	4	201	1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.5	34.0	34.0	13.2	45.7		11.1	25.1	25.1	1.5	15.9	15.9
Effective Green, g (s)	1.5	35.3	35.3	13.2	47.0		11.1	26.4	26.4	1.5	15.0	15.0
Actuated g/C Ratio	0.02	0.38	0.38	0.14	0.51		0.12	0.29	0.29	0.02	0.16	0.16
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	28	1352	1064	712	1794		412	1011	452	28	574	256
v/s Ratio Prot	0.00	c0.25		c0.09	0.15		c0.09	0.07		0.00	c0.06	
v/s Ratio Perm			0.07						0.02			0.00
v/c Ratio	0.25	0.64	0.18	0.65	0.29		0.76	0.24	0.06	0.14	0.35	0.00
Uniform Delay, d1	44.8	23.4	18.9	37.4	13.1		39.3	25.3	24.0	44.8	34.3	32.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	1.0	0.0	1.6	0.0		7.4	0.1	0.0	0.8	0.3	0.0
Delay (s)	46.6	24.5	19.0	39.1	13.2		46.8	25.4	24.0	45.6	34.7	32.4
Level of Service	D	C	B	D	B		D	C	C	D	C	C
Approach Delay (s/veh)		22.8			25.3			35.4			34.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	92.4	Sum of lost time (s)	17.8
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

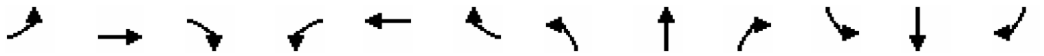
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	689	50	39	476	27	44	1	2	142	13	225
Future Volume (vph)	26	689	50	39	476	27	44	1	2	142	13	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1844		1770	1848		1770	1676		1770	1598	
Flt Permitted	0.95	1.00		0.95	1.00		0.31	1.00		0.75	1.00	
Satd. Flow (perm)	1770	1844		1770	1848		582	1676		1408	1598	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	749	54	42	517	29	48	1	2	154	14	245
RTOR Reduction (vph)	0	3	0	0	2	0	0	2	0	0	200	0
Lane Group Flow (vph)	28	800	0	42	544	0	48	1	0	154	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.2	49.4		4.0	49.2		14.6	14.6		14.6	14.6	
Effective Green, g (s)	4.2	49.4		4.0	49.2		14.6	14.6		14.6	14.6	
Actuated g/C Ratio	0.05	0.62		0.05	0.62		0.18	0.18		0.18	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	92	1138		88	1136		106	305		256	291	
v/s Ratio Prot	0.02	c0.43		0.02	c0.29			0.00			0.04	
v/s Ratio Perm							0.08			c0.11		
v/c Ratio	0.30	0.70		0.47	0.47		0.45	0.00		0.60	0.20	
Uniform Delay, d1	36.4	10.3		36.9	8.4		29.1	26.7		30.0	27.7	
Progression Factor	1.00	1.00		1.01	0.85		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	3.6		3.5	1.2		3.0	0.0		3.9	0.3	
Delay (s)	38.3	13.9		41.1	8.4		32.1	26.7		33.9	28.0	
Level of Service	D	B		D	A		C	C		C	C	
Approach Delay (s/veh)		14.8			10.7			31.8			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

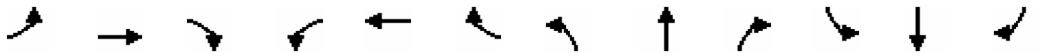
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	511	309	25	265	54	164	12	14	284	124	113
Future Volume (vph)	13	511	309	25	265	54	164	12	14	284	124	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.91		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1757		1770	1815		1770	1713		1770	1730	
Flt Permitted	0.95	1.00		0.95	1.00		0.42	1.00		0.73	1.00	
Satd. Flow (perm)	1770	1757		1770	1815		792	1713		1377	1730	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	555	336	27	288	59	178	13	15	309	135	123
RTOR Reduction (vph)	0	24	0	0	9	0	0	11	0	0	42	0
Lane Group Flow (vph)	14	867	0	27	338	0	178	17	0	309	216	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.4	45.9		1.6	44.1		20.5	20.5		20.5	20.5	
Effective Green, g (s)	3.4	45.9		1.6	44.1		20.5	20.5		20.5	20.5	
Actuated g/C Ratio	0.04	0.57		0.02	0.55		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	75	1008		35	1000		202	438		352	443	
v/s Ratio Prot	0.01	c0.49		c0.02	0.19			0.01			0.12	
v/s Ratio Perm							c0.22			0.22		
v/c Ratio	0.18	0.85		0.77	0.33		0.88	0.03		0.87	0.48	
Uniform Delay, d1	36.9	14.3		39.0	9.9		28.5	22.3		28.5	25.2	
Progression Factor	1.18	0.88		1.09	1.06		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	7.5		65.9	0.8		33.0	0.0		21.0	0.8	
Delay (s)	44.6	20.3		108.5	11.4		61.5	22.3		49.5	26.1	
Level of Service	D	C		F	B		E	C		D	C	
Approach Delay (s/veh)		20.7			18.4			56.2			38.9	
Approach LOS		C			B			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

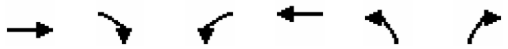
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	45	448	128	22	91	482	620	335	167	1007	37
Future Volume (vph)	87	45	448	128	22	91	482	620	335	167	1007	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.87	0.85	1.00	0.87		1.00	0.94		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1552	1504	1770	1638		3433	3353		1770	3521	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1552	1504	1770	1638		3433	3353		1770	3521	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	49	487	139	24	99	524	674	364	182	1095	40
RTOR Reduction (vph)	0	192	228	0	89	0	0	80	0	0	3	0
Lane Group Flow (vph)	95	81	35	139	34	0	524	958	0	182	1132	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.5	10.8	10.8	6.1	8.4		16.2	40.2		7.1	31.1	
Effective Green, g (s)	8.5	10.8	10.8	6.1	8.4		16.2	40.2		7.1	31.1	
Actuated g/C Ratio	0.11	0.13	0.13	0.08	0.10		0.20	0.50		0.09	0.39	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	187	208	202	134	171		693	1680		156	1365	
v/s Ratio Prot	0.05	c0.05		c0.08	0.02		c0.15	0.29		c0.10	c0.32	
v/s Ratio Perm			0.02									
v/c Ratio	0.50	0.38	0.17	1.03	0.20		0.75	0.57		1.16	0.82	
Uniform Delay, d1	33.8	31.6	30.7	37.0	32.8		30.1	13.9		36.5	22.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	1.2	0.4	88.0	0.5		4.7	0.4		123.8	4.3	
Delay (s)	36.0	32.8	31.1	125.0	33.4		34.8	14.4		160.4	26.4	
Level of Service	D	C	C	F	C		C	B		F	C	
Approach Delay (s/veh)		32.6			82.0			21.2			44.9	
Approach LOS		C			F			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

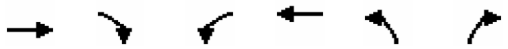
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1221	89	0	642	0	61
Future Volume (Veh/h)	1221	89	0	642	0	61
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1327	97	0	698	0	66
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.79		0.80	0.79
vC, conflicting volume			1424		1608	491
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			596		651	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			770		322	854

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	531	531	362	233	233	233	66
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	97	0	0	0	66
cSH	1700	1700	1700	1700	1700	1700	854
Volume to Capacity	0.31	0.31	0.21	0.14	0.14	0.14	0.08
Queue Length 95th (ft)	0	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.6
Approach LOS							A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	562	61	126	282	32	61
Future Volume (vph)	562	61	126	282	32	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.91	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1838		1770	1863	1669	
Flt Permitted	1.00		0.36	1.00	0.98	
Satd. Flow (perm)	1838		681	1863	1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	611	66	137	307	35	66
RTOR Reduction (vph)	3	0	0	0	58	0
Lane Group Flow (vph)	674	0	137	307	43	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	58.4		58.4	58.4	8.6	
Effective Green, g (s)	58.4		58.4	58.4	8.6	
Actuated g/C Ratio	0.78		0.78	0.78	0.11	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1431		530	1450	191	
v/s Ratio Prot	c0.37			0.16	c0.03	
v/s Ratio Perm			0.20			
v/c Ratio	0.47		0.25	0.21	0.22	
Uniform Delay, d1	2.9		2.3	2.1	30.1	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.1		0.2	0.0	0.5	
Delay (s)	4.0		2.5	2.2	30.7	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	4.0			2.3	30.7	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

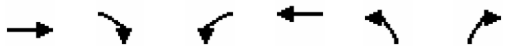
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	143	818	333	849	804	75
Future Volume (vph)	143	818	333	849	804	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.89	0.85	1.00	1.00	0.98	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1641	1504	3433	3539	3494	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1641	1504	3433	3539	3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	155	889	362	923	874	82
RTOR Reduction (vph)	92	38	0	0	9	0
Lane Group Flow (vph)	436	478	362	923	947	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	24.2	39.8	11.6	44.4	28.8	
Effective Green, g (s)	24.2	39.8	11.6	44.4	28.8	
Actuated g/C Ratio	0.32	0.52	0.15	0.58	0.38	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	518	781	519	2051	1313	
v/s Ratio Prot	c0.27	c0.32	0.11	0.26	c0.27	
v/s Ratio Perm						
v/c Ratio	0.84	0.61	0.69	0.45	0.72	
Uniform Delay, d1	24.4	12.9	30.8	9.1	20.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.7	1.4	4.0	0.1	1.9	
Delay (s)	36.1	14.3	34.9	9.3	22.4	
Level of Service	D	B	C	A	C	
Approach Delay (s/veh)	25.3			16.5	22.4	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	76.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

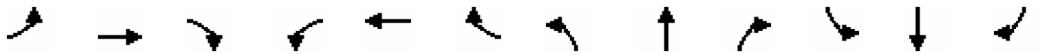
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	562	247	101	213	131	61
Future Volume (vph)	562	247	101	213	131	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1786		1770	1863	1724	
Flt Permitted	1.00		0.23	1.00	0.96	
Satd. Flow (perm)	1786		442	1863	1724	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	611	268	110	232	142	66
RTOR Reduction (vph)	15	0	0	0	24	0
Lane Group Flow (vph)	864	0	110	232	184	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	57.8		57.8	57.8	14.2	
Effective Green, g (s)	57.8		57.8	57.8	14.2	
Actuated g/C Ratio	0.72		0.72	0.72	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1290		319	1346	306	
v/s Ratio Prot	c0.48			0.12	c0.11	
v/s Ratio Perm			0.25			
v/c Ratio	0.66		0.34	0.17	0.60	
Uniform Delay, d1	5.9		4.1	3.5	30.2	
Progression Factor	0.91		1.00	1.00	1.00	
Incremental Delay, d2	1.5		0.6	0.0	3.3	
Delay (s)	7.0		4.7	3.5	33.6	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	7.0			3.9	33.6	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

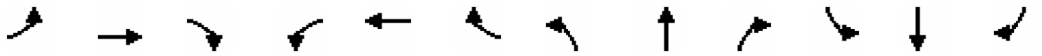
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	87	225	42	51	30	242	445	111	55	944	19
Future Volume (vph)	44	87	225	42	51	30	242	445	111	55	944	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.94		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1661		1770	1758		1770	3433		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1661		1770	1758		1770	3433		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	95	245	46	55	33	263	484	121	60	1026	21
RTOR Reduction (vph)	0	109	0	0	25	0	0	19	0	0	0	13
Lane Group Flow (vph)	48	231	0	46	63	0	263	586	0	60	1026	8
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	3.0	17.1		3.0	17.1		16.2	43.2		3.7	30.7	30.7
Effective Green, g (s)	3.0	17.1		3.0	17.1		16.2	43.2		3.7	30.7	30.7
Actuated g/C Ratio	0.04	0.21		0.04	0.21		0.20	0.52		0.04	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	63	342		63	362		345	1786		78	1309	585
v/s Ratio Prot	c0.03	c0.14		0.03	0.04		c0.15	0.17		0.03	c0.29	
v/s Ratio Perm												0.00
v/c Ratio	0.76	0.67		0.73	0.17		0.76	0.32		0.76	0.78	0.01
Uniform Delay, d1	39.6	30.3		39.5	27.1		31.5	11.5		39.2	23.2	16.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	41.2	5.2		34.9	0.2		9.5	0.1		35.7	3.1	0.0
Delay (s)	80.8	35.6		74.5	27.3		41.1	11.6		74.9	26.3	16.5
Level of Service	F	D		E	C		D	B		E	C	B
Approach Delay (s/veh)		41.2			43.5			20.5			28.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	548	326	149	661	13	234	0	62	13	0	29
Future Volume (vph)	29	548	326	149	661	13	234	0	62	13	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3341		1770	3529		1770	1583		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3341		1770	3529		1770	1583		1770	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	596	354	162	718	14	254	0	67	14	0	32
RTOR Reduction (vph)	0	71	0	0	1	0	0	46	0	0	29	0
Lane Group Flow (vph)	32	879	0	162	731	0	254	21	0	14	3	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.2	29.6		11.8	38.2		18.2	26.2		0.5	8.5	
Effective Green, g (s)	3.2	29.6		11.8	38.2		18.2	26.2		0.5	8.5	
Actuated g/C Ratio	0.04	0.35		0.14	0.45		0.22	0.31		0.01	0.10	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	67	1175		248	1602		383	493		10	159	
v/s Ratio Prot	0.02	c0.26		c0.09	0.21		c0.14	c0.01		0.01	0.00	
v/s Ratio Perm												
v/c Ratio	0.47	0.74		0.65	0.45		0.66	0.04		1.40	0.02	
Uniform Delay, d1	39.6	23.9		34.2	15.7		30.1	20.1		41.8	34.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.2	2.6		6.0	0.2		4.2	0.0		438.5	0.0	
Delay (s)	44.9	26.6		40.2	16.0		34.4	20.2		480.3	34.1	
Level of Service	D	C		D	B		C	C		F	C	
Approach Delay (s/veh)		27.2			20.4			31.4			169.9	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

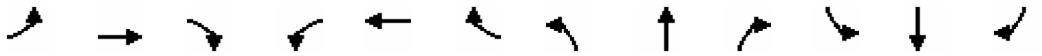
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	613	10	0	823	0	55
Future Volume (Veh/h)	613	10	0	823	0	55
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	666	11	0	895	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked			0.95		0.95	0.95
vC, conflicting volume			677		1119	339
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		1020	198
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			961		221	769

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	444	233	448	448	0	60
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	60
cSH	1700	1700	1700	1700	1700	769
Volume to Capacity	0.26	0.14	0.26	0.26	0.00	0.08
Queue Length 95th (ft)	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	10.1
Lane LOS					A	B
Approach Delay (s/veh)	0.0		0.0		10.1	
Approach LOS					B	

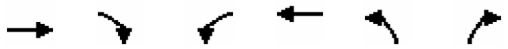
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1031	126	89	491	143	119	21	122	36	67	32
Future Volume (vph)	125	1031	126	89	491	143	119	21	122	36	67	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.96		1.00	0.87		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5002		1770	4914		1770	1625		1770	1772	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5002		1770	4914		1770	1625		1770	1772	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	1121	137	97	534	155	129	23	133	39	73	35
RTOR Reduction (vph)	0	16	0	0	60	0	0	100	0	0	29	0
Lane Group Flow (vph)	136	1242	0	97	629	0	129	56	0	39	79	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.6	20.6		5.8	18.8		5.6	14.7		1.7	10.8	
Effective Green, g (s)	7.6	20.6		5.8	18.8		5.6	14.7		1.7	10.8	
Actuated g/C Ratio	0.13	0.35		0.10	0.32		0.10	0.25		0.03	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	228	1752		174	1571		168	406		51	325	
v/s Ratio Prot	c0.08	c0.25		0.05	0.13		c0.07	c0.03		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.59	0.70		0.55	0.40		0.76	0.13		0.76	0.24	
Uniform Delay, d1	24.1	16.5		25.2	15.6		25.9	17.1		28.3	20.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.1	1.3		3.8	0.1		18.7	0.1		48.9	0.3	
Delay (s)	28.3	17.8		29.1	15.7		44.7	17.2		77.2	20.9	
Level of Service	C	B		C	B		D	B		E	C	
Approach Delay (s/veh)		18.8			17.4			29.7			35.8	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	58.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1284	36	0	517	0	41
Future Volume (Veh/h)	1284	36	0	517	0	41
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1396	39	0	562	0	45
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			1435		1603	485
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			833		1034	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			665		191	906

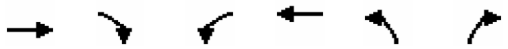
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	558	558	318	187	187	187	45
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	39	0	0	0	45
cSH	1700	1700	1700	1700	1700	1700	906
Volume to Capacity	0.33	0.33	0.19	0.11	0.11	0.11	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	1111	90	133	367	142	119	20	163	36	66	31
Future Volume (vph)	124	1111	90	133	367	142	119	20	163	36	66	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.95		1.00	0.86		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5028		1770	4873		1770	1614		1770	1773	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5028		1770	4873		1770	1614		1770	1773	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	135	1208	98	145	399	154	129	22	177	39	72	34
RTOR Reduction (vph)	0	10	0	0	74	0	0	135	0	0	28	0
Lane Group Flow (vph)	135	1296	0	145	479	0	129	64	0	39	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.7	20.6		7.3	21.2		4.7	14.2		1.4	10.9	
Effective Green, g (s)	6.7	20.6		7.3	21.2		4.7	14.2		1.4	10.9	
Actuated g/C Ratio	0.11	0.35		0.12	0.36		0.08	0.24		0.02	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	199	1740		217	1736		139	385		41	324	
v/s Ratio Prot	0.08	c0.26		c0.08	0.10		c0.07	c0.04		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.67	0.74		0.66	0.27		0.92	0.16		0.95	0.24	
Uniform Delay, d1	25.3	17.1		24.9	13.6		27.2	17.9		29.0	20.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.8	1.7		7.5	0.0		54.3	0.2		120.9	0.3	
Delay (s)	34.2	18.9		32.5	13.7		81.5	18.1		149.9	21.1	
Level of Service	C	B		C	B		F	B		F	C	
Approach Delay (s/veh)		20.3			17.6			43.1			55.8	
Approach LOS		C			B			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

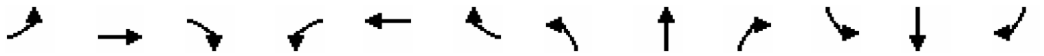


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1171	18	0	723	0	20
Future Volume (Veh/h)	1171	18	0	723	0	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1273	20	0	786	0	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.81		0.81	0.81
vC, conflicting volume			1293		1545	434
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			533		844	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			833		244	877

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	509	509	275	262	262	262	22
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	20	0	0	0	22
cSH	1700	1700	1700	1700	1700	1700	877
Volume to Capacity	0.30	0.30	0.16	0.15	0.15	0.15	0.03
Queue Length 95th (ft)	0	0	0	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

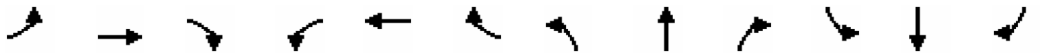
Appendix G – 2040 Option 2 Mitigated LOS Calculations – AM peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	150	414	235	346	138	226	1078	211	352	1234	31
Future Volume (vph)	1	150	414	235	346	138	226	1078	211	352	1234	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	163	450	255	376	150	246	1172	229	383	1341	34
RTOR Reduction (vph)	0	0	99	0	0	79	0	0	154	0	0	24
Lane Group Flow (vph)	1	163	351	255	376	71	246	1172	75	383	1341	10
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.7	17.6	32.6	14.4	31.3	45.5	15.0	30.3	30.3	14.2	29.5	29.5
Effective Green, g (s)	0.1	17.0	31.4	13.8	30.7	44.3	16.0	31.3	31.3	15.2	30.5	29.5
Actuated g/C Ratio	0.00	0.18	0.33	0.14	0.32	0.46	0.17	0.33	0.33	0.16	0.32	0.31
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	1	330	519	255	597	732	295	1663	517	545	1620	487
v/s Ratio Prot	0.00	0.09	0.10	c0.14	c0.20	0.01	c0.14	0.23		0.11	c0.26	
v/s Ratio Perm			0.12			0.03			0.05			0.01
v/c Ratio	1.00	0.49	0.67	1.00	0.62	0.09	0.83	0.70	0.14	0.70	0.82	0.02
Uniform Delay, d1	47.8	35.4	27.7	40.9	27.6	14.4	38.5	28.1	22.7	38.1	30.1	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	900.0	1.1	3.4	56.3	2.0	0.0	17.9	1.7	0.2	4.0	4.0	0.0
Delay (s)	947.8	36.6	31.2	97.3	29.7	14.5	56.5	29.8	23.0	42.2	34.2	23.0
Level of Service	F	D	C	F	C	B	E	C	C	D	C	C
Approach Delay (s/veh)		34.1			48.8			32.9			35.7	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	95.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

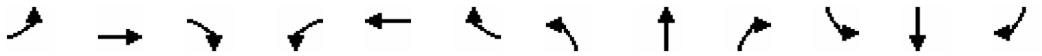
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	580	105	295	1240	1	198	6	139	1	3	0
Future Volume (vph)	0	580	105	295	1240	1	198	6	139	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor		0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt		0.97		1.00	0.99		1.00	1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (prot)		3458		3433	3539		1681	1690	1583		1840	
Flt Permitted		1.00		0.95	1.00		0.95	0.95	1.00		0.98	
Satd. Flow (perm)		3458		3433	3539		1681	1690	1583		1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	630	114	321	1348	1	215	7	151	1	3	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	128	0	0	0
Lane Group Flow (vph)	0	727	0	321	1349	0	112	110	23	0	4	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)		16.8		9.9	30.7		8.7	8.7	8.7		0.5	
Effective Green, g (s)		15.9		9.9	29.8		8.1	8.1	8.1		0.5	
Actuated g/C Ratio		0.30		0.19	0.56		0.15	0.15	0.15		0.01	
Clearance Time (s)		4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)		1029		636	1974		254	256	240		17	
v/s Ratio Prot		0.21		0.09	c0.38		c0.07	0.07			c0.00	
v/s Ratio Perm									0.01			
v/c Ratio		0.70		0.50	0.68		0.44	0.42	0.09		0.23	
Uniform Delay, d1		16.6		19.5	8.4		20.5	20.5	19.4		26.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.8		0.2	0.7		0.4	0.4	0.0		2.5	
Delay (s)		18.5		19.7	9.2		21.0	20.9	19.5		28.8	
Level of Service		B		B	A		C	C	B		C	
Approach Delay (s/veh)		18.5			11.2			20.4			28.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	53.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

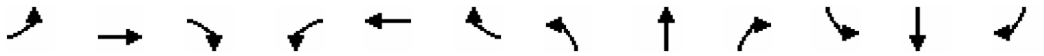
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	324	287	137	56	649	86	268	485	73	127	723	454
Future Volume (vph)	324	287	137	56	649	86	268	485	73	127	723	454
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.94	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	4990	3539	1583	1770	3539	1583	1770	3470		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	4990	3539	1583	1770	3539	1583	1770	3470		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	312	149	61	705	93	291	527	79	138	786	493
RTOR Reduction (vph)	0	0	104	0	0	65	0	12	0	0	0	47
Lane Group Flow (vph)	352	312	45	61	705	28	291	594	0	138	786	446
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	5.1	25.9	25.9	4.6	25.4	25.4	13.3	28.6		9.8	25.1	30.2
Effective Green, g (s)	5.1	27.2	25.9	4.6	26.7	25.4	13.3	27.7		9.8	24.2	28.4
Actuated g/C Ratio	0.06	0.32	0.31	0.05	0.31	0.30	0.16	0.33		0.12	0.29	0.33
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	299	1133	482	95	1112	473	277	1132		204	1008	620
v/s Ratio Prot	c0.07	0.09		0.03	c0.20		c0.16	c0.17		0.08	0.22	c0.04
v/s Ratio Perm			0.03			0.02						0.25
v/c Ratio	1.17	0.27	0.09	0.64	0.63	0.05	1.05	0.52		0.67	0.77	0.71
Uniform Delay, d1	39.9	21.5	21.1	39.3	24.9	21.2	35.8	23.2		36.0	27.9	24.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	109.0	0.1	0.0	13.8	1.1	0.0	67.9	0.4		8.5	3.8	3.9
Delay (s)	148.9	21.6	21.1	53.2	26.1	21.2	103.7	23.6		44.6	31.7	28.7
Level of Service	F	C	C	D	C	C	F	C		D	C	C
Approach Delay (s/veh)		76.6			27.5			49.6			31.9	
Approach LOS		E			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	44.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	16.5
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

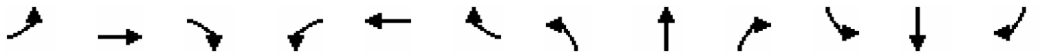
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	678	0	514	0	599	118	116	1022	444
Future Volume (vph)	0	0	0	678	0	514	0	599	118	116	1022	444
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		0.99	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5060	1583
Flt Permitted				0.95		1.00		1.00	1.00		0.79	1.00
Satd. Flow (perm)				3433		1583		5085	1583		4020	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	737	0	559	0	651	128	126	1111	483
RTOR Reduction (vph)	0	0	0	0	0	24	0	0	0	0	0	282
Lane Group Flow (vph)	0	0	0	737	0	535	0	651	128	0	1237	201
Turn Type				Prot		Prot		NA	Free	Perm	NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free	6		
Actuated Green, G (s)				26.2		26.2		25.8	60.0		25.8	25.8
Effective Green, g (s)				26.2		26.2		25.0	60.0		25.0	25.0
Actuated g/C Ratio				0.44		0.44		0.42	1.00		0.42	0.42
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1499		691		2118	1583		1675	659
v/s Ratio Prot				0.21		c0.34		0.13				0.13
v/s Ratio Perm									0.08		c0.31	
v/c Ratio				0.49		0.77		0.30	0.08		0.73	0.30
Uniform Delay, d1				12.1		14.3		11.7	0.0		14.7	11.6
Progression Factor				1.00		1.00		0.82	1.00		1.00	1.00
Incremental Delay, d2				0.0		4.9		0.3	0.0		2.9	1.1
Delay (s)				12.2		19.3		9.9	0.0		17.7	12.8
Level of Service				B		B		A	A		B	B
Approach Delay (s/veh)		0.0			15.2			8.3			16.3	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

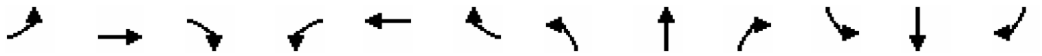
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	0	351	0	0	0	0	761	501	0	1204	534
Future Volume (vph)	275	0	351	0	0	0	0	761	501	0	1204	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	299	0	382	0	0	0	0	827	545	0	1309	580
RTOR Reduction (vph)	0	0	86	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	0	296	0	0	0	0	827	545	0	1309	580
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	10.6		10.6					40.4	60.0		40.4	60.0
Effective Green, g (s)	10.6		10.6					41.4	60.0		41.4	60.0
Actuated g/C Ratio	0.18		0.18					0.69	1.00		0.69	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	606		492					3508	1583		3508	1583
v/s Ratio Prot	0.09							0.16			0.26	
v/s Ratio Perm			c0.11						0.34			c0.37
v/c Ratio	0.49		0.60					0.23	0.34		0.37	0.36
Uniform Delay, d1	22.2		22.7					3.4	0.0		3.8	0.0
Progression Factor	1.00		1.00					1.00	1.00		0.74	1.00
Incremental Delay, d2	0.2		1.4					0.1	0.5		0.2	0.5
Delay (s)	22.5		24.1					3.6	0.5		3.1	0.5
Level of Service	C		C					A	A		A	A
Approach Delay (s/veh)		23.4			0.0			2.4			2.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

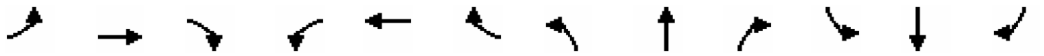
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	45	25	686	0	1108	401	0	372	782
Future Volume (vph)	0	0	0	45	25	686	0	1108	401	0	372	782
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.89	
Flt Protected				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1730	2787		3539	1583		4568	
Flt Permitted				0.95	0.97	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1730	2787		3539	1583		4568	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	49	27	746	0	1204	436	0	404	850
RTOR Reduction (vph)	0	0	0	0	0	64	0	0	202	0	395	0
Lane Group Flow (vph)	0	0	0	26	50	682	0	1204	234	0	859	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				16.6	16.6	16.6		27.1	27.1		27.1	
Effective Green, g (s)				16.6	16.6	16.6		28.4	28.4		28.4	
Actuated g/C Ratio				0.31	0.31	0.31		0.54	0.54		0.54	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				526	541	872		1896	848		2447	
v/s Ratio Prot				0.02	0.03			c0.34			0.19	
v/s Ratio Perm						c0.24			0.15			
v/c Ratio				0.04	0.09	0.78		0.63	0.27		0.35	
Uniform Delay, d1				12.6	12.8	16.5		8.6	6.6		7.0	
Progression Factor				1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2				0.0	0.0	4.2		0.7	0.2		0.1	
Delay (s)				12.7	12.8	20.8		9.4	6.9		7.1	
Level of Service				B	B	C		A	A		A	
Approach Delay (s/veh)		0.0			20.0			8.7			7.1	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	53.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

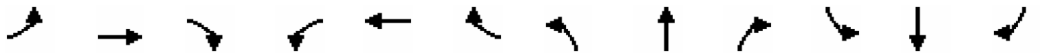
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	619	213	396	38	33	106	49	536	205	89	198	149
Future Volume (vph)	619	213	396	38	33	106	49	536	205	89	198	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3392		1770	3311	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3392		1770	3311	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	673	232	430	41	36	115	53	583	223	97	215	162
RTOR Reduction (vph)	0	0	312	0	0	93	0	46	0	0	113	0
Lane Group Flow (vph)	673	232	118	41	36	22	53	760	0	97	264	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	19.9	19.9	19.9	7.0	7.0	11.3	9.0	25.4		4.3	20.7	
Effective Green, g (s)	19.9	19.9	19.9	6.6	6.6	10.5	8.5	26.7		4.3	22.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.09	0.09	0.14	0.12	0.37		0.06	0.30	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	941	510	433	160	169	324	207	1247		104	1003	
v/s Ratio Prot	c0.20	0.12		c0.02	0.02	0.00	0.03	c0.22		c0.05	0.08	
v/s Ratio Perm			0.07			0.01						
v/c Ratio	0.71	0.45	0.27	0.25	0.21	0.06	0.25	0.60		0.93	0.26	
Uniform Delay, d1	23.7	21.8	20.6	30.7	30.5	26.8	29.1	18.7		34.0	19.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.2	0.1	0.3	0.2	0.0	0.2	0.8		65.9	0.1	
Delay (s)	25.9	22.0	20.7	31.0	30.8	26.8	29.4	19.5		99.9	19.3	
Level of Service	C	C	C	C	C	C	C	B		F	B	
Approach Delay (s/veh)		23.6			28.4			20.2			35.8	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	72.6	Sum of lost time (s)	15.6
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

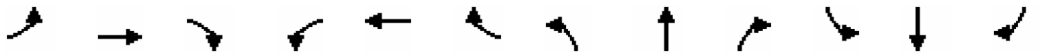
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	63	46	415	797	333	363	1018	96	168	1299	321
Future Volume (vph)	33	63	46	415	797	333	363	1018	96	168	1299	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	68	50	451	866	362	395	1107	104	183	1412	349
RTOR Reduction (vph)	0	0	42	0	0	52	0	0	66	0	0	109
Lane Group Flow (vph)	36	68	8	451	866	310	395	1107	38	183	1412	240
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	3.8	17.4	17.4	18.1	31.7	42.5	13.0	38.1	38.1	10.8	35.9	35.9
Effective Green, g (s)	3.8	17.4	17.4	18.1	31.7	42.5	13.0	38.1	38.1	10.8	35.9	35.9
Actuated g/C Ratio	0.04	0.16	0.16	0.17	0.30	0.40	0.12	0.36	0.36	0.10	0.34	0.34
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	123	583	260	303	1062	716	422	1834	571	351	1728	538
v/s Ratio Prot	0.01	0.02		c0.25	c0.24	0.04	c0.12	0.22		0.05	c0.28	
v/s Ratio Perm			0.01			0.15			0.02			0.15
v/c Ratio	0.29	0.11	0.03	1.48	0.81	0.43	0.93	0.60	0.06	0.52	0.81	0.44
Uniform Delay, d1	49.5	37.5	37.0	43.7	34.2	22.8	45.8	27.5	22.0	44.9	31.8	27.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.0	236.6	4.9	0.4	28.0	0.5	0.0	1.3	3.1	0.5
Delay (s)	50.9	37.6	37.0	280.3	39.1	23.2	73.9	28.1	22.1	46.3	34.9	27.7
Level of Service	D	D	D	F	D	C	E	C	C	D	C	C
Approach Delay (s/veh)		40.5			100.5			39.0			34.7	
Approach LOS		D			F			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	56.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	21.2
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

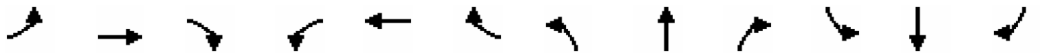
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	84	49	993	965	0	771	0	933	0	0	0
Future Volume (vph)	0	84	49	993	965	0	771	0	933	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	91	53	1079	1049	0	838	0	1014	0	0	0
RTOR Reduction (vph)	0	0	47	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	91	6	1079	1049	0	0	838	909	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		10.0	10.0	41.0	55.0			40.0	81.0			
Effective Green, g (s)		12.0	12.0	43.0	57.0			39.8	85.0			
Actuated g/C Ratio		0.12	0.12	0.42	0.55			0.39	0.83			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		412	184	1433	1030			683	2354			
v/s Ratio Prot		0.03		0.31	c0.56			c0.47	0.16			
v/s Ratio Perm			0.00						0.17			
v/c Ratio		0.22	0.03	0.75	1.01			1.22	0.38			
Uniform Delay, d1		41.2	40.3	25.4	23.0			31.6	2.3			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		0.2	0.0	2.2	32.7			114.7	0.1			
Delay (s)		41.5	40.4	27.7	55.7			146.3	2.4			
Level of Service		D	D	C	E			F	A			
Approach Delay (s/veh)		41.1			41.5			67.5			0.0	
Approach LOS		D			D			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

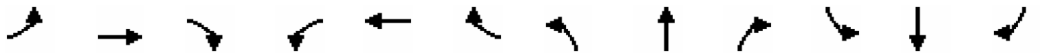
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	428	47	284	895	40	1	3	38	57	5	8
Future Volume (vph)	195	428	47	284	895	40	1	3	38	57	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1602		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	465	51	309	973	43	1	3	41	62	5	9
RTOR Reduction (vph)	0	0	34	0	0	23	0	36	0	0	0	8
Lane Group Flow (vph)	212	465	17	309	973	20	1	8	0	62	5	1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	9.8	19.8	19.8	17.3	27.3	27.3	0.9	7.0		2.8	8.9	8.9
Effective Green, g (s)	9.8	21.1	21.1	17.3	28.6	28.6	0.9	8.0		2.8	8.3	8.3
Actuated g/C Ratio	0.16	0.34	0.34	0.28	0.45	0.45	0.01	0.13		0.04	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	534	1187	531	486	1609	719	25	203		78	245	208
v/s Ratio Prot	0.06	0.13		c0.17	c0.27		0.00	c0.01		c0.04	0.00	
v/s Ratio Perm			0.01			0.01						0.00
v/c Ratio	0.39	0.39	0.03	0.63	0.60	0.02	0.04	0.04		0.79	0.02	0.00
Uniform Delay, d1	23.8	15.9	14.0	20.0	12.8	9.4	30.5	24.0		29.7	23.7	23.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.2	0.0	2.7	0.6	0.0	0.6	0.0		41.1	0.0	0.0
Delay (s)	24.3	16.2	14.0	22.7	13.5	9.4	31.2	24.1		70.9	23.7	23.7
Level of Service	C	B	B	C	B	A	C	C		E	C	C
Approach Delay (s/veh)		18.4			15.5			24.3			62.2	
Approach LOS		B			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	15.3
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

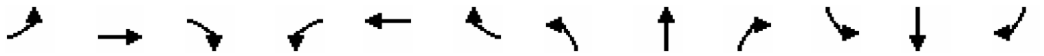
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	311	198	276	539	68	461	302	91	11	76	2
Future Volume (vph)	2	311	198	276	539	68	461	302	91	11	76	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3480		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3480		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	338	215	300	586	74	501	328	99	12	83	2
RTOR Reduction (vph)	0	0	163	0	7	0	0	0	57	0	0	2
Lane Group Flow (vph)	2	338	52	300	653	0	501	328	42	12	83	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.6	18.0	18.0	9.7	26.1		19.2	32.6	32.6	1.6	15.4	15.4
Effective Green, g (s)	1.6	19.3	19.3	9.7	27.4		19.2	33.9	33.9	1.6	14.5	14.5
Actuated g/C Ratio	0.02	0.24	0.24	0.12	0.34		0.24	0.42	0.42	0.02	0.18	0.18
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	35	848	668	601	1184		818	1490	666	35	637	285
v/s Ratio Prot	0.00	0.10		c0.06	c0.19		c0.15	c0.09		0.01	0.02	
v/s Ratio Perm			0.02						0.03			0.00
v/c Ratio	0.05	0.39	0.07	0.49	0.55		0.61	0.22	0.06	0.34	0.13	0.00
Uniform Delay, d1	38.7	25.7	23.7	33.1	21.5		27.3	14.8	13.8	38.9	27.7	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3	0.0	0.2	0.5		0.9	0.0	0.0	2.1	0.0	0.0
Delay (s)	38.9	26.0	23.7	33.3	22.1		28.2	14.9	13.8	41.0	27.7	27.0
Level of Service	D	C	C	C	C		C	B	B	D	C	C
Approach Delay (s/veh)		25.1			25.6			22.0			29.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	17.8
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	467	27	16	660	139	86	7	5	27	1	27
Future Volume (vph)	219	467	27	16	660	139	86	7	5	27	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1848		1770	1814		1770	1755		1770	1593	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.74	1.00	
Satd. Flow (perm)	1770	1848		1770	1814		1374	1755		1395	1593	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	238	508	29	17	717	151	93	8	5	29	1	29
RTOR Reduction (vph)	0	2	0	0	8	0	0	4	0	0	25	0
Lane Group Flow (vph)	238	535	0	17	860	0	93	9	0	29	5	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	13.1	55.9		1.3	44.1		10.8	10.8		10.8	10.8	
Effective Green, g (s)	13.1	55.9		1.3	44.1		10.8	10.8		10.8	10.8	
Actuated g/C Ratio	0.16	0.70		0.02	0.55		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	289	1291		28	999		185	236		188	215	
v/s Ratio Prot	c0.13	0.29		0.01	c0.47			0.00			0.00	
v/s Ratio Perm							c0.07			0.02		
v/c Ratio	0.82	0.41		0.60	0.86		0.50	0.03		0.15	0.02	
Uniform Delay, d1	32.3	5.1		39.0	15.3		32.1	30.0		30.5	30.0	
Progression Factor	1.00	1.00		0.89	0.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.0	0.9		18.0	5.4		2.1	0.0		0.3	0.0	
Delay (s)	49.3	6.0		53.0	16.6		34.2	30.1		30.9	30.0	
Level of Service	D	A		D	B		C	C		C	C	
Approach Delay (s/veh)		19.3			17.3			33.7			30.4	
Approach LOS		B			B			C			C	

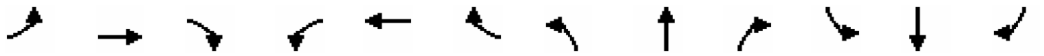
Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	294	95	10	575	277	227	150	13	53	13	13
Future Volume (vph)	110	294	95	10	575	277	227	150	13	53	13	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.98		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1772		1770	1841		1770	1723	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00		0.55	1.00	
Satd. Flow (perm)	1770	1795		1770	1772		1377	1841		1025	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	320	103	11	625	301	247	163	14	58	14	14
RTOR Reduction (vph)	0	12	0	0	21	0	0	4	0	0	11	0
Lane Group Flow (vph)	120	411	0	11	905	0	247	173	0	58	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	8.2	48.8		0.8	41.4		18.4	18.4		18.4	18.4	
Effective Green, g (s)	8.2	48.8		0.8	41.4		18.4	18.4		18.4	18.4	
Actuated g/C Ratio	0.10	0.61		0.01	0.52		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	181	1094		17	917		316	423		235	396	
v/s Ratio Prot	c0.07	0.23		0.01	c0.51			0.09			0.01	
v/s Ratio Perm							c0.18			0.06		
v/c Ratio	0.66	0.37		0.64	0.98		0.78	0.40		0.24	0.04	
Uniform Delay, d1	34.5	7.8		39.4	19.0		28.9	26.1		25.1	23.9	
Progression Factor	0.86	0.38		1.06	0.98		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.3	0.9		53.7	24.1		11.8	0.6		0.5	0.0	
Delay (s)	38.4	4.0		95.8	42.9		40.7	26.8		25.6	24.0	
Level of Service	D	A		F	D		D	C		C	C	
Approach Delay (s/veh)		11.6			43.5			34.9			25.1	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

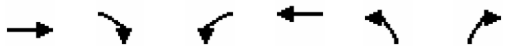
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	5	383	332	26	68	376	690	47	26	734	57
Future Volume (vph)	5	5	383	332	26	68	376	690	47	26	734	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.85	0.85	1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1511	1504	1770	1660		3433	3505		1770	3501	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1511	1504	1770	1660		3433	3505		1770	3501	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	416	361	28	74	409	750	51	28	798	62
RTOR Reduction (vph)	0	171	173	0	46	0	0	4	0	0	5	0
Lane Group Flow (vph)	5	38	39	361	56	0	409	797	0	28	855	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	0.6	14.0	14.0	19.3	32.7		11.2	34.6		1.5	24.9	
Effective Green, g (s)	0.6	14.0	14.0	19.3	32.7		11.2	34.6		1.5	24.9	
Actuated g/C Ratio	0.01	0.16	0.16	0.23	0.38		0.13	0.41		0.02	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	12	247	246	400	635		450	1420		31	1020	
v/s Ratio Prot	0.00	0.03		c0.20	0.03		c0.12	0.23		0.02	c0.24	
v/s Ratio Perm			c0.03									
v/c Ratio	0.41	0.15	0.15	0.90	0.08		0.90	0.56		0.90	0.83	
Uniform Delay, d1	42.2	30.6	30.6	32.1	16.8		36.5	19.5		41.8	28.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	21.7	0.2	0.3	22.9	0.0		21.8	1.6		120.6	8.2	
Delay (s)	63.9	30.9	30.9	55.1	16.8		58.4	21.1		162.5	36.5	
Level of Service	E	C	C	E	B		E	C		F	D	
Approach Delay (s/veh)		31.3			46.6			33.7			40.5	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

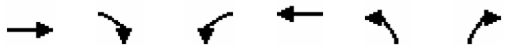
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	461	43	0	1123	0	7
Future Volume (Veh/h)	461	43	0	1123	0	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	501	47	0	1221	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.94		0.88	0.94
vC, conflicting volume			548		932	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			311		35	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1176		861	1023

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	200	200	147	407	407	407	8
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	47	0	0	0	8
cSH	1700	1700	1700	1700	1700	1700	1023
Volume to Capacity	0.12	0.12	0.09	0.24	0.24	0.24	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	25.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	324	19	55	679	45	59
Future Volume (vph)	324	19	55	679	45	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.99		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	1849		1770	1863	1684	
Flt Permitted	1.00		0.53	1.00	0.97	
Satd. Flow (perm)	1849		994	1863	1684	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	21	60	738	49	64
RTOR Reduction (vph)	1	0	0	0	51	0
Lane Group Flow (vph)	372	0	60	738	62	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	86.1		86.1	86.1	10.9	
Effective Green, g (s)	86.1		86.1	86.1	10.9	
Actuated g/C Ratio	0.82		0.82	0.82	0.10	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1516		815	1527	174	
v/s Ratio Prot	0.20			c0.40	c0.04	
v/s Ratio Perm			0.06			
v/c Ratio	0.24		0.07	0.48	0.35	
Uniform Delay, d1	2.1		1.8	2.8	43.7	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.0	0.2	1.2	
Delay (s)	2.5		1.8	3.0	45.0	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	2.5			2.9	45.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

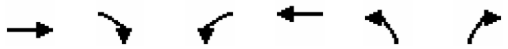
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	36	289	694	742	404	40
Future Volume (vph)	36	289	694	742	404	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.88	0.85	1.00	1.00	0.98	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1627	1504	3433	3539	3492	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1627	1504	3433	3539	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	314	754	807	439	43
RTOR Reduction (vph)	119	80	0	0	12	0
Lane Group Flow (vph)	58	96	754	807	470	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	7.3	28.6	17.3	37.1	15.8	
Effective Green, g (s)	7.3	28.6	17.3	37.1	15.8	
Actuated g/C Ratio	0.14	0.55	0.33	0.71	0.30	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	226	820	1133	2505	1052	
v/s Ratio Prot	c0.04	0.06	c0.22	0.23	c0.13	
v/s Ratio Perm						
v/c Ratio	0.25	0.11	0.66	0.32	0.44	
Uniform Delay, d1	20.1	5.7	15.0	2.8	14.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.0	1.4	0.0	0.3	
Delay (s)	20.7	5.8	16.5	2.9	15.0	
Level of Service	C	A	B	A	B	
Approach Delay (s/veh)	13.3			9.5	15.0	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	52.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

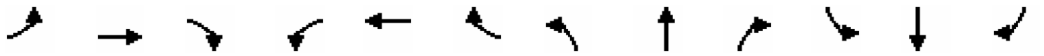
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	284	76	44	680	182	59
Future Volume (vph)	284	76	44	680	182	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.96	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1810		1770	1863	1736	
Flt Permitted	1.00		0.50	1.00	0.96	
Satd. Flow (perm)	1810		938	1863	1736	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	309	83	48	739	198	64
RTOR Reduction (vph)	10	0	0	0	16	0
Lane Group Flow (vph)	382	0	48	739	246	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	55.6		55.6	55.6	16.4	
Effective Green, g (s)	55.6		55.6	55.6	16.4	
Actuated g/C Ratio	0.70		0.70	0.70	0.21	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1257		651	1294	355	
v/s Ratio Prot	0.21			c0.40	c0.14	
v/s Ratio Perm			0.05			
v/c Ratio	0.30		0.07	0.57	0.69	
Uniform Delay, d1	4.7		3.9	6.1	29.4	
Progression Factor	0.82		1.00	1.00	1.00	
Incremental Delay, d2	0.5		0.0	0.6	5.7	
Delay (s)	4.4		3.9	6.7	35.2	
Level of Service	A		A	A	D	
Approach Delay (s/veh)	4.4			6.6	35.2	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

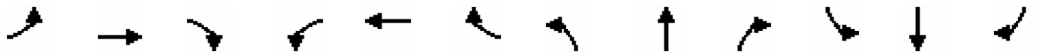
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	22	192	111	37	22	188	559	16	8	514	28
Future Volume (vph)	2	22	192	111	37	22	188	559	16	8	514	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1612		1770	1758		1770	3525		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1612		1770	1758		1770	3525		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	24	209	121	40	24	204	608	17	9	559	30
RTOR Reduction (vph)	0	165	0	0	18	0	0	2	0	0	0	21
Lane Group Flow (vph)	2	68	0	121	46	0	204	623	0	9	559	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	0.5	13.9		4.3	17.7		12.1	30.7		0.5	19.1	19.1
Effective Green, g (s)	0.5	13.9		4.3	17.7		12.1	30.7		0.5	19.1	19.1
Actuated g/C Ratio	0.01	0.21		0.07	0.27		0.19	0.47		0.01	0.29	0.29
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	13	342		116	475		327	1654		13	1033	462
v/s Ratio Prot	0.00	c0.04		c0.07	c0.03		c0.12	0.18		0.01	c0.16	
v/s Ratio Perm												0.01
v/c Ratio	0.15	0.20		1.04	0.09		0.62	0.37		0.69	0.54	0.01
Uniform Delay, d1	32.2	21.1		30.5	17.8		24.5	11.1		32.3	19.4	16.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.4	0.2		95.5	0.0		3.6	0.1		96.2	0.5	0.0
Delay (s)	37.6	21.4		126.1	17.9		28.2	11.3		128.6	20.0	16.4
Level of Service	D	C		F	B		C	B		F	C	B
Approach Delay (s/veh)		21.6			88.7			15.4			21.5	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	323	90	41	676	0	207	0	37	0	0	0
Future Volume (vph)	0	323	90	41	676	0	207	0	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		1.00	1.00				
Frt		0.96		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3423		1770	3539		1770	1583				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3423		1770	3539		1770	1583				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	351	98	45	735	0	225	0	40	0	0	0
RTOR Reduction (vph)	0	25	0	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	424	0	45	735	0	225	13	0	0	0	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		19.1		1.4	24.5		8.4	15.9				
Effective Green, g (s)		19.1		1.4	24.5		8.4	15.9				
Actuated g/C Ratio		0.39		0.03	0.51		0.17	0.33				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1350		51	1791		307	520				
v/s Ratio Prot		0.12		c0.03	c0.21		c0.13	c0.01				
v/s Ratio Perm												
v/c Ratio		0.31		0.88	0.41		0.73	0.02				
Uniform Delay, d1		10.1		23.4	7.4		18.9	11.0				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.1		83.1	0.1		8.7	0.0				
Delay (s)		10.2		106.6	7.6		27.6	11.0				
Level of Service		B		F	A		C	B				
Approach Delay (s/veh)		10.2			13.3			25.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	48.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

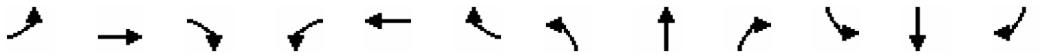
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	351	10	0	717	0	56
Future Volume (Veh/h)	351	10	0	717	0	56
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	382	11	0	779	0	61
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked						
vC, conflicting volume			393		777	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			393		777	197
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			1162		334	812

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	255	138	390	390	0	61
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	61
cSH	1700	1700	1700	1700	1700	812
Volume to Capacity	0.15	0.08	0.23	0.23	0.00	0.08
Queue Length 95th (ft)	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	9.8
Lane LOS					A	A
Approach Delay (s/veh)	0.0		0.0		9.8	
Approach LOS					A	

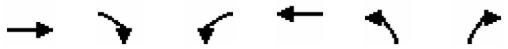
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	398	60	77	881	31	137	6	15	27	84	105
Future Volume (vph)	10	398	60	77	881	31	137	6	15	27	84	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.89		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4986		1770	5059		1770	1668		1770	1707	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4986		1770	5059		1770	1668		1770	1707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	433	65	84	958	34	149	7	16	29	91	114
RTOR Reduction (vph)	0	23	0	0	4	0	0	10	0	0	71	0
Lane Group Flow (vph)	11	475	0	84	988	0	149	13	0	29	135	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	16.6		4.0	20.1		9.0	23.5		0.7	15.2	
Effective Green, g (s)	0.5	16.6		4.0	20.1		9.0	23.5		0.7	15.2	
Actuated g/C Ratio	0.01	0.27		0.07	0.33		0.15	0.39		0.01	0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	14	1361		116	1672		262	644		20	426	
v/s Ratio Prot	0.01	0.10		c0.05	c0.20		c0.08	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.78	0.34		0.72	0.59		0.56	0.02		1.45	0.31	
Uniform Delay, d1	30.0	17.7		27.8	16.9		24.0	11.5		30.0	18.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	130.5	0.1		19.9	0.5		2.8	0.0		363.8	0.4	
Delay (s)	160.6	17.9		47.7	17.4		26.9	11.5		393.9	18.9	
Level of Service	F	B		D	B		C	B		F	B	
Approach Delay (s/veh)		20.9			19.8			24.8			65.4	
Approach LOS		C			B			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

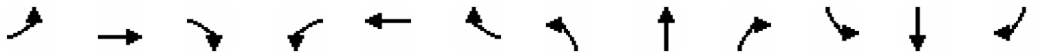
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	506	17	0	1218	0	5
Future Volume (Veh/h)	506	17	0	1218	0	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	18	0	1324	0	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.98		0.85	0.98
vC, conflicting volume			568		1000	192
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			508		288	127
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1037		581	887

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	220	220	128	441	441	441	5
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	18	0	0	0	5
cSH	1700	1700	1700	1700	1700	1700	887
Volume to Capacity	0.13	0.13	0.08	0.26	0.26	0.26	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.1
Approach LOS							A

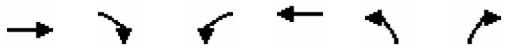
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	458	43	115	978	30	136	6	20	26	83	104
Future Volume (vph)	10	458	43	115	978	30	136	6	20	26	83	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.88		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5020		1770	5062		1770	1651		1770	1707	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5020		1770	5062		1770	1651		1770	1707	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	498	47	125	1063	33	148	7	22	28	90	113
RTOR Reduction (vph)	0	11	0	0	3	0	0	15	0	0	61	0
Lane Group Flow (vph)	11	534	0	125	1093	0	148	14	0	28	142	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.5	19.2		7.3	26.0		8.0	20.6		1.6	14.2	
Effective Green, g (s)	0.5	19.2		7.3	26.0		8.0	20.6		1.6	14.2	
Actuated g/C Ratio	0.01	0.30		0.11	0.40		0.12	0.32		0.02	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	13	1489		199	2034		218	525		43	374	
v/s Ratio Prot	0.01	0.11		c0.07	c0.22		c0.08	0.01		0.02	c0.08	
v/s Ratio Perm												
v/c Ratio	0.84	0.35		0.62	0.53		0.67	0.02		0.65	0.37	
Uniform Delay, d1	32.0	17.9		27.4	14.7		27.1	15.1		31.2	21.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	166.4	0.1		6.0	0.2		8.1	0.0		30.1	0.6	
Delay (s)	198.5	18.0		33.4	15.0		35.2	15.1		61.4	22.1	
Level of Service	F	B		C	B		D	B		E	C	
Approach Delay (s/veh)		21.6			16.9			31.9			26.9	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

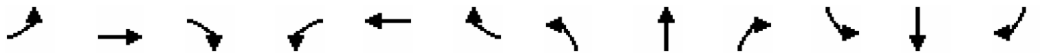


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	431	9	0	989	0	3
Future Volume (Veh/h)	431	9	0	989	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	468	10	0	1075	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			478		831	161
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			329		695	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1184		363	1045

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	187	187	104	358	358	358	3
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	10	0	0	0	3
cSH	1700	1700	1700	1700	1700	1700	1045
Volume to Capacity	0.11	0.11	0.06	0.21	0.21	0.21	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.5
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	22.4%	ICU Level of Service	A
Analysis Period (min)	15		

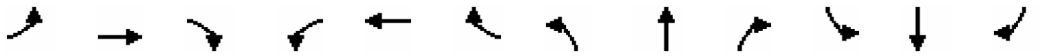
Appendix H – 2040 Option 2 Mitigated LOS Calculations – PM peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	192	389	265	191	276	467	998	262	312	1330	18
Future Volume (vph)	10	192	389	265	191	276	467	998	262	312	1330	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.6	5.2	5.2	5.6	4.0	4.0	4.0	4.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	209	423	288	208	300	508	1085	285	339	1446	20
RTOR Reduction (vph)	0	0	56	0	0	50	0	0	170	0	0	12
Lane Group Flow (vph)	11	209	367	288	208	250	508	1085	115	339	1446	8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	1.6	23.9	50.9	14.4	36.7	63.5	27.0	55.7	55.7	26.8	55.5	55.5
Effective Green, g (s)	1.0	23.3	49.7	13.8	36.1	62.3	28.0	56.7	56.7	27.8	56.5	55.5
Actuated g/C Ratio	0.01	0.17	0.36	0.10	0.26	0.45	0.20	0.41	0.41	0.20	0.40	0.40
Clearance Time (s)	4.6	4.6	5.0	4.6	4.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	12	310	561	174	480	704	354	2059	641	681	2052	627
v/s Ratio Prot	0.01	c0.11	0.12	c0.16	0.11	0.07	c0.29	0.21		0.10	c0.28	
v/s Ratio Perm			0.11			0.09			0.07			0.01
v/c Ratio	0.91	0.67	0.65	1.65	0.43	0.35	1.43	0.52	0.18	0.49	0.70	0.01
Uniform Delay, d1	69.4	54.7	37.9	63.1	43.4	25.6	56.0	31.5	26.7	49.8	34.7	25.6
Progression Factor	1.12	0.78	0.65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	195.4	4.9	2.3	318.9	0.6	0.3	211.3	0.9	0.6	0.5	2.0	0.0
Delay (s)	273.3	47.6	27.2	382.0	44.0	25.9	267.3	32.4	27.3	50.4	36.8	25.6
Level of Service	F	D	C	F	D	C	F	C	C	D	D	C
Approach Delay (s/veh)		38.0			159.5			95.2			39.2	
Approach LOS		D			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

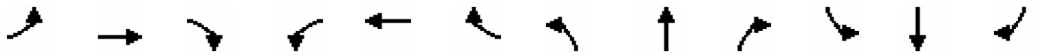
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1087	248	239	941	2	208	2	494	7	1	3
Future Volume (vph)	2	1087	248	239	941	2	208	2	494	7	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.8		4.0	5.8		5.2	5.2	5.2		4.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (prot)	1770	3440		3433	3538		1681	1687	1583		1742	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00		0.96	
Satd. Flow (perm)	1770	3440		3433	3538		1681	1687	1583		1742	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	1182	270	260	1023	2	226	2	537	8	1	3
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	304	0	3	0
Lane Group Flow (vph)	2	1439	0	260	1025	0	118	110	233	0	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases									8			
Actuated Green, G (s)	0.7	52.7		11.7	63.7		18.0	18.0	18.0		0.7	
Effective Green, g (s)	0.7	51.8		11.7	62.8		17.4	17.4	17.4		0.7	
Actuated g/C Ratio	0.01	0.51		0.12	0.62		0.17	0.17	0.17		0.01	
Clearance Time (s)	4.0	4.9		4.0	4.9		4.6	4.6	4.6		4.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	12	1771		399	2208		290	291	273		12	
v/s Ratio Prot	0.00	c0.42		c0.08	0.29		0.07	0.07			c0.01	
v/s Ratio Perm									c0.15			
v/c Ratio	0.16	0.81		0.65	0.46		0.40	0.37	0.85		0.75	
Uniform Delay, d1	49.6	20.3		42.5	9.9		37.0	36.8	40.3		49.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	2.3	2.8		2.8	0.0		0.3	0.3	21.0		118.8	
Delay (s)	52.0	23.1		45.4	10.0		37.3	37.1	61.4		168.7	
Level of Service	D	C		D	B		D	D	E		F	
Approach Delay (s/veh)		23.1			17.2			54.2			168.7	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	100.6	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	836	678	151	45	410	69	285	700	191	221	1047	478
Future Volume (vph)	836	678	151	45	410	69	285	700	191	221	1047	478
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	4.0	4.0	2.7	4.0	4.0	4.9		4.0	4.9	4.9
Lane Util. Factor	0.94	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	4990	3539	1583	1770	3539	1583	1770	3425		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	4990	3539	1583	1770	3539	1583	1770	3425		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	909	737	164	49	446	75	310	761	208	240	1138	520
RTOR Reduction (vph)	0	0	114	0	0	60	0	20	0	0	0	61
Lane Group Flow (vph)	909	737	50	49	446	15	310	949	0	240	1138	459
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases			8			4						2
Actuated Green, G (s)	17.1	33.2	33.2	6.1	22.2	22.2	17.1	36.1		17.1	36.1	53.2
Effective Green, g (s)	17.1	34.5	33.2	6.1	23.5	22.2	17.1	35.2		17.1	35.2	51.4
Actuated g/C Ratio	0.16	0.32	0.31	0.06	0.22	0.20	0.16	0.32		0.16	0.32	0.47
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	786	1125	484	99	766	323	278	1111		278	1148	749
v/s Ratio Prot	c0.18	c0.21		0.03	c0.13		c0.18	0.28		0.14	c0.32	0.09
v/s Ratio Perm			0.03			0.01						0.20
v/c Ratio	1.15	0.65	0.10	0.49	0.58	0.04	1.11	0.85		0.86	0.99	0.61
Uniform Delay, d1	45.7	31.8	26.9	49.7	38.0	34.6	45.7	34.2		44.5	36.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	84.5	1.3	0.0	3.8	1.1	0.0	88.5	6.5		23.0	24.3	1.4
Delay (s)	130.2	33.2	27.0	53.5	39.2	34.7	134.2	40.8		67.6	60.8	22.6
Level of Service	F	C	C	D	D	C	F	D		E	E	C
Approach Delay (s/veh)		81.3			39.8			63.4			51.2	
Approach LOS		F			D			E			D	

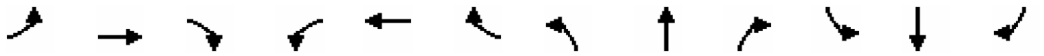
Intersection Summary			
HCM 2000 Control Delay (s/veh)	62.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	108.5	Sum of lost time (s)	16.5
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	854	0	638	0	799	88	0	817	626
Future Volume (vph)	0	0	0	854	0	638	0	799	88	0	817	626
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0		4.8	4.0		4.8	4.8
Lane Util. Factor				0.97		1.00		0.91	1.00		0.91	1.00
Frt				1.00		0.85		1.00	0.85		1.00	0.85
Flt Protected				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)				3433		1583		5085	1583		5085	1583
Flt Permitted				0.95		1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)				3433		1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	928	0	693	0	868	96	0	888	680
RTOR Reduction (vph)	0	0	0	0	0	72	0	0	0	0	0	401
Lane Group Flow (vph)	0	0	0	928	0	621	0	868	96	0	888	279
Turn Type				Prot		Prot		NA	Free		NA	Prot
Protected Phases				8		8		2			6	6
Permitted Phases									Free			
Actuated Green, G (s)				32.5		32.5		29.5	70.0		29.5	29.5
Effective Green, g (s)				32.5		32.5		28.7	70.0		28.7	28.7
Actuated g/C Ratio				0.46		0.46		0.41	1.00		0.41	0.41
Clearance Time (s)				4.0		4.0		4.0			4.0	4.0
Vehicle Extension (s)				2.0		2.0		4.0			4.0	4.0
Lane Grp Cap (vph)				1593		734		2084	1583		2084	649
v/s Ratio Prot				0.27		c0.39		0.17			0.17	c0.18
v/s Ratio Perm									0.06			
v/c Ratio				0.58		0.84		0.41	0.06		0.42	0.42
Uniform Delay, d1				13.7		16.5		14.6	0.0		14.7	14.7
Progression Factor				1.00		1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2				0.3		8.5		0.6	0.0		0.6	2.0
Delay (s)				14.1		25.1		15.3	0.0		15.4	16.8
Level of Service				B		C		B	A		B	B
Approach Delay (s/veh)		0.0			18.8			13.7			16.0	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.8
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

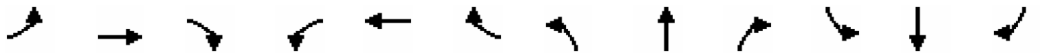
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	408	0	361	0	0	0	0	850	728	0	1133	666
Future Volume (vph)	408	0	361	0	0	0	0	850	728	0	1133	666
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0		4.0	4.0
Lane Util. Factor	0.97		0.88					0.91	1.00		0.91	1.00
Frt	1.00		0.85					1.00	0.85		1.00	0.85
Flt Protected	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (prot)	3433		2787					5085	1583		5085	1583
Flt Permitted	0.95		1.00					1.00	1.00		1.00	1.00
Satd. Flow (perm)	3433		2787					5085	1583		5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	443	0	392	0	0	0	0	924	791	0	1232	724
RTOR Reduction (vph)	0	0	82	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	443	0	310	0	0	0	0	924	791	0	1232	724
Turn Type	Prot		Perm					NA	Free		NA	Free
Protected Phases	4							2			6	
Permitted Phases			4						Free			Free
Actuated Green, G (s)	11.4		11.4					34.6	55.0		34.6	55.0
Effective Green, g (s)	11.4		11.4					35.6	55.0		35.6	55.0
Actuated g/C Ratio	0.21		0.21					0.65	1.00		0.65	1.00
Clearance Time (s)	4.0		4.0					5.0			5.0	
Vehicle Extension (s)	2.0		2.0					4.0			4.0	
Lane Grp Cap (vph)	711		577					3291	1583		3291	1583
v/s Ratio Prot	0.13							0.18			0.24	
v/s Ratio Perm			0.11						c0.50			0.46
v/c Ratio	0.62		0.53					0.28	0.49		0.37	0.45
Uniform Delay, d1	19.8		19.4					4.1	0.0		4.5	0.0
Progression Factor	1.00		1.00					1.00	1.00		1.00	1.00
Incremental Delay, d2	1.2		0.4					0.2	1.1		0.3	0.9
Delay (s)	21.0		19.9					4.3	1.1		4.8	0.9
Level of Service	C		B					A	A		A	A
Approach Delay (s/veh)		20.5			0.0			2.8			3.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	159	1	197	0	823	378	0	737	732
Future Volume (vph)	0	0	0	159	1	197	0	823	378	0	737	732
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor				0.95	0.95	0.88		0.95	1.00		0.91	
Frt				1.00	1.00	0.85		1.00	0.85		0.92	
Flt Protected				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (prot)				1681	1686	2787		3539	1583		4705	
Flt Permitted				0.95	0.95	1.00		1.00	1.00		1.00	
Satd. Flow (perm)				1681	1686	2787		3539	1583		4705	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	173	1	214	0	895	411	0	801	796
RTOR Reduction (vph)	0	0	0	0	0	182	0	0	108	0	168	0
Lane Group Flow (vph)	0	0	0	92	82	32	0	895	303	0	1429	0
Turn Type				Split	NA	Perm		NA	Perm		NA	
Protected Phases				8	8			2			6	
Permitted Phases						8			2			
Actuated Green, G (s)				10.4	10.4	10.4		50.3	50.3		50.3	
Effective Green, g (s)				10.4	10.4	10.4		51.6	51.6		51.6	
Actuated g/C Ratio				0.15	0.15	0.15		0.74	0.74		0.74	
Clearance Time (s)				4.0	4.0	4.0		5.3	5.3		5.3	
Vehicle Extension (s)				2.0	2.0	2.0		4.0	4.0		4.0	
Lane Grp Cap (vph)				249	250	414		2608	1166		3468	
v/s Ratio Prot				c0.05	0.05			0.25			c0.30	
v/s Ratio Perm						0.01			0.19			
v/c Ratio				0.36	0.32	0.07		0.34	0.25		0.41	
Uniform Delay, d1				26.8	26.6	25.6		3.2	2.9		3.4	
Progression Factor				1.00	1.00	1.00		0.74	2.28		1.00	
Incremental Delay, d2				0.3	0.2	0.0		0.2	0.4		0.3	
Delay (s)				27.1	26.9	25.6		2.7	7.2		3.8	
Level of Service				C	C	C		A	A		A	
Approach Delay (s/veh)		0.0			26.3			4.1			3.8	
Approach LOS		A			C			A			A	

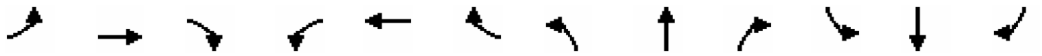
Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	596	239	366	97	112	221	120	503	194	150	403	333
Future Volume (vph)	596	239	366	97	112	221	120	503	194	150	403	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.5	2.7		4.0	2.7	
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3391		1770	3299	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	1770	3391		1770	3299	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	648	260	398	105	122	240	130	547	211	163	438	362
RTOR Reduction (vph)	0	0	301	0	0	71	0	25	0	0	109	0
Lane Group Flow (vph)	648	260	97	105	122	169	130	733	0	163	691	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	1	5	2		1	6	
Permitted Phases			7			8						
Actuated Green, G (s)	33.2	33.2	33.2	15.1	15.1	31.7	20.1	59.1		16.6	55.6	
Effective Green, g (s)	33.2	33.2	33.2	14.7	14.7	30.9	19.6	60.4		16.6	56.9	
Actuated g/C Ratio	0.24	0.24	0.24	0.11	0.11	0.22	0.14	0.43		0.12	0.41	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5		2.0	4.0	
Lane Grp Cap (vph)	814	441	375	185	195	399	247	1462		209	1340	
v/s Ratio Prot	c0.19	0.14		0.06	c0.07	0.05	0.07	c0.22		c0.09	c0.21	
v/s Ratio Perm			0.06			0.06						
v/c Ratio	0.79	0.58	0.25	0.56	0.62	0.42	0.52	0.50		0.77	0.51	
Uniform Delay, d1	50.2	47.3	43.4	59.6	60.0	46.8	55.8	28.8		59.9	31.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.81		1.04	0.94	
Incremental Delay, d2	5.0	1.3	0.1	2.3	4.4	0.2	0.4	0.5		14.4	1.3	
Delay (s)	55.2	48.6	43.5	61.9	64.4	47.1	44.9	24.1		76.8	30.8	
Level of Service	E	D	D	E	E	D	D	C		E	C	
Approach Delay (s/veh)		50.3			55.0			27.2			38.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

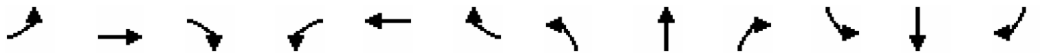
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	756	257	224	240	231	102	1327	693	280	1570	91
Future Volume (vph)	225	756	257	224	240	231	102	1327	693	280	1570	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	822	279	243	261	251	111	1442	753	304	1707	99
RTOR Reduction (vph)	0	0	112	0	0	36	0	0	194	0	0	58
Lane Group Flow (vph)	245	822	167	243	261	215	111	1442	559	304	1707	41
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.6	34.1	34.1	17.7	37.2	52.9	8.7	49.8	49.8	15.7	56.8	56.8
Effective Green, g (s)	14.6	34.1	34.1	17.7	37.2	52.9	8.7	49.8	49.8	15.7	56.8	56.8
Actuated g/C Ratio	0.11	0.25	0.25	0.13	0.27	0.38	0.06	0.36	0.36	0.11	0.41	0.41
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	361	871	389	226	950	665	215	1828	569	389	2085	649
v/s Ratio Prot	0.07	c0.23		c0.14	0.07	c0.04	0.03	0.28		c0.09	c0.34	
v/s Ratio Perm			0.11			0.10			c0.35			0.03
v/c Ratio	0.67	0.94	0.42	1.07	0.27	0.32	0.51	0.78	0.98	0.78	0.81	0.06
Uniform Delay, d1	59.6	51.2	43.9	60.4	39.9	30.1	62.8	39.6	43.9	59.7	36.2	24.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	18.2	0.7	81.2	0.1	0.2	2.0	2.3	33.0	9.8	2.6	0.0
Delay (s)	64.6	69.4	44.7	141.6	40.1	30.4	64.9	41.9	76.9	69.5	38.9	24.7
Level of Service	E	E	D	F	D	C	E	D	E	E	D	C
Approach Delay (s/veh)		63.4			69.6			54.5			42.6	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	21.2
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

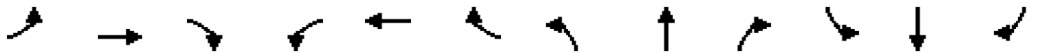
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	884	322	1052	35	0	99	0	855	0	0	0
Future Volume (vph)	0	884	322	1052	35	0	99	0	855	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		2.0	2.0	2.0	2.0			4.2	2.0			
Lane Util. Factor		0.95	1.00	0.97	1.00			1.00	0.88			
Frt		1.00	0.85	1.00	1.00			1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (prot)		3539	1583	3433	1863			1770	2787			
Flt Permitted		1.00	1.00	0.95	1.00			0.95	1.00			
Satd. Flow (perm)		3539	1583	3433	1863			1770	2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	961	350	1143	38	0	108	0	929	0	0	0
RTOR Reduction (vph)	0	0	211	0	0	0	0	0	325	0	0	0
Lane Group Flow (vph)	0	961	139	1143	38	0	0	108	604	0	0	0
Turn Type		NA	Perm	Prot	NA	Perm	Split	NA	pm+ov			
Protected Phases		2		1	6		8	8	1	4	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)		34.0	34.0	54.5	92.5			19.5	74.0			
Effective Green, g (s)		36.0	36.0	56.5	94.5			19.3	78.0			
Actuated g/C Ratio		0.30	0.30	0.47	0.79			0.16	0.65			
Clearance Time (s)		4.0	4.0	4.0	4.0			4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			
Lane Grp Cap (vph)		1061	474	1616	1467			284	1858			
v/s Ratio Prot		c0.27		c0.33	0.02			c0.06	0.15			
v/s Ratio Perm			0.09						0.06			
v/c Ratio		0.90	0.29	0.70	0.02			0.38	0.32			
Uniform Delay, d1		40.3	32.2	25.1	2.7			45.0	9.3			
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00			
Incremental Delay, d2		12.5	1.5	1.4	0.0			0.8	0.1			
Delay (s)		52.9	33.7	26.6	2.7			45.8	9.4			
Level of Service		D	C	C	A			D	A			
Approach Delay (s/veh)		47.8			25.8			13.2			0.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

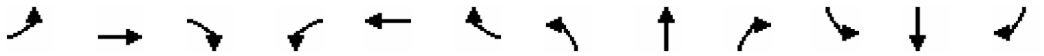
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	955	107	64	409	44	3	7	326	39	4	85
Future Volume (vph)	117	955	107	64	409	44	3	7	326	39	4	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.7	2.7	4.0	2.7	2.7	4.0	3.0		4.0	4.6	4.6
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1590		1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1590		1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	1038	116	70	445	48	3	8	354	42	4	92
RTOR Reduction (vph)	0	0	66	0	0	29	0	221	0	0	0	67
Lane Group Flow (vph)	127	1038	50	70	445	19	3	141	0	42	4	25
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6			2						4
Actuated Green, G (s)	6.6	28.4	28.4	4.2	26.0	26.0	0.9	16.5		3.3	18.9	18.9
Effective Green, g (s)	6.6	29.7	29.7	4.2	27.3	27.3	0.9	17.5		3.3	18.3	18.3
Actuated g/C Ratio	0.10	0.43	0.43	0.06	0.40	0.40	0.01	0.26		0.05	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	331	1536	687	108	1412	631	23	406		85	498	423
v/s Ratio Prot	0.04	c0.29		c0.04	0.13		0.00	c0.09		c0.02	0.00	
v/s Ratio Perm			0.03			0.01						0.02
v/c Ratio	0.38	0.67	0.07	0.64	0.31	0.03	0.13	0.34		0.49	0.00	0.05
Uniform Delay, d1	28.9	15.4	11.3	31.3	14.1	12.4	33.3	20.7		31.7	18.3	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.7	1.1	0.0	12.6	0.1	0.0	2.5	0.5		4.4	0.0	0.0
Delay (s)	29.7	16.6	11.3	44.0	14.2	12.5	35.9	21.3		36.1	18.3	18.6
Level of Service	C	B	B	D	B	B	D	C		D	B	B
Approach Delay (s/veh)		17.4			17.8			21.4			24.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	15.3
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

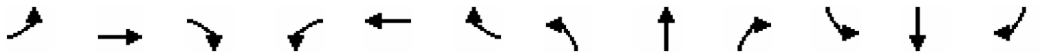
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	807	402	431	483	10	290	224	91	4	185	6
Future Volume (vph)	6	807	402	431	483	10	290	224	91	4	185	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95	0.88	0.94	0.95		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	4990	3528		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	4990	3528		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	877	437	468	525	11	315	243	99	4	201	7
RTOR Reduction (vph)	0	0	239	0	1	0	0	0	71	0	0	6
Lane Group Flow (vph)	7	877	198	468	535	0	315	243	28	4	201	1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	1.5	34.0	34.0	13.2	45.7		11.1	25.1	25.1	1.5	15.9	15.9
Effective Green, g (s)	1.5	35.3	35.3	13.2	47.0		11.1	26.4	26.4	1.5	15.0	15.0
Actuated g/C Ratio	0.02	0.38	0.38	0.14	0.51		0.12	0.29	0.29	0.02	0.16	0.16
Clearance Time (s)	4.0	5.3	5.3	4.0	5.3		4.0	5.3	5.3	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	28	1352	1064	712	1794		412	1011	452	28	574	256
v/s Ratio Prot	0.00	c0.25		c0.09	0.15		c0.09	0.07		0.00	c0.06	
v/s Ratio Perm			0.07						0.02			0.00
v/c Ratio	0.25	0.64	0.18	0.65	0.29		0.76	0.24	0.06	0.14	0.35	0.00
Uniform Delay, d1	44.8	23.4	18.9	37.4	13.1		39.3	25.3	24.0	44.8	34.3	32.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	1.0	0.0	1.6	0.0		7.4	0.1	0.0	0.8	0.3	0.0
Delay (s)	46.6	24.5	19.0	39.1	13.2		46.8	25.4	24.0	45.6	34.7	32.4
Level of Service	D	C	B	D	B		D	C	C	D	C	C
Approach Delay (s/veh)		22.8			25.3			35.4			34.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	92.4	Sum of lost time (s)	17.8
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

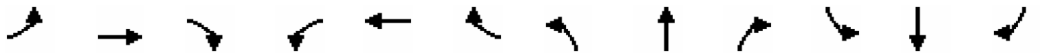
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	689	50	39	476	27	44	1	2	142	13	225
Future Volume (vph)	26	689	50	39	476	27	44	1	2	142	13	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1844		1770	1848		1770	1676		1770	1598	
Flt Permitted	0.95	1.00		0.95	1.00		0.31	1.00		0.75	1.00	
Satd. Flow (perm)	1770	1844		1770	1848		582	1676		1408	1598	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	749	54	42	517	29	48	1	2	154	14	245
RTOR Reduction (vph)	0	3	0	0	2	0	0	2	0	0	200	0
Lane Group Flow (vph)	28	800	0	42	544	0	48	1	0	154	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.2	49.4		4.0	49.2		14.6	14.6		14.6	14.6	
Effective Green, g (s)	4.2	49.4		4.0	49.2		14.6	14.6		14.6	14.6	
Actuated g/C Ratio	0.05	0.62		0.05	0.62		0.18	0.18		0.18	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	92	1138		88	1136		106	305		256	291	
v/s Ratio Prot	0.02	c0.43		0.02	c0.29			0.00			0.04	
v/s Ratio Perm							0.08			c0.11		
v/c Ratio	0.30	0.70		0.47	0.47		0.45	0.00		0.60	0.20	
Uniform Delay, d1	36.4	10.3		36.9	8.4		29.1	26.7		30.0	27.7	
Progression Factor	1.00	1.00		1.01	0.85		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	3.6		3.5	1.2		3.0	0.0		3.9	0.3	
Delay (s)	38.3	13.9		41.1	8.4		32.1	26.7		33.9	28.0	
Level of Service	D	B		D	A		C	C		C	C	
Approach Delay (s/veh)		14.8			10.7			31.8			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

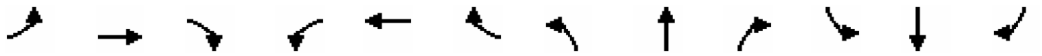
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	511	309	25	265	54	164	12	14	284	124	113
Future Volume (vph)	13	511	309	25	265	54	164	12	14	284	124	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.91		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1757		1770	1815		1770	1713		1770	1730	
Flt Permitted	0.95	1.00		0.95	1.00		0.42	1.00		0.73	1.00	
Satd. Flow (perm)	1770	1757		1770	1815		792	1713		1377	1730	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	555	336	27	288	59	178	13	15	309	135	123
RTOR Reduction (vph)	0	24	0	0	9	0	0	11	0	0	42	0
Lane Group Flow (vph)	14	867	0	27	338	0	178	17	0	309	216	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	3.4	45.9		1.6	44.1		20.5	20.5		20.5	20.5	
Effective Green, g (s)	3.4	45.9		1.6	44.1		20.5	20.5		20.5	20.5	
Actuated g/C Ratio	0.04	0.57		0.02	0.55		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	75	1008		35	1000		202	438		352	443	
v/s Ratio Prot	0.01	c0.49		c0.02	0.19			0.01			0.12	
v/s Ratio Perm							c0.22			0.22		
v/c Ratio	0.18	0.85		0.77	0.33		0.88	0.03		0.87	0.48	
Uniform Delay, d1	36.9	14.3		39.0	9.9		28.5	22.3		28.5	25.2	
Progression Factor	1.18	0.88		1.09	1.06		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	7.5		65.9	0.8		33.0	0.0		21.0	0.8	
Delay (s)	44.6	20.3		108.5	11.4		61.5	22.3		49.5	26.1	
Level of Service	D	C		F	B		E	C		D	C	
Approach Delay (s/veh)		20.7			18.4			56.2			38.9	
Approach LOS		C			B			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

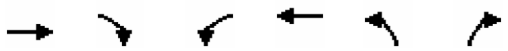
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	45	448	128	22	91	482	620	335	167	1007	37
Future Volume (vph)	87	45	448	128	22	91	482	620	335	167	1007	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00		0.97	0.95		1.00	0.95	
Frt	1.00	0.87	0.85	1.00	0.87		1.00	0.94		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1552	1504	1770	1638		3433	3353		1770	3521	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1552	1504	1770	1638		3433	3353		1770	3521	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	49	487	139	24	99	524	674	364	182	1095	40
RTOR Reduction (vph)	0	193	228	0	83	0	0	77	0	0	3	0
Lane Group Flow (vph)	95	80	35	139	40	0	524	961	0	182	1132	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	6.2	10.8	10.8	8.9	13.5		15.5	34.6		11.9	31.0	
Effective Green, g (s)	6.2	10.8	10.8	8.9	13.5		15.5	34.6		11.9	31.0	
Actuated g/C Ratio	0.08	0.13	0.13	0.11	0.16		0.19	0.42		0.14	0.38	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	133	203	197	191	269		647	1411		256	1327	
v/s Ratio Prot	0.05	c0.05		c0.08	c0.02		c0.15	c0.29		0.10	c0.32	
v/s Ratio Perm			0.02									
v/c Ratio	0.71	0.39	0.17	0.72	0.14		0.80	0.68		0.71	0.85	
Uniform Delay, d1	37.1	32.7	31.7	35.4	29.4		31.9	19.3		33.5	23.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.6	1.2	0.4	12.9	0.2		7.4	1.3		8.9	5.5	
Delay (s)	53.7	33.9	32.1	48.4	29.6		39.3	20.6		42.4	29.0	
Level of Service	D	C	C	D	C		D	C		D	C	
Approach Delay (s/veh)		36.1			39.6			26.9			30.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	82.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

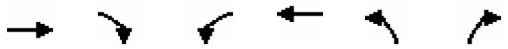
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1221	89	0	642	0	61
Future Volume (Veh/h)	1221	89	0	642	0	61
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1327	97	0	698	0	66
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	366			483		
pX, platoon unblocked			0.79		0.80	0.79
vC, conflicting volume			1424		1608	491
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			596		651	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			770		322	854

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	531	531	362	233	233	233	66
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	97	0	0	0	66
cSH	1700	1700	1700	1700	1700	1700	854
Volume to Capacity	0.31	0.31	0.21	0.14	0.14	0.14	0.08
Queue Length 95th (ft)	0	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.6
Approach LOS							A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	562	61	126	282	32	61
Future Volume (vph)	562	61	126	282	32	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.91	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1838		1770	1863	1669	
Flt Permitted	1.00		0.36	1.00	0.98	
Satd. Flow (perm)	1838		681	1863	1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	611	66	137	307	35	66
RTOR Reduction (vph)	3	0	0	0	58	0
Lane Group Flow (vph)	674	0	137	307	43	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	58.4		58.4	58.4	8.6	
Effective Green, g (s)	58.4		58.4	58.4	8.6	
Actuated g/C Ratio	0.78		0.78	0.78	0.11	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1431		530	1450	191	
v/s Ratio Prot	c0.37			0.16	c0.03	
v/s Ratio Perm			0.20			
v/c Ratio	0.47		0.25	0.21	0.22	
Uniform Delay, d1	2.9		2.3	2.1	30.1	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.1		0.2	0.0	0.5	
Delay (s)	4.0		2.5	2.2	30.7	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	4.0			2.3	30.7	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

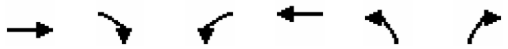
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	143	818	333	849	804	75
Future Volume (vph)	143	818	333	849	804	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.97	0.95	0.95	
Frt	0.89	0.85	1.00	1.00	0.98	
Flt Protected	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1641	1504	3433	3539	3494	
Flt Permitted	0.98	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1641	1504	3433	3539	3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	155	889	362	923	874	82
RTOR Reduction (vph)	92	38	0	0	9	0
Lane Group Flow (vph)	436	478	362	923	947	0
Turn Type	Prot	pt+ov	Prot	NA	NA	
Protected Phases	4	4 5	5	2	6	
Permitted Phases						
Actuated Green, G (s)	24.2	39.8	11.6	44.4	28.8	
Effective Green, g (s)	24.2	39.8	11.6	44.4	28.8	
Actuated g/C Ratio	0.32	0.52	0.15	0.58	0.38	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	518	781	519	2051	1313	
v/s Ratio Prot	c0.27	c0.32	0.11	0.26	c0.27	
v/s Ratio Perm						
v/c Ratio	0.84	0.61	0.69	0.45	0.72	
Uniform Delay, d1	24.4	12.9	30.8	9.1	20.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.7	1.4	4.0	0.1	1.9	
Delay (s)	36.1	14.3	34.9	9.3	22.4	
Level of Service	D	B	C	A	C	
Approach Delay (s/veh)	25.3			16.5	22.4	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	76.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

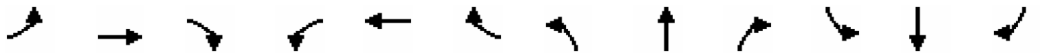
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	562	247	101	213	131	61
Future Volume (vph)	562	247	101	213	131	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	1786		1770	1863	1724	
Flt Permitted	1.00		0.23	1.00	0.96	
Satd. Flow (perm)	1786		442	1863	1724	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	611	268	110	232	142	66
RTOR Reduction (vph)	15	0	0	0	24	0
Lane Group Flow (vph)	864	0	110	232	184	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	8	
Permitted Phases			6			
Actuated Green, G (s)	57.8		57.8	57.8	14.2	
Effective Green, g (s)	57.8		57.8	57.8	14.2	
Actuated g/C Ratio	0.72		0.72	0.72	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1290		319	1346	306	
v/s Ratio Prot	c0.48			0.12	c0.11	
v/s Ratio Perm			0.25			
v/c Ratio	0.66		0.34	0.17	0.60	
Uniform Delay, d1	5.9		4.1	3.5	30.2	
Progression Factor	0.91		1.00	1.00	1.00	
Incremental Delay, d2	1.5		0.6	0.0	3.3	
Delay (s)	7.0		4.7	3.5	33.6	
Level of Service	A		A	A	C	
Approach Delay (s/veh)	7.0			3.9	33.6	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

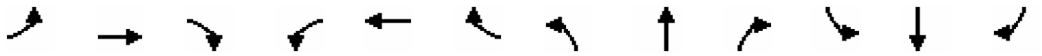
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	87	225	42	51	30	242	445	111	55	944	19
Future Volume (vph)	44	87	225	42	51	30	242	445	111	55	944	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.94		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1661		1770	1758		1770	3433		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1661		1770	1758		1770	3433		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	95	245	46	55	33	263	484	121	60	1026	21
RTOR Reduction (vph)	0	109	0	0	25	0	0	19	0	0	0	13
Lane Group Flow (vph)	48	231	0	46	63	0	263	586	0	60	1026	8
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	3.0	17.1		3.0	17.1		16.2	43.2		3.7	30.7	30.7
Effective Green, g (s)	3.0	17.1		3.0	17.1		16.2	43.2		3.7	30.7	30.7
Actuated g/C Ratio	0.04	0.21		0.04	0.21		0.20	0.52		0.04	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	63	342		63	362		345	1786		78	1309	585
v/s Ratio Prot	c0.03	c0.14		0.03	0.04		c0.15	0.17		0.03	c0.29	
v/s Ratio Perm												0.00
v/c Ratio	0.76	0.67		0.73	0.17		0.76	0.32		0.76	0.78	0.01
Uniform Delay, d1	39.6	30.3		39.5	27.1		31.5	11.5		39.2	23.2	16.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	41.2	5.2		34.9	0.2		9.5	0.1		35.7	3.1	0.0
Delay (s)	80.8	35.6		74.5	27.3		41.1	11.6		74.9	26.3	16.5
Level of Service	F	D		E	C		D	B		E	C	B
Approach Delay (s/veh)		41.2			43.5			20.5			28.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	548	326	149	661	13	234	0	62	13	0	29
Future Volume (vph)	29	548	326	149	661	13	234	0	62	13	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3341		1770	3529		1770	1583		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3341		1770	3529		1770	1583		1770	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	596	354	162	718	14	254	0	67	14	0	32
RTOR Reduction (vph)	0	71	0	0	1	0	0	46	0	0	29	0
Lane Group Flow (vph)	32	879	0	162	731	0	254	21	0	14	3	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.2	29.6		11.8	38.2		18.2	26.2		0.5	8.5	
Effective Green, g (s)	3.2	29.6		11.8	38.2		18.2	26.2		0.5	8.5	
Actuated g/C Ratio	0.04	0.35		0.14	0.45		0.22	0.31		0.01	0.10	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	67	1175		248	1602		383	493		10	159	
v/s Ratio Prot	0.02	c0.26		c0.09	0.21		c0.14	c0.01		0.01	0.00	
v/s Ratio Perm												
v/c Ratio	0.47	0.74		0.65	0.45		0.66	0.04		1.40	0.02	
Uniform Delay, d1	39.6	23.9		34.2	15.7		30.1	20.1		41.8	34.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.2	2.6		6.0	0.2		4.2	0.0		438.5	0.0	
Delay (s)	44.9	26.6		40.2	16.0		34.4	20.2		480.3	34.1	
Level of Service	D	C		D	B		C	C		F	C	
Approach Delay (s/veh)		27.2			20.4			31.4			169.9	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

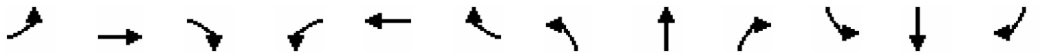
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	613	10	0	823	0	55
Future Volume (Veh/h)	613	10	0	823	0	55
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	666	11	0	895	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	889					
pX, platoon unblocked			0.95		0.95	0.95
vC, conflicting volume			677		1119	339
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		1020	198
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			961		221	769

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total	444	233	448	448	0	60
Volume Left	0	0	0	0	0	0
Volume Right	0	11	0	0	0	60
cSH	1700	1700	1700	1700	1700	769
Volume to Capacity	0.26	0.14	0.26	0.26	0.00	0.08
Queue Length 95th (ft)	0	0	0	0	0	6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	10.1
Lane LOS					A	B
Approach Delay (s/veh)	0.0		0.0		10.1	
Approach LOS					B	

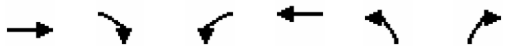
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1031	126	89	491	143	119	21	122	36	67	32
Future Volume (vph)	125	1031	126	89	491	143	119	21	122	36	67	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.96		1.00	0.87		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5002		1770	4914		1770	1625		1770	1772	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5002		1770	4914		1770	1625		1770	1772	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	1121	137	97	534	155	129	23	133	39	73	35
RTOR Reduction (vph)	0	16	0	0	60	0	0	100	0	0	29	0
Lane Group Flow (vph)	136	1242	0	97	629	0	129	56	0	39	79	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.6	20.6		5.8	18.8		5.6	14.7		1.7	10.8	
Effective Green, g (s)	7.6	20.6		5.8	18.8		5.6	14.7		1.7	10.8	
Actuated g/C Ratio	0.13	0.35		0.10	0.32		0.10	0.25		0.03	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	228	1752		174	1571		168	406		51	325	
v/s Ratio Prot	c0.08	c0.25		0.05	0.13		c0.07	c0.03		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.59	0.70		0.55	0.40		0.76	0.13		0.76	0.24	
Uniform Delay, d1	24.1	16.5		25.2	15.6		25.9	17.1		28.3	20.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.1	1.3		3.8	0.1		18.7	0.1		48.9	0.3	
Delay (s)	28.3	17.8		29.1	15.7		44.7	17.2		77.2	20.9	
Level of Service	C	B		C	B		D	B		E	C	
Approach Delay (s/veh)		18.8			17.4			29.7			35.8	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	58.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

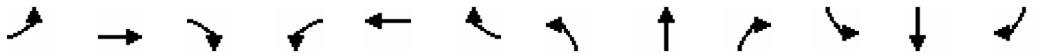
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1284	36	0	517	0	41
Future Volume (Veh/h)	1284	36	0	517	0	41
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1396	39	0	562	0	45
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	418			404		
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			1435		1603	485
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			833		1034	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			665		191	906

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	558	558	318	187	187	187	45
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	39	0	0	0	45
cSH	1700	1700	1700	1700	1700	1700	906
Volume to Capacity	0.33	0.33	0.19	0.11	0.11	0.11	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

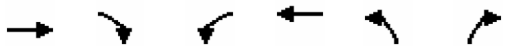
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	1111	90	133	367	142	119	20	163	36	66	31
Future Volume (vph)	124	1111	90	133	367	142	119	20	163	36	66	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.95		1.00	0.86		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5028		1770	4873		1770	1614		1770	1773	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5028		1770	4873		1770	1614		1770	1773	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	135	1208	98	145	399	154	129	22	177	39	72	34
RTOR Reduction (vph)	0	10	0	0	74	0	0	135	0	0	28	0
Lane Group Flow (vph)	135	1296	0	145	479	0	129	64	0	39	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.7	20.6		7.3	21.2		4.7	14.2		1.4	10.9	
Effective Green, g (s)	6.7	20.6		7.3	21.2		4.7	14.2		1.4	10.9	
Actuated g/C Ratio	0.11	0.35		0.12	0.36		0.08	0.24		0.02	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	199	1740		217	1736		139	385		41	324	
v/s Ratio Prot	0.08	c0.26		c0.08	0.10		c0.07	c0.04		0.02	c0.04	
v/s Ratio Perm												
v/c Ratio	0.67	0.74		0.66	0.27		0.92	0.16		0.95	0.24	
Uniform Delay, d1	25.3	17.1		24.9	13.6		27.2	17.9		29.0	20.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.8	1.7		7.5	0.0		54.3	0.2		120.9	0.3	
Delay (s)	34.2	18.9		32.5	13.7		81.5	18.1		149.9	21.1	
Level of Service	C	B		C	B		F	B		F	C	
Approach Delay (s/veh)		20.3			17.6			43.1			55.8	
Approach LOS		C			B			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1171	18	0	723	0	20
Future Volume (Veh/h)	1171	18	0	723	0	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1273	20	0	786	0	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	397			579		
pX, platoon unblocked			0.81		0.81	0.81
vC, conflicting volume			1293		1545	434
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			533		844	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			833		244	877

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	509	509	275	262	262	262	22
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	20	0	0	0	22
cSH	1700	1700	1700	1700	1700	1700	877
Volume to Capacity	0.30	0.30	0.16	0.15	0.15	0.15	0.03
Queue Length 95th (ft)	0	0	0	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.2
Approach LOS							A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix E-4

No Net Loss Project – VMT Assessment

KITTELSON & ASSOCIATES
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Oakland, CA 94612
P 510.839.1742

Technical Memorandum

June 10, 2024 Project# 29502

To: Aileen Mahoney,
Rincon Environmental Engineers
449 25th Street, Suite 303
Oakland, CA 94612

From: Damian Stefanakis, Kittelson & Associates, Inc.

CC:

RE: **Livermore Isabel Neighborhood Plan – Rezoning Addendum – VMT Assessment**

INTRODUCTION

This technical memorandum prepared by Kittelson & Assoc., Inc, summarizes the VMT assessment for the rezoning of the Isabel Neighborhood plan (INP). Following the INP DEIR/SEIR and the subsequent Isabel Village application by Harridge which has proposed to reduce the number of residential units in Parcels 3b and 3c, we understand the City of Livermore is concerned about a reduction in residential units to meet their overall RINA's housing needs. As a result, they have proposed two potential options to replace some of the planned office development with additional residential units in the INP. These options are being evaluated as an addendum to the SEIR.

Kittelson has modeled the two options using the citywide Isabel Neighborhood plan model and extracted VMT and intersection forecasts so that the city can assess the effects of the addendum options on the D/SEIR. This memorandum focuses on the VMT, while a subsequent memo will address the intersection level of service impact assessment.

This memorandum provides a qualitative review of VMT primarily for information purposes, and a statement of whether the change in project would substantially affect the VMT findings compared to the DEIR/SEIR.

Previously, Kittelson prepared a VMT Analysis to determine if the Harridge proposed modifications to the Isabel Neighborhood Specific Plan (INSP) by the Livermore Transit Village project (Modified Project) incur the same or any additional VMT impacts compared to the Environmental Impact Report (EIR) certified on May 14, 2018, and Supplemental Environmental Impact Report (SEIR) dated September 30, 2020, for the INSP. A summary of those results and findings are shown below.

Senate Bill 743

Senate Bill (SB) 743, signed into law in 2013, required CEQA lead agencies to shift from using traditional LOS standards and automobile delay to determine significant traffic impacts. Under SB 743, the State Office of Planning and Research is required to update CEQA guidelines and criteria to promote greenhouse gas emissions reductions, multimodal transportation networks and diverse land uses. The Office of Planning and Research proposes using VMT as the metric for evaluating the significant traffic impacts, where projects that decrease VMT compared to existing conditions may be considered to have a less than significant transportation impact. SB 743 provides that, once the State adopts updated CEQA Guidelines for alternatives to LOS-based significance determinations, automobile delay as described by LOS shall not be considered a significant impact on the environment. However, the State guidelines were still under

development at the time of the DEIR. Accordingly, the City of Livermore determined to utilize the LOS-based methodology for significance determination in the DEIR, and VMT was reported for information purposes only. Given the addendum tiers off the DEIR, this assessment reports the VMT and net change for informational purposes.

Summary of Land Use Changes

We understand that the city is considering two options for rezoning, including sites within INSP areas 3a and/or 1d. The intent of the proposed rezoning is to ensure no net loss of housing opportunity sites, in accordance with the City's adopted Housing Element, for the INSP area. Proposed and constructed developments in the INSP area have not met the anticipated unit counts identified in the INSP and/or Housing Element; therefore, the city desires to rezone certain parcels within the INSP to ensure that there is adequate opportunity for the development of housing within the INSP area. The current shortfall of residential units is 344 units, with the trend of housing unit shortfalls anticipated to continue as the INSP area is built out.

The two options being considered for rezoning by the city include:

Option 1: Rezone the following parcel to residential: Assessor's Parcel Number (APN) 903-10-36-3, BART Parcel West (INSP 3a), 913 units.

- Increase of 569 residential units and decrease of 946,994 square feet (sf) of office space, as compared to the certified INSP EIR

Option 2: Rezone the following parcels to residential: APN 905-10-23, Comcast Parcel West (INSP 1d), 350 units; APN 905-10-24, Comcast Parcel East (INSP 1d), 512 units; APN 903-10-36-3, BART Parcel West (INSP 3a), 913 units.

- Increase of 1,431 residential units and decrease of 1,531,486 sf of office space, as compared to the certified INSP EIR

Figure 1 displays the location of the parcels considered for rezoning.

Figure 1: INSP Addendum Rezoning Parcels



Source: Google Maps, City of Livermore, 2024

Summary of VMT Assessment

Previously, the D/SEIR summarized VMT results for informational purposes. At that time, the Office of Planning and Research (OPR) had not yet finalized their VMT recommendations per SB 743, so the DEIR team opted to present VMT results as informational, while LOS remained as the primary impact metric for transportation. The metrics used were total VMT and VMT per Service population (residential population + jobs). The method used for computing the VMT for the Addendum is slightly different to the methods used in 2018, so the results do vary slightly. For consistency, the D/SEIR VMT was restated for consistent comparison to the addendum options. **Table 1** summarizes the VMT results for the D/SEIR and the Addendum options.

Table 1 Daily Vehicle Miles Traveled (VMT)

Year	*Scenario*	*Daily Vehicle Trips*	*Daily VMT*	*Service Population*	*VMT/ Service Population*
2013	No Project	57,730	599,393	14,671	40.9
2040	DEIR Project	112,183	1,168,901	36,273	32.2
2040	Addendum Option 1	104,771	1,123,732	34,379	32.7
2040	Addendum Option 2	104,657	1,157,280	35,328	32.8

Note: Total VMT and VMT/Service Population may be different to those reported in DEIR, due to updated methodology, but the net comparison with the DEIR remains consistent.

Source: Kittelson & Associates, Inc., 2024

As mentioned in the footnote, the Total VMT and VMT/Service Population may be different to those reported in the DEIR due to use of an updated methodology, but the net comparison with the DEIR remains consistent.

The following is observed when comparing the VMT results from the 2040 D/SEIR with the 2040 Addendum options:

- The 2013 results are provided as representing the original baseline.
- The DEIR was evaluated under 2040 cumulative conditions.
- The total VMT for the 2040 Addendum options decreases compared to the DEIR (from 1,168,901 to 1,123,732 and 1,157,280). This is a result of reductions in office related VMT offset by increases in residential VMT. Overall, the net change in total VMT shows a slight reduction, but the result is not substantially significant.
- The VMT/Service population increases very slightly from 32.2 for the DEIR to 32.7 and 32.8 with the two Addendum options. Since the VMT/service population combines the VMT for the two land use types, the change in the ratio is not substantially significant compared to the DEIR.

Overall VMT findings suggest the Addendum options would not substantially increase VMT impacts compared to the INSP DEIR.

Conclusion

VMT is provided for informational purposes. Based on this assessment, the increase of residential units and reduction of office commercial in three parcels for the addendum is not expected to have a substantial effect on VMT compared to the DEIR findings.

Appendix F

Water Supply Assessment Update



Isabel Crossing and No Net Loss Project

Water Supply Assessment Update

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1 Introduction

This report is an update to the 2017 Water Supply Assessment (WSA) for the Isabel Neighborhood Specific Plan (INSP) (City of Livermore 2017). The 2017 WSA was approved with certification of the project's INSP Environmental Impact Report (EIR) in 2018 (City of Livermore 2018) for compliance with the California Environmental Quality Act (CEQA). A Supplemental EIR for the project was later certified in 2020 (City of Livermore 2020). An Addendum to the Supplemental EIR is currently being prepared for the Isabel Crossing and No Net Loss Project, which consists of changes to the development program for a portion of the INSP area; these changes are henceforth referred to as the "proposed project." Section 1.1, *Project Overview,* provides a comparison between the approved project (i.e., the adopted INSP) and the proposed project.

The purpose of this WSA Update is to assess water demands of the changes to the INSP contemplated in the proposed project in comparison to the approved project and incorporate 2020 Urban Water Management Plan (UWMP) data into the analysis of water supply availability and reliability. Water demands of the approved project were assessed in the 2017 WSA for the INSP and accounted for in the 2020 UWMPs for Livermore Municipal Water (LMW) and Zone 7 Water Agency ("Zone 7"); see Section 1.4, *Water Supply Providers*, for information on these water provides. Water supply availability and reliability projections included in the 2020 UWMPs determined that with implementation of planned water supply projects, sufficient water would be available to meet anticipated needs under normal year, single dry-year, and multiple dry-year conditions and, should shortfall(s) occur prior to full implementation of planned water supply projects, Water Shortage Contingency Plans (WSCPs) for LMW and Zone 7 would be implemented to ensure sufficient supply to meet anticipated demands; see Section 3, *Supply Availability Projections*, for further discussion.

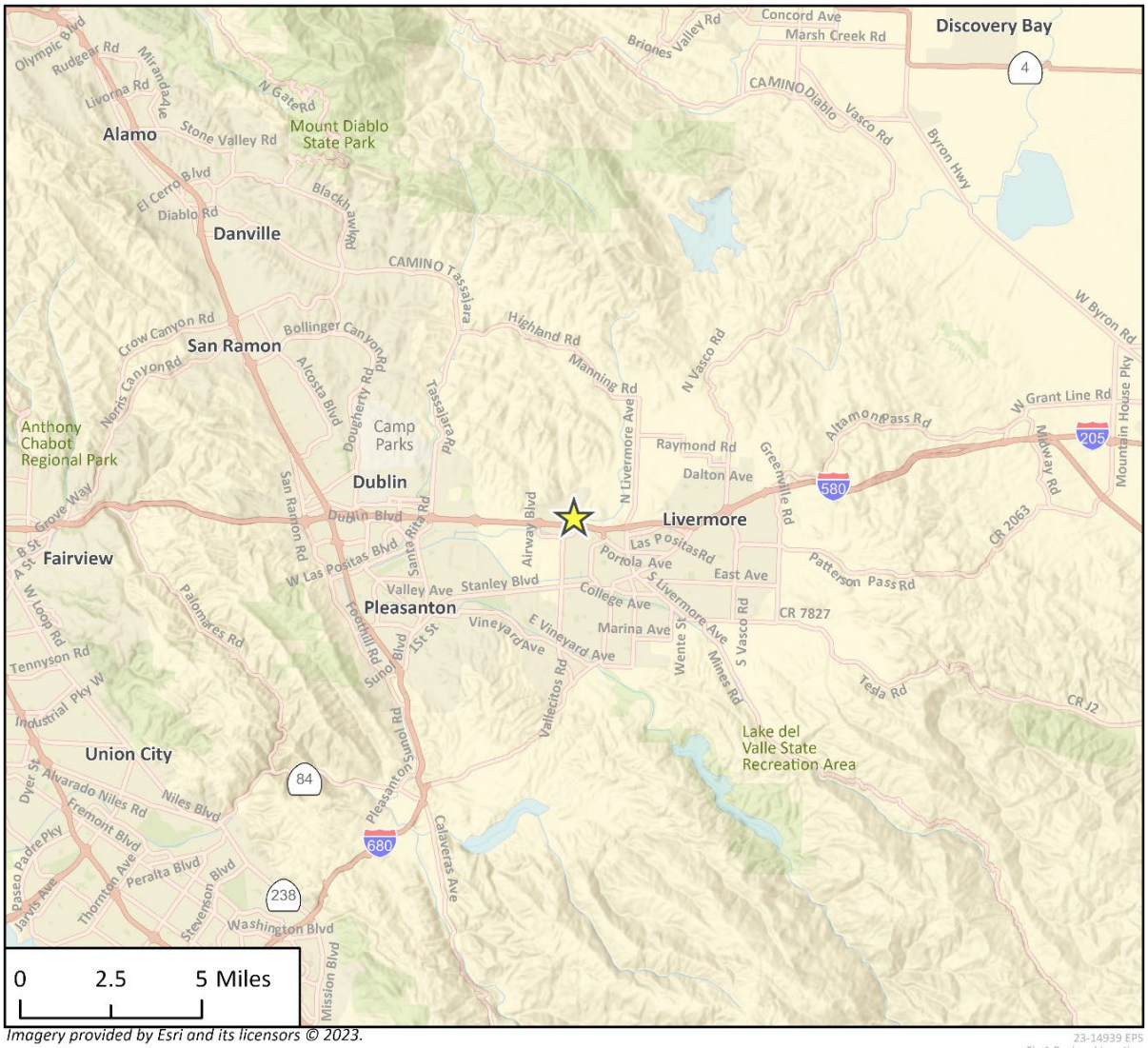
This WSA Update is being prepared because the proposed project would increase water demands of the approved project beyond those accounted for in the 2017 WSA for the INSP and the 2020 UWMPs for LMW and Zone 7. The proposed project also meets one of the thresholds defined by SB 610 as requiring a WSA, which is the introduction of 500 or more new residential units. The proposed project would increase the number of residential units previously approved for the INSP area by 1,431 units; see Section 1.2, *Project Overview*, for further discussion. This WSA Update builds off the 2017 WSA by providing analysis of the proposed changes to the approved project, and by using the same approach as the approved 2017 WSA; see Section 2, *Senate Bill 610*.

1.1 Project Location

The proposed project site includes three distinct areas. Figure 1 and Figure 2 on the following pages portray the proposed project regional location and the proposed project site. The proposed project includes the Isabel Crossing Project and the No New Loss Project.

- The Isabel Crossing Parcels (Assessor's Parcel Numbers [APN] 903-10-36-3, 905-10-23, and 905-10-24) encompass approximately 45 acres located at the southwest corner of Isabel Avenue and Portola Avenue in the INSP area of the City of Livermore in Alameda County. The Isabel Crossing Parcels are located within the 3b and 3c Subareas of the previously approved INSP. Subareas 3b and 3c are core areas of the INSP with a general objective of creating a vibrant residential neighborhood with retail uses that generate transit ridership.

Figure 1 Regional Location



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23-14939 EPS
Fig 1 Regional Location

Project Location

N

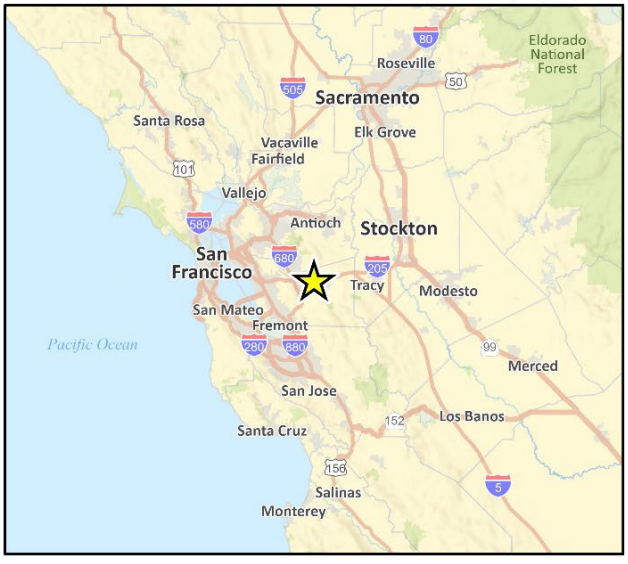


Figure 2 Project Location



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24-16209 EPS
Fig 2 Project Location

- The No Net Loss Parcels make up the remaining two areas of the proposed project site, including the BART Parcel and the Comcast Parcels. The BART Parcel (6.53 acres, APN 903-10-36-3) is located to the east of the intersection of I-580 and Isabel Avenue, and the Comcast Parcels (26.832 total acres, APNs 905-10-23 and 905-10-24) are located northwest of North Canyons Parkway at 3055 Triad Place in Livermore. The BART Parcel is located within Subarea 3a of the INSP. Subarea 3a land uses include Office Core and Core Residential (60-100 du/ac). The Comcast Parcels are located within Subarea 1d of the INSP. Subarea 1d is designated for Business Park land uses.

The Isabel Crossing Parcels and the BART Parcel are currently undeveloped with sparse vegetation. The Comcast Parcels are currently developed with existing office buildings and parking.

1.2 Project Overview

The proposed project consists of proposed development on the Isabel Crossing Parcels as well as land use designation changes for the BART Parcel and Comcast Parcels within the INSP area to ensure no net loss of housing opportunity sites within the INSP area, in accordance with the City's updated Housing Element which was adopted on March 13, 2023, and covers the period from 2023 to 2031. The current shortfall of residential units is 344 units, with the trend of housing unit shortfalls anticipated to continue as the INSP area is built out. The proposed project would change the land use designations of the following parcels from the approved project, to provide for additional residential uses needed to address the current housing shortfall, based upon the City's updated Housing Element: Assessor's Parcel Number (APN) 905-10-23, Comcast Parcel West (INSP Subarea 1d); APN 905-10-24, Comcast Parcel East (INSP Subarea 1d); APN 903-10-36-3, BART Parcel West (INSP Subarea 3a).

The Isabel Crossing Project and No Net Loss Parcels combined would result in a net Increase of 1,431 residential units and a net decrease of 1,531,486 square feet of office space, compared to what was analyzed in the 2018 EIR and 2020 SEIR for the INSP. Table 1, below, provides a comparison between the characteristics of the proposed project (including the Isabel Crossing Project and No Net Loss Project) and the approved project (original INSP design), to demonstrate how land uses would change under the proposed project.

Table 1 Net Growth Projections with Proposed Project (Isabel Crossing Project and No Net Loss Project)

Project Characteristic	Proposed Project	Approved Project	Change (Proposed Compared to Approved Project)
Isabel Crossing Project			
Office/Commercial	74,362 square feet	206,825[1] square feet	-132,463 square feet
Residential Units	1,299 units	1,338 units[2]	-39 units
Other Existing and Planned Development in the INSP + Isabel Crossing Project			
Residential Units	2,299 units	2,642 units	-344 units
No Net Loss Parcels			
Office/Commercial (Comcast Parcels)	0	584,482 square feet	-584,482 square feet
Residential Units (BART Parcel)	0	946,994 square feet	-946,994 square feet

Project Characteristic	Proposed Project	Approved Project	Change (Proposed Compared to Approved Project)
Residential Units (Comcast Parcels)	862 units	0 units	+862 units
Residential Units (BART Parcel)	913 units	244 units	+669 units
Overall Growth Projections (Isabel Crossing Project + No Net Loss Parcels)			
Office/Commercial	--	--	-1,531,486 square feet
Residential Units	--	--	1,431 units

[1] The office buildout for the project site was estimated using the acreage for proposed products within the Office Core area of the project site and a minimum floor area ratio of 1.0 as planned for the Office Core designation in the Land Use chapter of the INSP.

[2] The calculated target buildout of the project site considered in the INSP.

[3] The maximum height allowed in the project site.

Source: Appendix A; City of Livermore 2020

This WSA Update assesses the difference in water demands between the proposed project and the approved project, as summarized in the table above, in comparison to the anticipated water supply availability and reliability from the local water supply providers. Water demands are addressed below in Section 1.3, followed by water supply providers which are discussed in Section 1.4.

1.3 Water Demands

Water demands of the approved project were defined in the 2017 WSA for the INSP for both the City of Livermore's LMW and Cal Water-Livermore service areas, as the INSP would include development within both service territories. As discussed below in Section 1.4, *Water Supply Providers*, the proposed project would only affect development within LMW's service area. Water demands of the approved project are summarized in Table 2.

Table 2 Approved Project Water Demands (AFY)

Water Supplier	Proposed Development	Existing Development	Total
Livermore Municipal Water (LMW)	441	395	836
Cal Water-Livermore	153	36	189
Total	**594**	**431**	**1,025**

Source: City of Livermore 2017: 11

As shown in the table, the approved project would introduce new development with water demands totaling 594 acre-feet per year (AFY); in combination with the 431 AFY demands of existing development, total water demand of the approved INSP would be 1,025 AFY, across the service territories of LMW and Cal Water-Livermore.

As discussed in the introduction to this section, water demands of the approved project were assessed in the 2017 WSA for the INSP and accounted for in the LMW and Zone 7 2020 UWMPs. The 2017 WSA concluded that the additional water demand associated with development proposed under the INSP, as presented above in Table 2, would represent less than one percent of total demands for LMW and Cal Water-Livermore combined, and is therefore within the margin of error for water supply planning purposes (City of Livermore 2017: 12). The 2020 UWMPs for LMW and Zone 7, which are discussed in detail in Section 1.4, *Water Supply Providers*, below, determined that

with the approved project's new water demands, sufficient supplies would be available during normal year and dry year conditions, including during potential shortages requiring implementation of the providers' respective WSCPs to ensure supply sufficiency.

The proposed project would introduce new water demands that were not accounted for in the 2017 WSA or the 2020 UWMPs. In comparison to the approved project, the proposed project would increase residential development by 1,431 units and decrease office space by 1,531,486 square feet. Table 3, below, presents water demands of the proposed project in comparison to the approved project, including increased demand for residential uses and decreased demand for office space.

Table 3 Proposed Project Water Demands

Proposed Land Use	Water Use Rate[1]	Water Demands (GPD)	Water Demands (AFY)[2]
+1,431 residential units[3]	▪ Multi-family: 94 GPD/unit	+134,514	+151
-1,531,486 sf of office space[4]	▪ Office Core (6.53 acres): 2,070 GPD/acre ▪ Business Park (26.83 acres): 690 GPD/acre	-32,030	-36
Difference	**n/a**	**+102,484**	**+115**

1. Water use rates were identified in the 2017 WSA for the approved project; the same water use rates were used to calculate demands of the proposed project to provided consistency between the 2017 WSA and this WSA Update.
2. AFY = (gallons per day*365 days per year)/325,851 gallons per acre-foot
3. The 1,431 additional residential units include 350 units on APN 905-10-23, Comcast Parcel West (INSP 1d), 512 units on APN 905-10-24, Comcast Parcel East (INSP 1d), and 913 units on APN 903-10-36-3, BART Parcel West (INSP 3a), less the 344 unit shortfall.
4. The 1,531,486 sf of reduced office space include 6.53 acres in the Office Core and 26.83 acres in the Business Park.

Sf = square feet

As shown in the table, the proposed project would increase water demands of the approved project by approximately 115 AFY. This new demand would be for potable water, as it would serve new residential units and office space; non-potable water needs associated with the INSP were already accounted for in the approved project demands reflected in Table 2 and accounted for in the 2020 UWMPs. Because the proposed project demands were not previously accounted for in local water supply planning documents, they are assessed herein using the same approach employed for analysis of the approved project in the 2017 WSA.

1.4 Water Supply Providers

The INSP area is within the jurisdiction of two water suppliers, the City of Livermore's LMW and Cal Water-Livermore. Both suppliers receive water supply from Zone 7, a wholesaler of imported surface water and stored water for retailers within the Livermore-Amador Valley. Development associated with the proposed project would occur exclusively within LMW's service territory; therefore, this WSA Update does not include analysis of Cal Water-Livermore as a water supply source. Water supply for the proposed project would be provided by LMW, which receives imported surface water supply from Zone 7.

The 2017 WSA for the approved project was informed by the 2015 UWMPs for LMW and Zone 7. Since approval of the 2017 WSA, LMW and Zone 7 have each published a 2020 UWMP with updated supply availability projections that account for current and anticipated land uses, including the approved project as detailed in Table 1. This WSA Update includes supply and demand tables from the respective 2020 UWMPs to inform consideration of water supply availability and reliability for the proposed project's new water demands of 115 AFY.

LMW Supply Sources

LMW obtains all of its potable water as imported surface water provided by Zone 7, discussed below. LMW does not self-supply surface water and does not pump groundwater to meet any water demands of the municipal water service area (City of Livermore 2021: 45). LMW has access to short-term, emergency water transfers through interties with the California Water Service Company, City of Pleasanton, and Dublin-San Ramon Services District, as well as a small intertie with the San Francisco Public Utilities Commission (SFPUC) water system via the Lawrence Livermore National Laboratory.

LMW produces and distributes recycled water meeting Title 22 disinfected tertiary recycled water requirements for beneficial use and in accordance with their Regional Water Quality Control Board (RWQCB) permit. The City owns and operates the Livermore Water Reclamation Plant (LWRP), which currently distributes an average of about 2.2 million gallons per day (MGD) of recycled water, with a peak demand of almost 3.3 MGD, and a design capacity of up to 8 MGD. The LWRP treats all wastewater collected within the city limits of Livermore, which includes the entire LMW service area and the Cal Water-Livermore service area.

Zone 7 Supply Sources

Zone 7 water supply sources include imported surface water, local surface runoff, and stored water. On average, imported surface water directly provides 80 percent of the water that Zone 7 supplies, locally captured watershed runoff makes up 10 percent, and previously-imported supplies stored in the local groundwater basin make up the remaining 10 percent (Zone 7 2021: 45). Groundwater is not considered a separate source of supply because Zone 7 only extracts water from underground storage that is recharged from surface water supplies (Zone 7 2021: 45).

The projects presented below are designed for use during all water year types (normal year, single dry year, and multiple dry year), and are accounted for in the projections of water supply availability and reliability presented in Zone 7's 2020 UWMP; see Section 3, *Supply Availability Projections*. These sources were also accounted for in Zone 7's 2015 UWMP, which informed the 2017 WSA for the approved project.

Existing Supplies

- **State Water Project (SWP) Table A.** Each SWP contractor is limited to a maximum annual contract amount as specified in Article 6(c) and Table A of the SWP Contract; this amount is therefore commonly referred to as "Table A" supplies. Zone 7's current Table A allocation is 80,619 AFY. The amount of Table A water physically available in a given year depends upon hydrologic conditions and other demands on the SWP system, as well as the extent of SWP water in storage, SWP facility capacity, and environmental/regulatory requirements. (Zone 7 2021: 49)
- **SWP Carryover.** As a SWP contractor, Zone 7 has the option to store unused Table A water from one year to the next in the SWP's San Luis Reservoir, when there is storage capacity available. This "carryover" water is also called Article 12e or 56c water, in reference to the relevant contract terms. Article 12e water must be taken by March 31 of the following year, but Article 56c water may remain as carryover as long as San Luis Reservoir storage is available. Zone 7 assumes it would carry over 10,000 acre-feet (AF) of water each year on average.

- **Arroyo Valle.** Zone 7 also stores local runoff from the Arroyo Valle watershed in a local reservoir (Lake Del Valle) located in Livermore Valley, which is owned by the California Department of Water Resources (DWR) as a SWP storage reservoir and operated by the East Bay Regional Parks District.
- **Main Basin.** Zone 7 overlies the Livermore Valley Groundwater Basin (DWR Basin No. 2-10), where the Main Basin Management Area (Main Basin) is used by Zone 7 as a storage facility. Zone 7 does not have access to naturally recharged water, and only withdraws water that has been artificially recharged with surface water supplies.
- **Semitropic.** Since 1998, Zone 7 has acquired 78,000 AF of groundwater banking storage capacity available to augment water supplies during drought and emergency conditions and as needed. Zone 7 can store up to 5,883 AFY (less 10 percent loss) in the Semitropic Water Storage District (Semitropic) groundwater bank. Under the contract terms, Zone 7 can request up to 9,100 AF of pumpback water (pumped from the Semitropic aquifer into the SWP system) and up to 8,645 AF of Table A exchange water.
- **Cawelo.** Since 2006, Zone 7 has acquired 120,000 AF of groundwater banking storage capacity available with the Cawelo Water District (Cawelo). Zone 7 can store up to 5,000 AFY in the groundwater bank. Zone 7 can request up to 10,000 AFY of pumpback (or SWP exchange water) from Cawelo.

Planned Supplies

- **Bay Area Regional Desalination Project (BARDP) and Potable Reuse.** The BARDP involves constructing a regional brackish water treatment plant in collaboration with Contra Costa Water District (CCWD) that would produce 10-20 MGD of desalinated water for reuse. Potable Reuse involves treating wastewater, with lower-yield estimates relying only on Livermore wastewater supply (year-round operations) and higher-yield estimates incorporating seasonal availability of wastewater from the Dublin San Ramon Services District (DSRSD) (Zone 7 2021: 70). As described above in Table 4 and the associated footnotes, Zone 7 anticipates reliably receiving approximately 5,000 AFY from the BARDP and/or Potable Reuse, with either or both systems online by 2030 (Zone 7 2021: 70); the estimated Zone 7 water yield from this project will be refined further and will depend on project yield and demands from the final participants.
- **Delta Conveyance Project (DCP).** DWR's proposed DCP would install a new tunnel to convey freshwater from north of the Delta to a point south of the Delta to increase SWP reliability and improve water quality. The DCP is not anticipated to be in service until the end of the 2020 UWMP planning period, and its impacts on supply were not included in DWR's 2019 Delivery Capability Report (DCR) for the SWP; however, in November 2020, the Zone 7 Board approved continued participation in the DCP at a 2.2 percent participation level based on Zone 7's Table A amount of 80,619 AF, which equates to 1,773 AF (Zone 7 2021: 68).
- **Los Vaqueros Reservoir (LVR) Expansion.** LVR is an off-stream reservoir owned by CCWD and located in southeastern Contra Costa County. It was constructed in 1997 and currently has a capacity of 160,000 AF. CCWD is planning to further expand the reservoir to 275,000 AF and construct the Transfer-Bethany Pipeline, which would connect the reservoir to the SBA and the California Aqueduct, increasing water supply reliability for Bay Area water agencies (Zone 7 2021: 72).

- **Sites Reservoir Project.** Sites Reservoir is a proposed new 1,500,000 AF off-stream storage reservoir in northern California near Maxwell. In its 2019 Water Supply Evaluation (WSE) Update, Zone 7 considered 5,000 to 10,000 AFY of average yield from Sites Reservoir, in combination with other water supply options. The availability of this supply was varied based on hydrology, with more water delivered to Zone 7 during dry years. At Zone 7's request, water would be released from Sites Reservoir annually to the Sacramento River, then conveyed by the SWP system through the Delta and to the South Bay Aqueduct (SBA).
- **SWP Transfers.** A transfer agreement with another SWP contractor using the SWP system—which Zone 7 is already invested in—is likely the most expedient and cost-effective transfer option. The transfer amount could vary from year-to-year depending on hydrology but could average between 5,000 and 10,000 AFY. For the 2020 UWMP, Zone 7 assumed a constant 5,000 AFY in water transfers through 2030.
- **Chain of Lakes.** Chain of Lakes is a series of former or active gravel quarry pits in the heart of the Livermore-Amador Valley, connected through a series of conduits. The Chain of Lakes would ultimately cover approximately 1,500 acres and have about 150,000 AF of total storage volume, of which 31,000 AF is estimated to be available for operational storage (Zone 7 2021: 73).

Table 4, below, provides further discussion of the supply sources listed above, including implementation timelines.

Table 4 Water Supply Development Projects and Programs

Project or Program[1]	Parties Involved[2]	Overview	Implementation Year	Expected Increase in Water Supply (AF)[3]
Bay Area Regional Desalination Project (BARDP)	Zone 7; CCWD; SFPUC; SCVWD	Brackish water desalination in eastern Contra Costa County	2030	5,600[4]
Potable Reuse	Zone 7; City of Livermore; DSRSD; City of Pleasanton; Cal Water-Livermore	Use of purified water derived from wastewater effluent to supplement potable water supplies	2030	4,000 – 7,000[4]
Delta Conveyance Project	Zone 7; DWR; other SWP Contractors	Construction of new intakes and tunnel as part of the SWP	2040	1,773[5]
Los Vaqueros Reservoir (LVR) Expansion	Zone 7; CCWD; Bay Area M&I water agencies, GWD, and SLDMWA	Expansion of LVR and construction of the Transfer-Bethany Pipeline to connect LVR to the South Bay Aqueduct and California Aqueduct	2025 (Pipeline) and 2030 (LVR Expansion)	10,000[6]
Sites Reservoir Project	Zone 7; Sites Project Authority; Sites Reservoir Project committee members	Construction of a new 1.5-million-AF off-stream reservoir in Colusa County	2030	10,000

Project or Program[1]	Parties Involved[2]	Overview	Implementation Year	Expected Increase in Water Supply (AF)[3]
State Water Project (SWP) Transfers	Other SWP contractors	Temporary water transfer agreements until major water projects are implemented	2021	Varies
Chain of Lakes	Zone 7; EBMUD	Provide alternate means of delivering water to Zone 7 during Delta and/or SBA outages	2030	Varies

1. These projects are in the conceptual or planning stages and Zone 7 is participating in planning efforts. It is expected that a subset of these projects would be needed to meet future water demands and increase the reliability of Zone 7's system. The planned supply and implementation year are estimates and may need to be adjusted when a final project/program has been approved.
2. The "parties involved" are potential partners; final participation will be determined when the project has been approved by the respective agencies' governing boards. CCWD = Contra Costa Water District; DSRSD = Dublin San Ramon Services District; DWR = Department of Water Resources; EBMUD = East Bay Municipal Utilities District; GWD = Grassland Water District; M&I = Municipal and Industrial; SBA = South Bay Aqueduct; SCVWD = Santa Clara Valley Water District; SFPUC = San Francisco Public Utilities District; SLDMWA = San Luis and Delta-Mendota Water Authority; SWP = State Water Project
3. Volumes are in acre-feet (AF).
4. Zone 7's 2020 UWMP assumes that the BARDP, producing desalinated brackish water, and/or Potable Reuse, producing purified water from wastewater effluent, would provide approximately 5,000 AFY of new supply, with either or both systems anticipated to be online by 2030 (Zone 7 2021: 70). As stated in table note (1) above, it is expected that a subset of planned future projects and programs would be needed to meet future water demands. The BARDP and Potable Reuse are both joint ventures with multiple other parties involved; while this table shows the total water supply benefit associated with the BARDP and Potable Reuse, Zone 7 anticipates the portion of new water that would be available to Zone 7 is approximately 5,000 AFY (Zone 7 2021: 77).
5. The Delta Conveyance Project (DCP) is not anticipated to be in service until the end of the 2020 UWMP planning period, and its impacts on supply were not included in DWR's 2019 Delivery Capability Report (DCR) for the SWP; however, in November 2020, the Zone 7 Board approved continued participation in the DCP at a 2.2 percent participation level based on Zone 7's Table A amount of 80,619 AF, which equates to 1,773 AF (Zone 7 2021: 68).
6. Zone 7's 2019 Water Supply Evaluation Update assumes emergency storage in Los Vaqueros Reservoir at 10,000 AF (Zone 7 2021: 73).

Source: Zone 7 2021: 75

2 Senate Bill 610

SB 610 was passed by the California Senate on January 1, 2002, amending California Water Code to require detailed analysis of water supply availability for certain types of development projects. The purpose of SB 610 is to improve the linkage between water and land use planning by ensuring greater communication between water providers and local planning agencies, and ensuring that land use decisions for certain large development projects are fully informed as to whether sufficient water supplies are available to meet project demands.

SB 610 requires the preparation of a WSA for certain types of projects that are subject to CEQA and would use groundwater to meet some or all of the project's water demands. A WSA is required to address the questions listed below, with responses provided for the proposed project.

1) Is there a public water system that will service the proposed project?

Yes, there is a public water system that will service the project. The INSP area is within the service territory of two existing water suppliers, LMW and Cal Water-Livermore. The proposed project, which would add 1,431 residential units and remove 1,531,486 square feet of office space from the approved project, is located exclusively within the service territory of LMW. Therefore, this WSA Update addresses LMW and Zone 7 as LMW's wholesale supplier.

2) Is there a current Urban Water Management Plan (UWMP) that accounts for the project demand?

There are two UWMPs applicable to the proposed project, including the LMW 2020 UWMP and the Zone 7 2020 UWMP. Both UWMPs account for the water demands of the approved project, based upon previous CEQA documents and the 2017 WSA for the INSP, and both UWMPs determined there is sufficient water supply available to reliably meet the demands of the approved INSP over a 20-year planning horizon and with consideration to varying climatic conditions (normal water year, single dry year, multiple dry years). The proposed project would increase water demands of the approved project by approximately 115 AFY (37.5 MG/Year), as discussed in Section 1.2, *Water Demands*. This WSA Update includes data from the 2020 UWMPs to inform consideration of water supply availability and reliability for the proposed project's increased water demand of 115 AFY.

3) Is groundwater a component of the supplies for the project?

No, groundwater is not a component of supplies for the project. Water supply for the project would be provided by LMW, which provides imported surface water from Zone 7 and locally developed recycled water. Zone 7 uses the Livermore Valley Groundwater Basin (Main Basin) to store surplus surface water when available, and also participates in groundwater banking projects in cooperation with Semitropic and Cawelo; however, the source water used to conduct such recharge is surface water, not local groundwater. Zone 7 withdraws only as much water from the groundwater storage areas as was recharged for storage; Zone 7 does not produce local groundwater as part of its water supply portfolio.

4) Are there sufficient supplies to serve the project over the next twenty years?

This WSA Update assesses the water supply availability and reliability for the 115 AFY of increased demand that would occur under the proposed project, based upon data provided in the 2020 UWMPs for LMW and Zone 7. Please see Section 4, *Findings and Recommendations*, for further discussion.

The primary question to be answered in a WSA is:

Will the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection meet the projected water demand of the proposed project, in addition to existing and planned future uses of the identified water supplies, including agricultural and manufacturing uses?

This WSA Update builds upon the 2017 WSA for the INSP to assess water supply availability and reliability for the proposed project's additional water demands of approximately 115 AFY, which were not previously accounted for in the 2017 WSA or the 2020 UWMPs for LMW and Zone 7. Section 4, *Conclusions*, addresses the WSA question presented above, regarding the sufficiency of available water supplies to meet projected demands over 20 years and with consideration to normal, single dry, and multiple dry water years.

3 Supply Availability Projections

The 2017 WSA for the INSP (approved project) was informed by the 2015 UWMPs for LMW, which would provide water service to the proposed project area, and for Zone 7, which provides imported surface water supply to LMW. Zone 7 also provides supply reliability to its retailers, including LMW, during dry year conditions through the use of stored surplus water and groundwater banking operations. As discussed in Section 2, *Senate Bill 610*, neither LMW nor Zone 7 produces local groundwater as part of its supply portfolio.

This section provides supply and demand comparisons for both water providers, LMW and Zone 7, for all climatic conditions required for consideration in a WSA, including normal water year conditions, single dry year conditions, and multiple dry year conditions. The purpose of this section is to inform consideration of water supply availability and reliability for the proposed project, which would increase water demands by 115 AFY compared to the approved project.

3.1 Normal Water Year

Livermore Municipal Water

Table 5, below, provides an overview of LMW's projected supply and demands through 2045 under normal water year (non-drought) conditions. During a normal water year, purchased supplies from Zone 7 are assumed to provide 100 percent of the LMW'S potable water demand.

Table 5 LMW Normal Water Year Conditions (AF)

	2025	2030	2035	2040	2045
Supply Total	8,338	8,559	8,780	9,004	9,004
Demand Total	8,338	8,559	8,780	9,004	9,004
Difference	0	0	0	0	0

* Volumes reported in acre-feet (AF)

Source: Livermore 2021: 69

As shown in the table, LMW projects that available supply is sufficient to meet projected demands during normal water year conditions through 2045, which is the anticipated buildout of the approved INSP. The proposed project's new demand of 115 AFY represents approximately 1.3 to 1.4 percent of LMW's total demands during normal year conditions. As shown in Section 1.3, *Water Demands,* the proposed project would introduce an additional 115 AFY of potable water demand to LMW's service territory. LMW would acquire this potable water from Zone 7, discussed below.

LMW would offset increasing potable demands with recycled water produced from local wastewater used for non-potable purposes including landscaping throughout the INSP. As reported in its 2020 UWMP, LMW anticipates producing approximately 1,890 AF (616 MG) of recycled water in 2025, which would increase to 2,059 AF (671 MG) in 2045; this increase is associated with buildout of the INSP and associated use of recycled water for landscape irrigation (City of Livermore 2021: 69). The proposed project's additional water demand of 115 AFY equates to approximately 5.6 percent of LMW's planned recycled water production in 2045, or approximately 1.3 percent of LMW's potable supply from Zone 7 in 2045, for normal water year conditions.

Zone 7 Water Agency

Table 6, below, provides an overview of Zone 7's projected supply and demands through 2045 under normal water year (non-drought) conditions. Zone 7 provides supply reliability through storage of surplus supplies as carryover, as recharge to the Main Basin (of the Livermore Valley Groundwater Basin) for later use when needed, and as banked water in Kern County groundwater banks managed by Semitropic and Cawelo. The supply projections shown below are representative of expected normal conditions or normal operational targets (Zone 7 2021: 102).

Table 6 Zone 7 Normal Water Year Conditions (AF)

	2025	2030	2035	2040	2045
Supplies[1]					
SWP Table A	47,000	46,000	45,000	43,500	43,500
SWP Carryover	10,000	10,000	10,000	10,000	10,000
Arroyo Valle	5,500	5,500	5,500	5,500	5,500
Main Basin	9,200	9,200	9,200	9,200	9,200
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	10,000	10,000	10,000	10,000
Transfers	5,000	5,000	0	0	0
Supply Totals	**76,700**	**90,700**	**84,700**	**83,200**	**83,200**
Demands					
Retailer Demand	43,000	43,200	43,400	43,700	43,700
Untreated Water Demand	5,500	7,800	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,000	1,000	1,000	1,000
Demand Totals	**50,300**	**52,80**	**53,800**	**55,300**	**55,300**
Difference	**26,400**	**37,900**	**30,900**	**27,900**	**27,900**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021: 102

As shown in the table, Zone 7 anticipates that available supply is sufficient to meet projected demands during normal water year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during normal year conditions. As described above, Zone 7 stores and banks surplus supplies for future use as needed, thereby providing supply reliability to its retailers, including LMW, through variable climatic conditions.

3.2 Single Dry Water Year

Livermore Municipal Water

Table 7, below, below, provides an overview of LMW's projected supply and demands through 2045 under single dry-year conditions, which would be provided by Zone 7 as imported surface water; as discussed below, LMW also produces recycled water from local wastewater flows to offset potable water uses. The table below assumes that water demands during a single dry year would be the

same as demands during a normal water year; this is a conservative approach because during dry years, conservation measures would likely reduce local demands. In addition, the single dry year is based on 2014 critically dry conditions which is the historically lowest allocation from the SWP within the modeling time period of 1922 through 2003; this scenario assumes the worst local conditions with no local water available (City of Livermore 2021: 69).

Table 7 LMW Single Dry-Year Conditions (AF)

	2025	2030	2035	2040	2045
Supply Total	8,338	8,559	8,780	9,004	9,004
Demand Total	8,338	8,559	8,780	9,004	9,004
Difference	0	0	0	0	0

* Volumes reported in acre-feet (AF)

Source: City of Livermore 2021: 70

As shown in the table, LMW anticipates it would receive sufficient supply from Zone 7 to meet projected demands for potable water during single dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 1.3 to 1.4 percent of LMW's potable water demands during single dry-year conditions.

Single dry year supplies are anticipated to be reliable because during drought conditions, demand would be reduced in accordance with LMW's 2020 WSCP, and because Zone 7 would draw from stored supplies to deliver potable water to LMW, as discussed below under "Zone 7 Water Agency." In addition, LMW would continue producing recycled wastewater to offset potable water uses; as stated in Section 3.1, LMW anticipated producing 1,890 AF of recycled water in 2025, increasing to 2,059 AF in 2045. Recycled wastewater is considered a drought-proof supply source because it is based upon municipal water uses which occur during all climatic conditions.

Zone 7 Water Agency

Table 8, below, provides an overview of Zone 7's projected supply and demands through 2045 under single dry-year conditions. These values reflect average output from Zone 7's water supply risk model, which was initialized given 2020 conditions and configured to simulate a single dry year beginning in each year required in the drought risk assessment (e.g., 2025, 2030, etc.) (Zone 7 2021: 103). The single dry year is based on 2014 critically dry conditions, the worst-case scenario for the SWP with five percent water deliveries, such that Zone 7 would receive approximately 4,000 AF of its maximum 80,619-AFY Table A allocation of SWP water. This scenario also assumes the worst local conditions with no local water available (Zone 7 2021: 103).

Table 8 Zone 7 Single Dry-Year Conditions (AF)

	2025	2030	2035	2040	2045
Supplies[1]					
SWP Table A	4,400	4,400	4,400	4,400	4,400
SWP Carryover	15,500	12,000	13,800	12,600	12,700
Main Basin	27,600	29,900	31,800	32,200	32,500
Semitropic	6,500	6,600	6,600	6,500	6,500
Cawelo	7,100	7,100	7,100	7,100	7,000
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	14,200	15,700	15,300	15,100
Transfers	4,500	4,600	0	0	0
Chain of Lakes	0	8,300	9,800	9,400	9,100
Supply Totals	**65,600**	**91,100**	**94,200**	**92,500**	**92,300**
Demands					
Retailer Demand	43,000	43,200	43,400	43,700	43,700
Untreated Water Demand	5,500	7,800	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,000	1,300	2,500	2,500
Demand Totals	**50,300**	**52,800**	**53,800**	**55,300**	**55,300**
Difference	**15,300**	**39,300**	**40,400**	**37,200**	**37,000**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021:104

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during normal water year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during single dry-year conditions. Compared to normal water year conditions, during a single dry year, Zone 7 does not anticipate collecting surface runoff from the Arroyo Valle watershed, and would rely on water stored in the Semitropic and Cawelo groundwater banking programs, as well as the Chain of Lakes.

Water savings from conservation are not included in the demands shown above; any extra supply as a result of conservation would remain in storage or go towards storage (Zone 7 2021: 103). The table above shows that during a single dry-year, Zone 7 would have a surplus of 15,300 AF in 2025, increasing to 37,000 AF in 2040; as discussed in Section 1.4, *Water Supply Providers*, these projections assume buildout of planned water supply projects. It is possible that operational constraints may occur during dry-year conditions, such as during a Delta outage that reduces water moving through the SBA from the Delta. Due to planned water projects currently being in planning stages or not fully operational yet, near-term water supply shortages could occur until such projects are implemented (Zone 7 2021: 103). Zone 7's 2020 WSCP would be implemented to address shortages, as needed, and could include voluntary or mandatory conservation measures and operational adjustments (Zone 7 2021: 103).

The proposed project's additional water demand of 115 AFY represents approximately 0.23 percent of Zone 7's total anticipated demands in 2025 and 0.21 percent of its total demands in 2045, under single dry-year conditions. For comparison, as discussed in Section 1.3, *Water Demands*, under

Table 2, the 2017 WSA for the approved project concluded that water demands for the INSP represented less than one percent of total demands for LMW and Cal Water-Livermore, and are therefore considered within the margin of error for water supply planning purposes (City of Livermore 2017: 12).

3.3 Multiple Dry Water Years

Livermore Municipal Water

Table 9, below, provides an overview of LMW's projected supply and demands through 2045 under multiple dry-year conditions, which would be provided by Zone 7 as imported surface water; as discussed below, LMW also produces recycled water from local wastewater flows to offset potable water uses. The table below is informed by a water supply risk model that simulates varying hydrologic conditions based upon the five-consecutive-dry-year scenario that occurred from 1987 through 1991 (City of Livermore 2021: 70).

Table 9 LMW Multiple Dry-Year Conditions (AF)

	2025	2030	2035	2040	2045
First Year					
Supply Total	8,338	8,559	8,780	9,004	9,004
Demand Total	8,338	8,559	8,780	9,004	9,004
Difference	0	0	0	0	0
Second Year					
Supply Total	8,338	8,605	8,826	9,004	9,004
Demand Total	8,338	8,605	8,826	9,004	9,004
Difference	0	0	0	0	0
Third Year					
Supply Total	8,427	8,648	8,869	9,004	9,004
Demand Total	8,427	8,648	8,869	9,004	9,004
Difference	0	0	0	0	0
Fourth Year					
Supply Total	8,470	8,692	8,915	9,004	9,004
Demand Total	8,470	8,692	8,915	9,004	9,004
Difference	0	0	0	0	0
Fifth Year					
Supply Total	8,516	8,737	8,958	9,004	9,004
Demand Total	8,516	8,737	8,958	9,004	9,004
Difference	0	0	0	0	0

* Volumes reported in acre-feet (AF)

Source: City of Livermore 2021: 70-71

As shown in the table, LMW anticipates it would receive sufficient supply from Zone 7 to meet projected potable demands during multiple dry-year conditions through 2045. Purchased supplies from Zone 7 are assumed to provide 100 percent of LMW's potable water demand and recycled water would be produced to meet all non-potable demands during the multiple dry-year event (City

of Livermore 2021: 70). The proposed project's new demand of 115 AFY represents approximately 1.3 percent to 1.4 percent of LMW's potable water demands during multiple dry-year conditions.

Multiple dry-year supplies from Zone 7 are anticipated to be reliable because during drought conditions, demand would be reduced in accordance with LMW's 2020 WSCP, and because Zone 7 would draw from stored supplies to deliver potable water to LMW, as discussed below under "Zone 7 Water Agency." In addition, as with the single dry-year scenario, LMW would continue producing recycled wastewater to offset potable water uses, with 1,890 AF of recycled water expected in 2025, increasing to 2,059 AF in 2045.

Zone 7 Water Agency

Table 10, below, provides an overview of Zone 7's projected supply and demands through 2045 during the first year of multiple dry-year conditions.

Table 10 Zone 7 Multiple Dry-Year Conditions – Year 1 (AF)

	2025	2030	2035	2040	2045
Supplies[1]					
SWP Table A	19,900	19,500	19,500	19,500	19,400
SWP Carryover	15,500	12,000	13,800	12,600	12,700
Arroyo Valle	1,700	1,700	1,700	1,700	1,700
Main Basin	27,600	29,900	31,800	32,200	32,500
Semitropic	10,000	9,900	10,000	10,000	9,900
Cawelo	9,700	9,700	9,700	9,700	9,700
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	15,300	17,000	16,800	16,600
Transfers	4,800	4,800	0	0	0
Chain of Lakes	0	8,800	10,000	9,600	9,300
Supply Totals	**89,200**	**116,600**	**118,500**	**117,100**	**116,800**
Demands					
Retailer Demand	43,00	43,200	43,400	43,700	43,700
Untreated Water Demand	5,500	7,800	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,000	1,300	2,500	2,500
Demand Totals	**50,300**	**52,800**	**53,800**	**55,300**	**55,300**
Difference	**38,900**	**63,800**	**64,700**	**61,800**	**61,500**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021: 105

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during the first year of multiple dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during Year 1 of multiple dry-year conditions, for all years projected.

Table 11, below, provides an overview of Zone 7's projected supply and demands through 2045 during the second year of multiple dry-year conditions.

Table 11 Zone 7 Multiple Dry-Year Conditions – Year 2 (AF)

	2026	2031	2036	2041	2046
Supplies[1]					
SWP Table A	20,200	19,800	19,800	19,600	19,600
SWP Carryover	2,800	4,400	3,500	3,100	3,100
Arroyo Valle	1,500	1,500	1,500	1,500	1,500
Main Basin	25,100	29,400	31,400	31,600	31,900
Semitropic	10,000	10,000	10,000	10,000	10,000
Cawelo	9,700	9,700	9,700	9,700	9,700
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	18,100	18,300	17,700	17,800
Transfers	4,900	0	0	0	0
Chain of Lakes	600	7,900	8,800	8,400	8,200
Supply Totals	**74,800**	**105,800**	**108,000**	**106,600**	**106,800**
Demands					
Retailer Demand	43,000	43,200	43,500	43,700	43,700
Untreated Water Demand	6,900	8,300	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,060	1,600	2,500	2,500
Demand Totals	**51,700**	**53,360**	**54,200**	**55,300**	**55,300**
Difference	**23,100**	**52,440**	**53,800**	**51,300**	**51,500**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021: 106

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during the second year of multiple dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during Year 2 of multiple dry-year conditions, for all years projected.

Table 12, below, provides an overview of Zone 7's projected supply and demands through 2045 during the third year of multiple dry-year conditions.

Table 12 Zone 7 Multiple Dry-Year Conditions – Year 3 (AF)

	2027	2032	2037	2042	2047
Supplies[1]					
SWP Table A	20,200	19,800	19,700	19,700	19,600
SWP Carryover	1,800	2,700	2,500	2,300	2,300
Arroyo Valle	1,500	1,500	1,500	1,500	1,500
Main Basin	20,600	28,300	30,300	30,300	30,700
Semitropic	10,000	10,000	9,900	10,000	9,900
Cawelo	9,700	9,800	9,700	9,700	9,700
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	16,600	16,400	16,300	16,300
Transfers	4,900	0	0	0	0
Chain of Lakes	400	6,900	7,700	7,500	7,300
Supply Totals	**69,100**	**100,600**	**102,700**	**102,300**	**102,300**
Demands					
Retailer Demand	43,100	43,300	43,500	43,700	43,700
Untreated Water Demand	7,100	8,300	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,120	1,800	2,500	2,500
Demand Totals	**52,000**	**53,520**	**54,400**	**55,300**	**55,300**
Difference	**17,100**	**47,080**	**48,300**	**47,000**	**47,000**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021:107

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during the third year of multiple dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during Year 3 of multiple dry-year conditions, for all years projected.

Table 13, below, provides an overview of Zone 7's projected supply and demands through 2045 during the fourth year of multiple dry-year conditions.

Table 13 Zone 7 Multiple Dry-Year Conditions – Year 4 (AF)

	2028	2033	2038	2043	2048
Supplies[1]					
SWP Table A	20,200	19,500	19,800	19,700	19,800
SWP Carryover	1,800	2,100	2,000	1,900	1,900
Arroyo Valle	1,500	1,500	1,500	1,500	1,500
Main Basin	15,100	26,900	28,800	28,600	28,900
Semitropic	10,100	10,000	10,000	10,000	10,000
Cawelo	9,700	9,700	9,700	9,700	9,700
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	16,000	16,000	15,900	15,900
Transfers	4,900	0	0	0	0
Chain of Lakes	300	6,000	6,700	6,600	6,500
Supply Totals	**63,600**	**96,700**	**99,500**	**98,900**	**99,200**
Demands					
Retailer Demand	43,100	43,300	43,600	43,700	43,700
Untreated Water Demand	7,350	8,300	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,180	2,000	2,500	2,500
Demand Totals	**52,250**	**53,580**	**54,700**	**55,300**	**55,300**
Difference	**11,350**	**43,120**	**44,800**	**43,600**	**43,900**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021: 108

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during the fourth year of multiple dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during Year 4 of multiple dry-year conditions, for all years projected.

Table 14, below, provides an overview of Zone 7's projected supply and demands through 2045 during the fifth year of multiple dry-year conditions.

Table 14 Zone 7 Multiple Dry-Year Conditions – Year 5 (AF)

	2029	2034	2039	2044	2049
Supplies[1]					
SWP Table A	20,200	19,800	19,700	19,600	19,600
SWP Carryover	1,800	1,900	1,900	1,900	1,900
Arroyo Valle	1,500	1,500	1,500	1,500	1,500
Main Basin	9,700	25,200	27,000	26,500	26,900
Semitropic	10,100	10,000	10,000	10,000	10,000
Cawelo	9,700	9,700	9,700	9,700	9,700
BARDP/Potable Reuse	0	5,000	5,000	5,000	5,000
Sites Reservoir Project	0	15,800	15,800	15,800	15,700
Transfers	4,900	0	0	0	0
Chain of Lakes	300	5,200	5,900	5,900	5,800
Supply Totals	**58,200**	**94,100**	**96,500**	**95,900**	**96,100**
Demands					
Retailer Demand	43,100	43,400	43,600	43,700	43,700
Untreated Water Demand	7,600	8,300	8,300	8,300	8,300
Direct Retail Demand	800	800	800	800	800
Losses	1,000	1,240	2,300	2,500	2,500
Demand Totals	**52,500**	**53,740**	**55,000**	**55,300**	**55,300**
Difference	**5,700**	**40,360**	**41,500**	**40,600**	**40,800**

1. Please see Section 1.3, *Water Supply Providers*, for an overview of Zone 7's water supply sources.
2. Volumes reported in acre-feet (AF)

Source: Zone 7 2021: 109

As shown in the table, Zone 7 projects that available supply is sufficient to meet projected demands during the fifth year of multiple dry-year conditions through 2045. The proposed project's new demand of 115 AFY represents approximately 0.2 percent of Zone 7's total demands during Year 5 of multiple dry-year conditions, for all years projected.

As discussed in Section 3.2, *Single Dry Water Year*, water savings from conservation are not included in the demands shown above; any extra supply as a result of conservation would remain in storage or go towards storage (Zone 7 2021: 103). It is possible that operational constraints may occur during dry-year conditions, and that such constraints could result in near-term water supply shortages before major water supply projects are implemented (Zone 7 2021: 103). In such cases, Zone 7's 2020 WSCP would be implemented and could include voluntary or mandatory conservation measures and operational adjustments to minimize shortages (Zone 7 2021: 103).

4 Conclusions

The proposed project is estimated to increase potable water demand in the INSP area by approximately 115 AFY, compared to the approved project which was analyzed in the 2017 WSA for the INSP and accounted for in the 2020 UWMPs for LMW and Zone 7. The proposed project demand of 115 AFY would occur only within LMW's service territory, and LMW would provide water for the project purchased from Zone 7, which provides all of LMW's potable water supply. The proposed project's new water demand of 115 AFY is not explicitly identified in LMW or Zone 7's 2020 UWMP; therefore, this WSA Update includes supply and demand projections from both UWMPs to consider potential availability of 115 AFY of additional potable water to meet the proposed project demands.

As discussed in Section 1.3, *Water Demands*, the 2017 WSA for the INSP concluded that water demands of the approved project would represent less than one percent of total demands for LMW and Cal Water-Livermore combined, and demands of this size are considered within the margin of error for water supply planning purposes (City of Livermore 2017: 12). The supply and demand tables in Section 3, *Supply Availability Projections*, indicate that LMW and Zone 7 both anticipate having sufficient supply available to meet demands under all climatic scenarios, and that the proposed project's new demand of 115 AFY would represent a very small portion of those demands. Under all projected scenarios (normal year, single dry year, multiple dry year), the proposed project demand of 115 AFY represents approximately 1.3 to 1.4 percent of LMW's total demands, and approximately 0.2 percent of Zone 7's total demands for the same years. Consistent with the rationale of the 2017 WSA's conclusions, the proposed project's water demands are within the margin of error for water supply projections.

As discussed throughout Section 3, *Supply Availability Projections,* LMW expects to have sufficient potable water supply available through Zone 7 under all considered climatic conditions. During drought years, water demands would be reduced as needed through implementation of the LMW and Zone 7 WSCPs, and Zone 7 would use its storage projects to access water that was stored during surplus years for later use during dry years. In addition, LMW is producing recycled wastewater that would be used for non-potable uses under the INSP, offsetting demands for potable water from Zone 7. Zone 7 expects to have surplus water supply available under all considered climatic conditions. As discussed in Section 1.4, *Water Supply Providers*, Zone 7 utilizes a suite of storage options including below-ground storage (Semitropic and Cawelo) and planned reservoir storage (Sites Reservoir and LVR Expansion) to support its water supply reliability during dry conditions.

Zone 7's anticipated water supply availability accounts for key projects that are currently in the planning or implementation stages, such as the Delta Conveyance Project (see Table 4), which would increase the reliability of SWP deliveries. If operational constraints such as an outage of the SWP system through the Delta were to occur prior to the completion of planned water supply projects, near-term water supply shortages could occur. In the case of an anticipated water supply shortage, both LMW and Zone 7 have a 2020 WSCP that would be implemented to reduce local demands and ensure supply availability within the respective service territories. Implementation of the WSCPs could include voluntary or mandatory conservation measures and operational adjustments to minimize shortages (Zone 7 2021: 103).

Based upon the information and analysis provided in this WSA Update, as well as the 2017 WSA which is incorporated by reference herein, sufficient water supply would be available for the proposed project under normal year, single dry-year, and multiple dry-year conditions.

5 References

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_____. 2018. Final Environmental Impact Report for the Isabel Neighborhood Plan. April 27. https://www.livermoreca.gov/home/showpublisheddocument/4501/637229234510430000 (June 2024).

_____. 2020. Final Supplemental Environmental Impact Report. September 30. https://www.livermoreca.gov/home/showpublisheddocument/6599/637583135635300000 (June 2024).

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_____. 2023. 2022 Water Supply Evaluation Update. May. https://www.zone7water.com/sites/main/files/file-attachments/draft_zone_7_2022_wse_update_2023.03.pdf?1685462831 (June 2024).

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

AN ORDINANCE APPROVING DEVELOPMENT CODE AMENDMENT 24-001, FOR THE ISABEL CROSSING PROJECT, THAT WOULD AMEND THE ALTERNATIVE MEANS OF COMPLIANCE AND AFFORDABILITY REQUIREMENTS IN LIVERMORE DEVELOPMENT CODE SECTION 10.06.050 ("INCLUSIONARY ORDINANCE")

On September 22, 2022, the City of Livermore ("City") received an application from the Applicant to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On March 13, 2023, the City Council adopted the 2023 to 2031 Livermore Housing Element, providing adequate sites to support CA's Regional Housing Needs Allocation (RHNA) Sixth Cycle requirements (2023 – 2031).

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

The City did not meet the Lower Income RHNA requirements for the Fifth RHNA Cycle (2014 – 2022).

The City's existing Inclusionary Ordinance does not require all for-sale development projects in the Isabel Neighborhood Specific Plan to provide Lower Income housing.

Providing adequate Lower Income affordable housing with each development project is critical to keep pace with Livermore's RHNA requirements and to provide a range of housing opportunities for residents of all income levels.

The proposed Inclusionary Ordinance amendments would provide the City Council more flexibility to secure Lower Income affordable housing and ensure future for-sale

development projects within the Isabel Neighborhood provide Lower Income affordable units.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LIVERMORE DOES ORDAIN AS FOLLOWS:

Section 1. *Purpose*. This Ordinance makes several changes to Livermore Development Code Section 10.06.050 *Inclusionary Ordinance* to amend the Alternative Means of Compliance and Affordability requirements.

Section 2. *Instruction for Publication*. The amendments made by this Ordinance are made as follows for transparency. Deletions are reflected in this ordinance using a strikethrough, and new language is underlined. However, language with a strikethrough, and the underlines, will not be codified. The codification will only reflect the final language. Exhibit B shows the final amended Development Code text.

Section 3. *Amendment – Development Code.* The Livermore Development Code is hereby amended as follows:

A. 10.06.050(A)(1)(c) is hereby amended so it reads as follows:

c. Isabel Neighborhood Specific Plan Area. In the Isabel Neighborhood Specific Plan area, provide affordable housing in accordance with section 10.06.050(D)(4)(c) below. ~~that at least 20 percent of the total dwelling units shall be affordable housing as follows:~~

~~(1) For-Sale Units. The affordable housing units for for-sale residential developments must be sold to median- and moderate-income households. Of the total number of dwelling units (20 percent) set aside, at least five percent shall be reserved for sale to median-income households with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as median-income units. For example, a 110-unit for-sale residential development would be required to provide 15 percent, or 16.5 units, at the moderate-income level and five percent, or five and one-half units, at the median-income level. Therefore, 16 units shall be provided at the moderate-income level and six units shall be provided at the median-income level.~~

~~(2) Rental Units. The affordable housing units for rental residential developments must be designated or reserved for rental to very-low-income, and low-income, median-income, and moderate-income households. Of the total number of dwelling units (20 percent) set aside, at least six percent shall be reserved for rental to very-low-income households, at least seven percent shall be reserved for low-income households, and at least four percent shall be reserved for median-income households, with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fraction of units, the units shall be~~

~~combined and provided as very-low-income units. For example, a 110-unit rental residential development would be required to provide six percent, or six and six-tenths units, at the very-low income level; seven percent, or seven and seven-tenths units, at the low-income level; four percent, or four and four-tenths units at the median-income level; and three percent, or three and three-tenths units, at the moderate-income level. The combined fractional units equate to two units that shall be provided as very-low-income units. Therefore, eight units shall be provided at the very-low income level, seven units shall be provided at the low-income level, four units shall be provided at the median-income level, and three units shall be provided at the moderate-income level.~~

B. 10.06.050 (D)(4)(c) is hereby amended so it reads as follows:

c. Isabel Neighborhood Specific Plan Area.

(1) For-Sale Units. The developer shall reserve ~~20~~ 15 percent or more of the for-sale units as affordable units to be sold to ~~median~~ low-and moderate-income households at a price that does not exceed the maximum affordable purchase price for a unit for those households. The maximum purchase price for ~~median~~ low- and moderate-income households shall be as adopted annually by City Council resolution.

(a) At least ~~five~~ seven-and-one-half (7.5) percent of the reserved units shall be set aside for low ~~median~~-income households, ~~with the balance set aside~~ and at least seven-and-one-half (7.5) percent for moderate-income households.

(b) Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as low ~~median~~-income units ~~as described in subsection A of this section~~.

(c) The for-sale units shall be encumbered in a manner acceptable to the City, so that if a buyer resells the reserved unit within the restricted time period for a price in excess of the inflation-adjusted purchase price, then the excess profit will be returned to the City for use in affordable housing programs.

(2) Rental Units. The developer shall reserve 20 percent or more of the rental units as affordable units to be rented to very-low-income, low-income, median-income, and moderate-income households at a cost that does not exceed maximum monthly rental rates for those households. The maximum monthly rental rates for very-low-income, low-income, median-income, and moderate-income households, shall be adopted annually by City Council resolution.

(a) At least six percent of the reserved units shall be set aside for very-low-income households, at least seven percent shall be set aside for low-income

households, and at least four percent shall be set aside for median-income households, ~~with the balance~~ and three percent set aside for moderate-income households.

(b) Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as very-low-income units as described in subsection A of this section.

(c) The rental units shall be marketed and made available through an application process directed by the City and the development shall be managed by an experienced management company acceptable to the City.

C. 10.06.050 (E) is hereby amended so it reads as follows:

E. Implementation – Alternative Means of Compliance.

1. Satisfy Housing Requirement. The following alternatives must be economically equivalent to the affordable housing requirement and may satisfy part or all of the affordable housing requirement.
2. City Council Approval Required. Alternatives to constructing affordable units on site specified in subsections E. 4. a through E.4.~~d~~e of this section require prior City Council approval.
3. As Part of Application Submittal. A request to use one of these alternatives shall be presented to the City Council as part of a tentative subdivision map or land use entitlement application that is submitted to the City.
4. Report Required. The request shall be accompanied by a report proposing the particular alternative requested, how the alternative will be economically equivalent to the requirement and further affordable housing opportunities in the City, and demonstrating why it is not feasible for the applicant to strictly conform to the requirements of Section 10.06.050 (A)~~construct affordable units within the development project~~ (through independent data, including financial information).

    a. Accessory Dwelling Units.
        (1) In a project of more than 50 dwelling units, up to 20 percent of the requirement for reserved units may be satisfied by including accessory dwelling units accessory to the market-priced units.
        (2) Each accessory dwelling unit provides a credit of 20 percent of a required affordable unit, without regard to unit size or other minimum standards specified in subsection D.7 of this section (Comparability of Units).
        (3) The accessory dwelling unit shall comply with the standards specified in Section 6.03.120 (Accessory Dwelling Units).

    b. Off-Site Construction.

(1) A developer may satisfy the affordable housing requirement by constructing, or making provisions to construct, reserved housing units on a site other than the primary project site.
(2) The off-site units are subject to the standards specified in subsections D.1 through D.8 of this section.
(3) A developer may not satisfy the affordable housing requirement by applying credits from reserved units on previously constructed projects.
(4) Other existing units in projects already completed may not be substituted to satisfy the affordable housing requirement.

c. In-Lieu Fee.
(1) A developer may satisfy the affordable housing requirement by paying an in-lieu fee for each market-priced unit.
(2) The method of calculating the in-lieu fee is specified in LMC 3.26.050.
(3) Whenever the number of affordable units required to be constructed includes a fraction of a unit, the payment of a proportional in-lieu fee shall satisfy that partial unit requirement.
(4) For residential subdivisions or rental projects with 10 or fewer units, a developer may satisfy the affordable housing requirement by paying an in-lieu fee for each market-priced unit. This does not require City Council approval.
(5) The applicable fee rate shall be determined at the time of building permit application unless otherwise agreed to in the project's low income housing agreement.

d. Dedication of Land.
(1) A developer may satisfy the affordable housing requirement by dedicating to the City a parcel of land suitable for development of housing units equal to or exceeding the number of affordable units required to be provided in compliance with this section.
(2) The General Plan designation and zoning designation on the land proposed for dedication shall be consistent with the intended use of the property for affordable housing at the appropriate density, and there shall be direct access to improved streets and utilities.

e. <u>Isabel Neighborhood Specific Plan – Alternative Affordable Plan</u>
<u>(1) Within the Isabel Neighborhood Specific Plan, A developer may satisfy the affordable housing requirement through an Alternative Affordable Plan.</u>
<u>(2) The Alternative Affordable Plan shall meet the following requirements:</u>

i. May only be considered as part of a Development Agreement between a developer and the City of Livermore; and

ii. May only be considered within the Specific Plan Core Area (Subareas 3a, 3b, and 3c).

Section 4. *Recommendation*. The Planning Commission held a duly noticed public hearing on July 2, 2024, to consider adoption of an ordinance approving the Development Code Amendment and by its Resolution No. 18-24, attached hereto as Exhibit A, recommended that the City Council adopt the ordinance and approve the Development Code Amendment.

Section 5. *Public Hearing*. Prior to taking action on the Project, and at a properly noticed public hearing, the City Council of the City of Livermore reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony; and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Ordinance by reference.

Section 6. *Environmental Review*. The City Council has adopted Resolution No. [_____] adopting the Isabel Crossing Addendum to the Isabel Neighborhood Specific Plan Final Supplemental Environmental Impact Report (State Clearinghouse No. 2016042039), and finding that no subsequent or supplemental Environmental Impact Report is required, under the provisions of the California Environmental Quality Act ("CEQA") per CEQA Guidelines section 15164.

Section 7. *Consistency*. Development Code Amendment (DCA) 24-001 is consistent with the General Plan, the Isabel Neighborhood Specific Plan, and the Livermore Development Code.

Section 8. *Findings and Approval*. The City Council has considered the findings made in Planning Commission Resolution No. 18-24, attached hereto as Exhibit A, and hereby adopts the same findings by this reference and incorporates them herein, and based upon the City Council's own independent review of the Record Evidence and considerations, it adopts this Ordinance approving the Development Code Amendment.

Section 9. *Publication and Effective Date.* This ordinance or a comprehensive summary thereof shall be published once in a newspaper of general circulation of the city of Livermore within 15 days after its adoption and shall take effect and be in force 30 days from and after its adoption.

Section 10. *Filing.* The Planning Manager is directed to file a Notice of Determination for the Isabel Crossing Addendum with the Alameda County Clerk.

Section 11. *Documents.* The documents that constitute the record of proceedings upon which this decision is based on can be found in the City Clerk's Office, 1052 S. Livermore Avenue, Livermore, California.

Section 12. *Severability*. If any part of this ordinance is declared unconstitutional or invalid by a court, such unconstitutionality or invalidity shall not affect any remaining parts.

The foregoing ordinance was introduced at the meeting of the City Council of the City of Livermore held on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

The ordinance was adopted at the regular meeting of the City Council held on _____, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Mayor, City of Livermore

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Planning Commission Resolution 18-24
Exhibit B – Livermore Development Code Text Amendment

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL APPROVE DEVELOPMENT CODE AMENDMENT 24-001, FOR THE ISABEL CROSSING PROJECT, THAT WOULD AMEND THE ALTERNATIVE MEANS OF COMPLIANCE AND AFFORDABILITY REQUIREMENTS IN LIVERMORE DEVELOPMENT CODE SECTION 10.06.050 ("INCLUSIONARY ORDINANCE")

On September 22, 2022, the City received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-00, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new tax district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

DCA 24-001 proposes an amendment to Livermore Development Code section 10.06.050.1.c, modifying the affordable housing requirements in the Isabel Neighborhood Specific Plan Area, and amending section 10.06.050.E.4., establishing alternative means of compliance for development within a portion of the Isabel Neighborhood Specific Plan Area.

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Amendment, together with the Project, staff recommendations, all public comments and testimony, and findings.

Together with this Resolution, the Planning Commission concurrently considered resolutions for: 1) the Project's Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, and Master Sign Program Amendment (MSP) 24-00 applications; 2) the Project's Development Agreement (DA) 22-001 application; 3) the Project's Specific Plan Amendment (SPPA) 24-001 application; and 4) the Project's Consistency Determination (CD) 24-004 application.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of

Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Livermore has considered the Record Evidence and recommends the City Council adopt a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the California Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED, with respect to Development Code Amendment (DCA) 24-001, the Planning Commission finds based upon the information presented that:

1. The proposed amendment is consistent with the General Plan and any applicable Specific Plan.

   Findings: The Project proposes a Development Code Amendment to: 1) Enable the approval of the Project's proposed alternative means of compliance with applicable City affordable housing requirements; and 2) Replace the existing Specific Plan's for-sale affordable requirements with the Citywide rates of 7.5% Lower and 7.5% Moderate. Each component of the Amendment is consistent with the General Plan and Isabel Neighborhood Specific Plan, as follows:

   Consistency with General Plan Housing Element

   The proposed Inclusionary Ordinance amendments are consistent with the following General Plan Housing Element policies:

   - Policy 1.2: Facilitate the development of a range of housing types through area planning efforts.
   - Policy 2.1: Facilitate the provision of affordable housing, infill development, and mixed-use projects in locations served by existing infrastructure, particularly transit services.
   - Policy 3.1: Facilitate the production of affordable housing through regulation of and incentives to new development.

   The proposed Inclusionary Ordinance amendments would allow for a distinct Alternative Means of Compliance within the Isabel Neighborhood Specific Plan. The proposed Alternative Means of Compliance would allow the City Council to authorize a development to deviate from the Inclusionary Ordinance requirements, so long as the alternative is economically equivalent. In this way, the amendment facilitates the production of affordable housing by allowing for more flexibility and novel approaches to housing production.

   Project proposes a creative approach whereby the market-rate for-sale units

offset the financial costs of the required affordable housing. By untethering affordable housing from every product type, affordable units could be focused in portions of the site and additional affordable units could be provided, beyond that required. Further, the City Council still ensures the alternative proposal is economically equivalent to the standard inclusionary requirements, guaranteeing each project will still provide sufficient affordable housing and a range of housing types.

The Amendment to the Inclusionary Ordinance would also modify the required affordability levels from 20% median and moderate, to 15% Lower and Moderate. Historically, Livermore has overperformed its RHNA numbers in the Median and Moderate categories, and underperformed in the Lower category. This modification ensures future for-sale product would be required to provide Lower Income units, ensuring Specific Plan policy better keeps pace with Livermore's RHNA requirements and a range of housing types is provided.

Consistency with Isabel Neighborhood General Plan Designation

The project site has a General Plan land use designation of Isabel Neighborhood. The Isabel Neighborhood seeks to create a safe, vibrant, complete neighborhood that includes amenities for residents, workers, and students; ensure new development is compatible with existing development and community character; and support transit ridership and citywide goals for increased transportation options, housing choices, and economic vitality [Livermore General Plan Land Use Element, p. 3-23]. The proposed amendments would facilitate the proposed Project, which will provide diverse housing choices that are affordable to a range of income levels.

Consistency with Isabel Neighborhood Specific Plan

The proposed Inclusionary Ordinance Amendments are consistent with the following Specific Plan Goals:

- G-LU-5: Support a diverse housing stock that provides options for students, seniors, low-income families, first-time homebuyers, and people with disabilities.
- G-LU-6: Promote the production of affordable for-sale and rental units and mixed-income developments such that at least 25 percent of all new units at build-out are offered at below-market rates, in order to provide affordable housing opportunities for rent and ownership in the Isabel Neighborhood and to take advantage of the strong connection between transit use and affordable housing.

The proposed Amendments would allow for more flexibility in affordable housing production by granting the City Council the authority to allow alternative affordable plans. Such plans could provide higher quantities of affordable units by allowing projects to deviate from the Inclusionary Ordinance's comparability

standards. For example, the proposed Isabel Crossing Project focuses affordability levels in certain unit types and in certain portions of the site plan, but provides 28% overall affordability, which is 8% higher than required. This helps drive up overall affordability levels in the Specific Plan, furthering Specific Plan G-LU-6. In addition, the proposed modifications to the affordability requirements would require for-sale units in the Specific Plan to provide Lower Income housing units. This would increase the diversity of Livermore's housing stock, ensuring options for individuals and families of all incomes. The proposed changes align with the proposed Specific Plan amendments that allow for the same.

2. The proposed amendment will not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

   Findings: Any Alternative Affordable Plan would still be required to demonstrate economic equivalence, ensuring all projects continue to meet their affordable obligations. Further, the proposed changes to the affordability requirements would increase Livermore's production of Lower Income units, diversifying Livermore's housing stock and increasing housing opportunities for lower income individuals and families. The changes would not change the required project review process. All projects would still be required to provide utilities and services to all new residents and would be required to protect the environment. The City Council may deny a proposed affordable plan or a proposed project if it does not meet City standards. Therefore, the proposed Amendment will not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

3. The proposed amendment is internally consistent with other applicable provisions of this Development Code.

   Findings: The proposed amendments only affect the Inclusionary Ordinance, codified in section 10.06.050 of the Development Code. The proposed alternative affordable plan language is consistent with the existing Alternative Means of Compliance section of the Inclusionary Ordinance, in that it allows for the City Council to authorize certain deviations from the Development Code if the project demonstrates economic equivalence. The proposed amendments to the affordability requirements within the Isabel Neighborhood Specific Plan Area, aligns the Specific Plan with the rest of the City, where for-sale units are required to provide 15% affordable units, divided evenly between the Lower and Moderate-income levels. Therefore, both changes are consistent with existing Inclusionary Ordinance standards and will not conflict with any other provision of the Development Code.

BE IT FURTHER RESOLVED that the Livermore Planning Commission, based upon its own independent review of the Record Evidence and considerations, and based on the above findings which are necessary to protect the public health, safety, and general welfare, hereby recommends the City Council approve Development Code Amendment (DCA) 24-001.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends the City Council direct the Planning Manager to file a Notice of Determination for the Project with the Alameda County Clerk if the Project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Kronzak, seconded by Commissioner Leary, the foregoing Resolution was adopted at the Planning Commission meeting of July 2, 2024 by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

Jacob Anderson, Chairperson

Stephen Riley

by Stephen Riley, Planning Manager
Secretary to the Planning Commission

10.06.050(A)(1)(c)

c. Isabel Neighborhood Specific Plan Area. In the Isabel Neighborhood Specific Plan area, provide affordable housing in accordance with section 10.06.050(D)(4)(c) below. ~~that at least 20 percent of the total dwelling units shall be affordable housing as follows:~~

> ~~(1) For-Sale Units. The affordable housing units for for-sale residential developments must be sold to median- and moderate-income households. Of the total number of dwelling units (20 percent) set aside, at least five percent shall be reserved for sale to median-income households with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as median-income units. For example, a 110-unit for-sale residential development would be required to provide 15 percent, or 16.5 units, at the moderate-income level and five percent, or five and one-half units, at the median-income level. Therefore, 16 units shall be provided at the moderate-income level and six units shall be provided at the median-income level.~~
>
> ~~(2) Rental Units. The affordable housing units for rental residential developments must be designated or reserved for rental to very-low-income, and low-income, median-income, and moderate-income households. Of the total number of dwelling units (20 percent) set aside, at least six percent shall be reserved for rental to very-low-income households, at least seven percent shall be reserved for low-income households, and at least four percent shall be reserved for median-income households, with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as very-low-income units. For example, a 110-unit rental residential development would be required to provide six percent, or six and six-tenths units, at the very-low income level; seven percent, or seven and seven-tenths units, at the low-income level; four percent, or four and four-tenths units at the median-income level; and three percent, or three and three-tenths units, at the moderate-income level. The combined fractional units equate to two units that shall be provided as very-low-income units. Therefore, eight units shall be provided at the very-low income level, seven units shall be provided at the low-income level, four units shall be provided at the median-income level, and three units shall be provided at the moderate-income level.~~

10.06.050(D)(4)(c)

c. Isabel Neighborhood Specific Plan Area.

> (1) For-Sale Units. The developer shall reserve ~~20~~ 15 percent or more of the for-sale units as affordable units to be sold to ~~median~~ low-and moderate-income households at a price that does not exceed the maximum affordable purchase price for a unit for those households. The

maximum purchase price for ~~median~~ low- and moderate-income households shall be as adopted annually by City Council resolution.

(a) At least ~~five~~ seven-and-one-half (7.5) percent of the reserved units shall be set aside for ~~median~~low-income households, ~~with the balance set aside~~ and at least seven-and-one-half (7.5) percent for moderate-income households.

(b) Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as ~~median~~low-income units ~~as described in subsection A of this section~~.

(c) The for-sale units shall be encumbered in a manner acceptable to the City, so that if a buyer resells the reserved unit within the restricted time period for a price in excess of the inflation-adjusted purchase price, then the excess profit will be returned to the City for use in affordable housing programs.

(2) Rental Units. The developer shall reserve 20 percent or more of the rental units as affordable units to be rented to very-low-income, low-income, median-income, and moderate-income households at a cost that does not exceed maximum monthly rental rates for those households. The maximum monthly rental rates for very-low-income, low-income, median-income, and moderate-income households, shall be adopted annually by City Council resolution.

(a) At least six percent of the reserved units shall be set aside for very-low-income households, at least seven percent shall be set aside for low-income households, and at least four percent shall be set aside for median-income households, ~~with the balance~~ and three percent set aside for moderate-income households.

(b) Whenever the inclusionary requirement results in a fraction of units, the units shall be combined and provided as very-low-income units as described in subsection A of this section.

(c) The rental units shall be marketed and made available through an application process directed by the City and the development shall be managed by an experienced management company acceptable to the City.

E. Implementation – Alternative Means of Compliance.

1. Satisfy Housing Requirement. The following alternatives must be economically equivalent to the affordable housing requirement and may satisfy part or all of the affordable housing requirement.

2. City Council Approval Required. Alternatives to constructing affordable units on site specified in subsections E. 4. a through E.4.de of this section require prior City Council approval.

3. As Part of Application Submittal. A request to use one of these alternatives shall be presented to the City Council as part of a tentative subdivision map or land use entitlement application that is submitted to the City.

4. Report Required. The request shall be accompanied by a report proposing the particular alternative requested, how the alternative will be economically equivalent to the requirement and further affordable housing opportunities in the City, and demonstrating why it is not feasible for the applicant to strictly conform to the requirements of Section 10.06.050 (A) ~~construct affordable units within the development project~~ (through independent data, including financial information).

   a. Accessory Dwelling Units.

      (1) In a project of more than 50 dwelling units, up to 20 percent of the requirement for reserved units may be satisfied by including accessory dwelling units accessory to the market-priced units.

      (2) Each accessory dwelling unit provides a credit of 20 percent of a required affordable unit, without regard to unit size or other minimum standards specified in subsection D.7 of this section (Comparability of Units).

      (3) The accessory dwelling unit shall comply with the standards specified in Section 6.03.120 (Accessory Dwelling Units).

   b. Off-Site Construction.

      (1) A developer may satisfy the affordable housing requirement by constructing, or making provisions to construct, reserved housing units on a site other than the primary project site.

      (2) The off-site units are subject to the standards specified in subsections D.1 through D.8 of this section.

      (3) A developer may not satisfy the affordable housing requirement by applying credits from reserved units on previously constructed projects.

      (4) Other existing units in projects already completed may not be substituted to satisfy the affordable housing requirement.

   c. In-Lieu Fee.

(1) A developer may satisfy the affordable housing requirement by paying an in-lieu fee for each market-priced unit.

(2) The method of calculating the in-lieu fee is specified in LMC 3.26.050.

(3) Whenever the number of affordable units required to be constructed includes a fraction of a unit, the payment of a proportional in-lieu fee shall satisfy that partial unit requirement.

(4) For residential subdivisions or rental projects with 10 or fewer units, a developer may satisfy the affordable housing requirement by paying an in-lieu fee for each market-priced unit. This does not require City Council approval.

(5) The applicable fee rate shall be determined at the time of building permit application unless otherwise agreed to in the project's low income housing agreement.

d. Dedication of Land.

(1) A developer may satisfy the affordable housing requirement by dedicating to the City a parcel of land suitable for development of housing units equal to or exceeding the number of affordable units required to be provided in compliance with this section.

(2) The General Plan designation and zoning designation on the land proposed for dedication shall be consistent with the intended use of the property for affordable housing at the appropriate density, and there shall be direct access to improved streets and utilities.

e. <u>Isabel Neighborhood Specific Plan – Alternative Affordable Plan</u>

<u>(1) Within the Isabel Neighborhood Specific Plan, A developer may satisfy the affordable housing requirement through an Alternative Affordable Plan.</u>

<u>i. The Alternative Affordable Plan shall meet the following requirements:
May only be considered as part of a Development Agreement between a developer and the City of Livermore; and</u>

<u>ii. May only be considered within the Specific Plan Core Area (Subareas 3a, 3b, and 3c).</u>

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROVING SPECIFIC PLAN AMENDMENT 24-001, FOR THE ISABEL CROSSING PROJECT, THAT WOULD AMEND THE ISABEL NEIGHBORHOOD SPECIFIC PLAN'S MASTER PLANNING AND INCLUSIONARY POLICIES AND AMEND THE LAND USE MAP

On September 22, 2022, the City of Livermore ("City") received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On March 13, 2023, the City Council adopted the 2023 to 2031 Livermore Housing Element, providing adequate sites to support CA's Regional Housing Needs Allocation (RHNA) requirements.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA 22-001), Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

The City did not meet the Lower Income RHNA requirements for the Fifth RHNA Cycle (2014 – 2022).

The City's existing Isabel Neighborhood Specific Plan affordable policy does not require all for-sale development projects in the Isabel Neighborhood to provide Lower Income housing.

Providing adequate Lower Income affordable housing with each development project is critical to keep pace with Livermore's RHNA requirements and to provide a range of housing opportunities for residents of all income levels.

The Project provides fewer Lower Income units than anticipated in the Livermore Housing Element's Sites Inventory and is required to undergo a No Net Loss Review, as required by Government Code Section 65863.

Isabel Neighborhood Specific Plan Subarea 3a is an adequate site to accommodate the net loss, and changing its land use designation to residential would result in No Net Loss of Lower Income units, as required by Government Code Section 65863.

The City's existing Isabel Neighborhood Specific Plan master planning policy allows for averaging densities within and across Isabel Neighborhood subareas. The policy intends to provide development flexibility and further Specific Plan buildout.

Allowing for both density averaging and mixing of uses within and across subareas increases development flexibility and encourages development.

The proposed Specific Plan amendments would provide the City Council more options to secure Lower Income affordable housing, ensure future for-sale development projects within the Isabel Neighborhood provide Lower Income affordable units, satisfy No Net Loss requirements, and facilitate development flexibility and Specific Plan buildout.

On July 2, 2024, at a duly noticed public hearing, the Planning Commission considered the Project, heard public testimony, made the necessary findings, and adopted Planning Commission resolution No. 17-24, attached hereto as Exhibit A, recommending the City Council approve the Project.

On July 22, 2024, the City Council held a duly noticed public hearing to consider the Project, Planning Commission and staff recommendations, all public comments and testimony, and findings.

Together with this resolution, the City Council concurrently considered resolutions for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Master Sign Program Amendment (MSP) 24-001, the Density Bonus request, No Net Loss, the Master Plan, and the Alternative Affordable Plan; and ordinances for: 1) the Project's Development Agreement (DA) 22-001 application; and 2) the Project's Development Code Amendment (DCA) 24-001 application.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the City Council reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore has considered the Record Evidence and adopted a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED that the City Council of the City of Livermore has considered the findings made in Planning Commission Resolution No. 17-24, attached hereto as Exhibit A, and the City Council hereby adopts the same findings by this reference and incorporates them as their own findings as part of this resolution, and as described below:

1. A Specific Plan may only be amended if first found consistent with the General Plan in compliance with Government Code Section 65454.

   Findings: The Project proposes a Specific Plan Amendment to: 1) Amend INSP Policy P-LU-8 to permit master planning for the multi-subarea, master planned Project, which would enable the averaging of densities and land uses across the entire Project Site and enable the Project to align its conceptual master plan with the applicable land use requirements, goals and policies set forth in the INSP; 2) Amend INSP Policy P-LU-34 to enable the approval of the Project's proposed alternative means of compliance with applicable City affordable housing requirements, and to replace the existing Specific Plan's for-sale affordable requirements with the Citywide rates of 7.5% Lower and 7.5% Moderate; and 3) Amend the land use map in Specific Plan Subarea 3a to change the allowed Office Core uses to Residential Core uses. Each component of the Amendment is consistent with the General Plan, as follows:

   Consistency with Isabel Neighborhood Designation

   The project site has a General Plan land use designation of Isabel Neighborhood. The Isabel Neighborhood seeks to create a safe, vibrant, complete neighborhood that includes amenities for residents, workers, and students; ensure new development is compatible with existing development and community character; and support transit ridership and citywide goals for increased transportation options, housing choices, and economic vitality [Livermore General Plan Land Use Element, p. 3-23]. The proposed amendments would facilitate the proposed Project. The Project is consistent with the land use designation and implements the General Plan goals for the Isabel Neighborhood. For example, the Project would create a new complete and vibrant neighborhood, with a mixed-use main street commercial core served by a range of amenities, including a public park, public plazas, a private community pool, public art, and tree-lined streets. The Project is also compatible with surrounding development since the building heights step down towards the existing residential and office uses

to the west and north and the buildings are designed with traditional architectural features common in Livermore, like brick, deep eave overhangs, and strong roof cornice elements.

The Project also supports transit ridership and mode shift by adding new bus stops and protected bike lanes, and by locating the project near the future Valley Link commuter train station and existing LAVTA bus lines. Increased housing choices are provided for nearby students and faculty at Las Positas College and other individuals and families through a range of for-sale and for-rent units of differing sizes, including units reserved for individuals and families of very low to moderate incomes. Finally, the project would increase the area's economic vitality by adding a mix of commercial and office uses, supporting jobs and a larger tax base, which implements the General Plan goals for the Isabel Neighborhood.

Consistency with Land Use Element

More specifically, the proposed Master Planning Policy amendment is consistent with the following General Plan Land Use Element policies:

- Objective LU-1.1 Locate new development so as to create a consolidated pattern of urbanization, maximizing the use of existing public services and facilities.
- Objective LU-1.2 Create neighborhoods that include a mix of uses and a range of housing types to meet the needs of all residents.
- Objective LU-3.1 Create neighborhoods near transit that include a mix of uses and a range of housing types to meet the needs of all residents.

In addition to allowing for averaging densities within and across Specific Plan subareas, the proposed Master Plan amendments would allow for distributing land uses as well. This provides more development flexibility and better allows for mixed-use neighborhoods, since uses can be located anywhere within a subarea, not only as prescribed in the conceptual Specific Plan land use map, effectively creating large mixed-use zones. Further, mixing uses within the subarea prevents urban sprawl and creates more compact development, since uses are no longer required to be separated by Euclidean districts, but can be collocated. Collocated uses reduce Vehicles Miles Traveled, by ensuring daily needs and jobs (like commercial and office uses) are within walking distance of residential.

Consistency with Housing Element

Further, the proposed Inclusionary Policy amendments and the proposed land use map amendment are consistent with the following General Plan Housing Element policies:

- Policy 1.2: Facilitate the development of a range of housing types through area planning efforts.
- Policy 2.1: Facilitate the provision of affordable housing, infill development, and mixed-use projects in locations served by existing infrastructure, particularly transit services.
- Policy 3.1: Facilitate the production of affordable housing through regulation of and incentives to new development.

The proposed Inclusionary Policy amendments would allow for a distinct Alternative Means of Compliance within the Specific Plan, similar to that allowed in the City's Inclusionary Ordinance. The proposed Alternative Means of Compliance would allow the City Council to authorize a project's affordable plan that deviates from the Inclusionary Ordinance requirements, so long as the alternative is economically equivalent. In this way, the amendment facilitates the production of affordable housing by allowing for more flexibility and novel approaches to housing production. For example, the Project proposes a creative approach whereby the market-rate for-sale units offset the financial costs of the required affordable housing. By untethering affordable housing from every product type, affordable units could be focused in portions of the site and additional affordable units could be provided, beyond that required. Further, the City Council still ensures the alternative proposal is economically equivalent to the requirements, guaranteeing each project will still provide sufficient affordable housing and a range of housing types.

The Amendment to the Inclusionary Policy would also modify the required affordability levels from 20% median and moderate, to 15% Lower and Moderate. Historically, Livermore has overperformed its RHNA numbers in the Median and Moderate categories, and underperformed in the Lower category. This modification ensures future for-sale product would be required to provide Lower Income units, ensuring Specific Plan policy better keeps pace with Livermore's RHNA requirements and a range of housing types is provided. Further, the proposed land use map amendment would revise the Office Core designations within Subarea 3a to Residential Core, the densest most compact residential development in the City. Subarea 3a is directly adjacent to the future commuter rail Valley Link station. In this way, the land use changes would implement General Plan policy by promoting infill development near transit, facilitate a range of housing types by allowing for smaller units, and by providing more affordable units overall since the site is being upzoned from office uses.

BE IT FURTHER RESOLVED that, based upon the City Council's own independent review of the Record Evidence and considerations, the City Council hereby approves Specific Plan Amendment (SPPA) 24-001, attached hereto as Exhibits B and C, for the Isabel Crossing Project.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore directs the Planning Manager to file a Notice of Determination with the Alameda County Clerk.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore finds that the effective date of this resolution shall be the effective date of Development Agreement (DA) 22-001 and Development Code Amendment (DCA) 24-001.

The documents that constitute the record of proceedings upon which this decision is based can be found in the City Clerk's Office, 1052 S. Livermore Avenue, in Livermore California.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Planning Commission Resolution No. 17-24
Exhibit B – Specific Plan Map Amendment
Exhibit C – Specific Plan Text Amendment

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL APPROVE SPECIFIC PLAN AMENDMENT 24-001, FOR THE ISABEL CROSSING PROJECT, THAT WOULD AMEND THE ISABEL NEIGHBORHOOD SPECIFIC PLAN'S MASTER PLANNING AND INCLUSIONARY POLICIES AND AMEND THE LAND USE MAP

On September 22, 2022, the City received an application from the Isabel Portola Owner, LLC (Harridge Development Group), ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-00, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new tax district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Amendment, together with the Project, staff recommendations, all public comments and testimony, and findings.

Together with this Resolution, the Planning Commission concurrently considered resolutions for: 1) the Project's Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, and Master Sign Program Amendment (MSP) 24-00 applications; 2) the Project's Development Agreement (DA) 22-001 application; 3) the Project's Development Code Amendment (DCA) 24-001 application; and 4) Consistency Determination (CD) 24-004.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Livermore

has considered the Record Evidence and recommends the City Council adopt a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the California Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED, with respect to Specific Plan Amendment (SPPA) 24-001, the Planning Commission finds based upon the information presented that:

1. A Specific Plan may only be amended if first found consistent with the General Plan in compliance with Government Code Section 65454.

   Findings: The Project proposes a Specific Plan Amendment to: 1) Amend INSP Policy P-LU-8 to permit master planning for the multi-subarea, master planned Project, which would enable the averaging of densities and land uses across the entire Project Site and enable the Project to align its conceptual master plan with the applicable land use requirements, goals and policies set forth in the INSP; 2) Amend INSP Policy P-LU-34 to enable the approval of the Project's proposed alternative means of compliance with applicable City affordable housing requirements, and to replace the existing Specific Plan's for-sale affordable requirements with the Citywide rates of 7.5% Lower and 7.5% Moderate; and 3) Amend the land use map in Specific Plan Subarea 3a to change the allowed Office Core uses to Residential Core uses. Each component of the Amendment is consistent with the General Plan, as follows:

   Consistency with Isabel Neighborhood Designation

   The project site has a General Plan land use designation of Isabel Neighborhood. The Isabel Neighborhood seeks to create a safe, vibrant, complete neighborhood that includes amenities for residents, workers, and students; ensure new development is compatible with existing development and community character; and support transit ridership and citywide goals for increased transportation options, housing choices, and economic vitality [Livermore General Plan Land Use Element, p. 3-23]. The proposed amendments would facilitate the proposed Project. The Project is consistent with the land use designation and implements the General Plan goals for the Isabel Neighborhood. For example, the Project would create a new complete and vibrant neighborhood, with a mixed-use main street commercial core served by a range of amenities, including a public park, public plazas, a private community pool, public art, and tree-lined streets. The Project is also compatible with surrounding development since the building heights step down towards the existing residential and office uses to the west and north and the buildings are designed with traditional architectural features common in Livermore, like brick, deep eave overhangs, and strong roof cornice elements.

   The Project also supports transit ridership and mode shift by adding new bus stops and protected bike lanes, and by locating the project near the future Valley Link commuter train station and existing LAVTA bus lines. Increased housing choices are provided for nearby students and faculty at Las Positas College and other individuals and families through a range of for-sale and for-rent units of differing sizes, including units reserved for individuals and families of very low

to moderate incomes. Finally, the project would increase the area's economic vitality by adding a mix of commercial and office uses, supporting jobs and a larger tax base, which implements the General Plan goals for the Isabel Neighborhood.

Consistency with Land Use Element

More specifically, the proposed Master Planning Policy amendment is consistent with the following General Plan Land Use Element policies:

- Objective LU-1.1 Locate new development so as to create a consolidated pattern of urbanization, maximizing the use of existing public services and facilities.
- Objective LU-1.2 Create neighborhoods that include a mix of uses and a range of housing types to meet the needs of all residents.
- Objective LU-3.1 Create neighborhoods near transit that include a mix of uses and a range of housing types to meet the needs of all residents.

In addition to allowing for averaging densities within and across Specific Plan subareas, the proposed Master Plan amendments would allow for distributing land uses as well. This provides more development flexibility and better allows for mixed-use neighborhoods, since uses can be located anywhere within a subarea, not only as prescribed in the conceptual Specific Plan land use map, effectively creating large mixed-use zones. Further, mixing uses within the subarea prevents urban sprawl and creates more compact development, since uses are no longer required to be separated by Euclidean districts, but can be collocated. Collocated uses reduce Vehicles Miles Traveled, by ensuring daily needs and jobs (like commercial and office uses) are within walking distance of residential.

Consistency with Housing Element

Further, the proposed Inclusionary Policy amendments and the proposed land use map amendment are consistent with the following General Plan Housing Element policies:

- Policy 1.2: Facilitate the development of a range of housing types through area planning efforts.
- Policy 2.1: Facilitate the provision of affordable housing, infill development, and mixed-use projects in locations served by existing infrastructure, particularly transit services.
- Policy 3.1: Facilitate the production of affordable housing through regulation of and incentives to new development.

The proposed Inclusionary Policy amendments would allow for a distinct Alternative Means of Compliance within the Specific Plan, similar to that allowed in the City's Inclusionary Ordinance. The proposed Alternative Means of Compliance would allow the City Council to authorize a project's affordable plan

that deviates from the Inclusionary Ordinance requirements, so long as the alternative is economically equivalent. In this way, the amendment facilitates the production of affordable housing by allowing for more flexibility and novel approaches to housing production. For example, the Project proposes a creative approach whereby the market-rate for-sale units offset the financial costs of the required affordable housing. By untethering affordable housing from every product type, affordable units could be focused in portions of the site and additional affordable units could be provided, beyond that required. Further, the City Council still ensures the alternative proposal is economically equivalent to the requirements, guaranteeing each project will still provide sufficient affordable housing and a range of housing types.

The Amendment to the Inclusionary Policy would also modify the required affordability levels from 20% median and moderate, to 15% Lower and Moderate. Historically, Livermore has overperformed its RHNA numbers in the Median and Moderate categories, and underperformed in the Lower category. This modification ensures future for-sale product would be required to provide Lower Income units, ensuring Specific Plan policy better keeps pace with Livermore's RHNA requirements and a range of housing types is provided. Further, the proposed land use map amendment would revise the Office Core designations within Subarea 3a to Residential Core, the densest most compact residential development in the City. Subarea 3a is directly adjacent to the future commuter rail Valley Link station. In this way, the land use changes would implement General Plan policy by promoting infill development near transit, facilitate a range of housing types by allowing for smaller units, and by providing more affordable units overall since the site is being upzoned from office uses.

BE IT FURTHER RESOLVED that the Livermore Planning Commission, based upon its own independent review of the Record Evidence and considerations, and based on the above findings which are necessary to protect the public health, safety, and general welfare, hereby recommends the City Council approve Specific Plan Amendment (SPPA) 24-001 and the Project.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends the City Council direct the Planning Manager to file a Notice of Determination for the Project with the Alameda County Clerk if the Project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Kronzak, seconded by Commissioner Leary, the foregoing Resolution was adopted at the Planning Commission meeting of July 2, 2024 by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

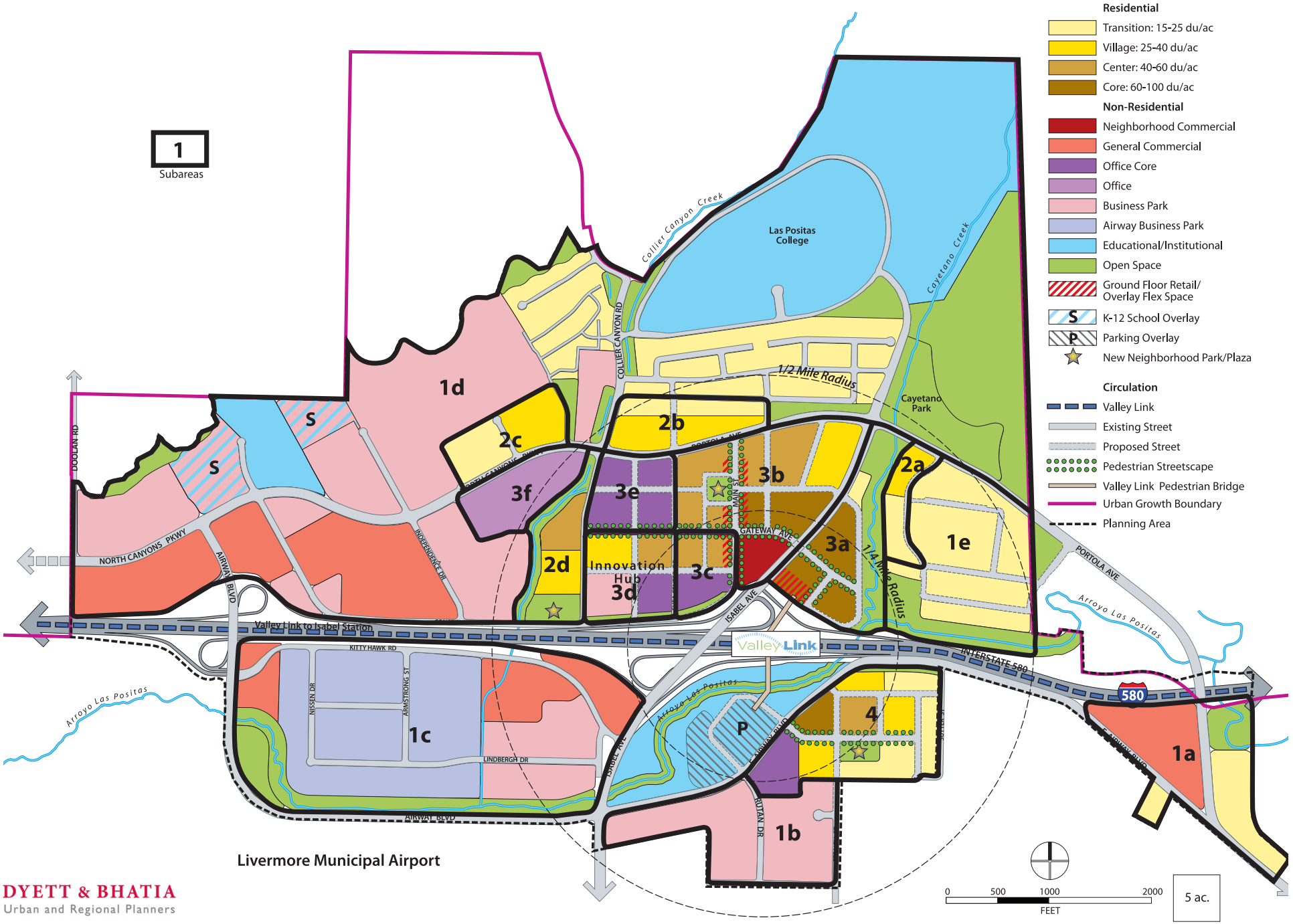
Jacob Anderson, Chairperson

Stephen Riley

by Stephen Riley, Planning Manager
Secretary to the Planning Commission

EXHIBIT B

FIGURE 2-3: SUBAREA DIAGRAM



DYETT & BHATIA
Urban and Regional Planners

Master Planning Policy

P-LU-8: The City shall encourage property owners to collaborate and prepare Master Plans by residential subarea. (Refer to Figure 2-3 for the subarea map.) For the purposes of this Specific Plan, Master Planning shall mean the subdivision and/or site plan design review application of at least one entire subarea. If Master Planned~~,~~: 1) ~~r~~Residential densities may be averaged or distributed across the subarea rather than calculated at the parcel level; and 2)~~,~~ Land Uses allowed within each residential or non-residential designation of each subarea may be permitted in any location within the subarea. ~~provided that the Master Plan complies with:~~ A subarea may only be Master Planned if the following standards are met:

1. The Master plan must comply with t~~T~~he target subarea unit count and the performance measures identified in Table 2-6.~~; and~~
    a. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.
2. Development within each Master Plan shall comply with the development standards identified in Tables 2-2 through 2-5.
    a. Each non-residential use shall comply with the development standards of the non-residential designation that matches the use.
    b. Each residential use shall comply with the development standards of the residential designation that most closely aligns with the product density. ~~All other applicable development and design standards for the land use~~. [Format changed by staff, July 10, 2024].
3. Land uses may only be Master Planned within the Specific Plan Core area (Subareas 3a, 3b, and 3c); [Text added by staff, July 10, 2024].
4. If Master Planning more than one subarea, the densities may be averaged and~~or~~ the permitted land uses may be distributed across those subareas;~~.~~ and
5. The Community Development Director shall approve a Master Plan pursuant to this policy.

~~If Master Planning more than one subarea, the densities may be averaged or distributed across those subareas. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.~~

Affordable Policy

P-LU-34: All new residential development shall either:

1. ~~c~~Comply with the City's Inclusionary Ordinance (Section 10.06.050 of the Livermore Development Code)~~,~~; or,
2. Comply with an Alternative Affordable Plan approved by the City Council through a Development Agreement. The Alternative Affordable Plan shall meet the following requirements:
    a. May only be considered within the Specific Plan Core area (Subareas 3a, 3b, and 3c); and

b. Shall be, at a minimum, economically equivalent to the requirements of the Inclusionary Ordinance. The applicant shall demonstrate economic equivalence through reports, studies, or other analysis as determined by the Director.

The City's Inclusionary Ordinance standards for the Specific Plan area are as follows: ~~including at least 20 percent of units for each project shall be affordable (i.e., offered at below-market rates) in the Isabel Neighborhood. The affordable housing units for for-sale residential subdivisions must be sold to moderate- and median-income households. Of the total number of for-sale dwelling units (20 percent) set aside, at least five percent (5%) shall be reserved for sale to median-income households with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fractional unit(s), the fractional unit(s) shall be combined to the nearest whole number and provided as median-income units.~~

1. For-Sale Units. A total of fifteen percent (15%) of all for-sale residential developments must be sold to low- and moderate-income households. Of the total number of dwelling units (15%) set aside, at least seven and one-half percent (7.5%) shall be reserved for sale to low-income households and at least seven and one-half percent (7.5%) for moderate-income households. Whenever the inclusionary requirement results in an odd number of units, the majority of units shall be provided as low-income. Whenever the total number of affordable units required to be constructed includes a fraction of a unit, the payment of a proportional in-lieu fee shall satisfy that partial unit requirement.

~~*Example: Calculation of the number of inclusionary units required for a 110-unit for sale residential development:*~~

~~*Required units reserved for moderate-income households: 110 units x 15% = 16.5 units*~~

~~*Required units reserved for median-income households: 110 units x 5% = 5.5 units*~~

~~*Combined fractional units: 0.5 unit + 0.5 unit = 1 unit*~~

~~*Required units to be provided: Moderate-income households = 16 units Median-income households = 6 units*~~

~~*Example: Calculation of the number of inclusionary units required for a 112-unit-for-sale residential development:*~~

~~*Required units reserved for moderate income households: 112 units x 15% = 16.8 units*~~

~~*Required units reserved for median-income households: 110 units x 5% = 5.6 units*~~

~~*Combined fractional units: 0.8 unit + 0.6 unit = 1.4 units*~~

~~*Required units to be provided: Moderate-income households = 16 units Median-income households = 6 units Remaining fractional unit to be paid in-lieu = 0.4 unit*~~

2. Rental Units. A total of twenty percent (20%) of all rental residential developments ~~The affordable housing units for rental residential projects~~ must be designated or reserved for rent to very-low-, low-, median, and moderate-income households. Of the total number of rental dwelling units (20 percent) set aside, at least six percent (6%) shall be reserved for rental to very-low income households, seven percent (7%) shall be reserved for rental to low income households four percent (4%) shall be reserved for rental to median-income households, and three percent (3%) shall be reserved for rental to moderate-income households. Whenever the inclusionary requirements result in a fractional unit(s), the fractional unit(s) shall be combined to the nearest whole number and provided as very low-income units. Whenever the total number of affordable units required to be constructed includes a fraction of a unit, the payment of a proportional in-lieu fee shall satisfy that partial unit requirement.

Example: Calculation of the number of inclusionary units required for a 110-unit rental residential development:

Required units reserved for very-low-income households: 110 x 6% = 6.6 units

Required units reserved for low-income households: 110 x 7% = 7.7 units

Required units reserved for median-income households: 110 x 4% = 4.4 units

Required units reserved for moderate-income households: 110 x 3% = 3.3 units

Combined fractional units: 0.6 unit + 0.7 unit + 0.4 unit + 0.3 unit = 2 units

Required units to be provided: Very-low-income households = 8 units Low-income households = 7 units Median-income households = 4 units Moderate-income households = 3 units

Example: Calculation of the number of inclusionary units required for a 112-unit rental residential development:

Required units for very-low-income households: 112 x 6% = 6.72 units

Required units reserved for low-income households: 112 x 7% = 7.84 units

Required units reserved for median-income households: 112 x 4% = 4.48 units

Required units reserved for moderate-income households: 112 x 3% = 3.36 units

Combined fractional units: 0.72 unit + 0.84 unit = 0.48 unit + 0.36 unit = 2.4 units

Required units to be provided: Very-low-income households = 8 units Low-income households = 7 units Median-income households = 4 units Moderate-income households = 3 units Remaining fractional unit to be paid in-lieu = 0.4 unit

Under the City's Inclusionary Ordinance, affordable housing units shall be built on site and integrated within new residential developments unless the City Council approves an alternative method of compliance. For projects that utilize land dedication as a compliance method, the dedicated land must

be located within the Isabel Neighborhood area and equivalent in actual value to the affordable units it is replacing.

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

AN ORDINANCE APPROVING DEVELOPMENT AGREEMENT (DA) 22-001 WITH ISABEL PORTOLA OWNER LLC, FOR THE ISABEL CROSSING PROJECT, THAT WOULD VEST DEVELOPMENT RIGHTS FOR 20 YEARS, PROVIDE FINANCIAL CERTAINTY FOR THE APPLICANT, AND SECURE A RANGE OF COMMUNITY BENEFITS FOR THE CITY OF LIVERMORE

CA Government Code Section 65864 (implemented by Livermore Development Code Chapter 9.04) allows local jurisdictions and private parties to enter into Development Agreements in order to vest certain development rights and to meet local public purpose.

On May 9, 2022, the City Council authorized staff to begin Development Agreement ("Agreement") negotiations with Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant").

On September 22, 2022, the City of Livermore ("City") received an application from the Applicant to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LIVERMORE DOES ORDAIN AS FOLLOWS:

Section 1. *Authority*. Pursuant to Government Code Section 65864 et seq., the City Council considers that certain document under City Application No. Development Agreement 22-001 and entitled "Development Agreement (DA) 22-001 for the Isabel

Crossing Project" ("Development Agreement"). The Development Agreement is attached hereto as Exhibit B.

Section 2. *Recommendation*. The Planning Commission held a duly noticed public hearing on July 2, 2024, to consider adoption of an ordinance approving the Development Agreement and by its Resolution No. 19-24, attached hereto as Exhibit A, recommended that the City Council adopt the ordinance and approve the Development Agreement.

Section 3. *Public Hearing*. Prior to taking action on the Project, and at a properly noticed public hearing, the City Council of the City of Livermore reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony; and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Ordinance by reference.

Section 4. *Environmental Review*. The City Council has adopted Resolution No. [_____] adopting the Isabel Crossing Addendum to the Isabel Neighborhood Specific Plan Final Supplemental Environmental Impact Report (State Clearinghouse No. 2016042039), and finding that no subsequent or supplemental Environmental Impact Report is required, under the provisions of the California Environmental Quality Act ("CEQA") per CEQA Guidelines section 15164.

Section 5. *Consistency*. Development Agreement 22-001 is consistent with the General Plan and the Livermore Development Code Chapter 9.04.

Section 6. *Findings and Approval*. The City Council has considered the findings made in Planning Commission Resolution No. 19-24, attached hereto as Exhibit A, and hereby adopts the same findings by this reference and incorporates them herein, and based upon the City Council's own independent review of the Record Evidence and considerations, it adopts this Ordinance approving the Development Agreement.

Section 7. *Signing Authority.* The City Manager is hereby authorized to sign the Development Agreement, attached hereto as Exhibit B, on behalf of the City of Livermore.

Section 8. *Publication and Effective Date.* This ordinance or a comprehensive summary thereof shall be published once in a newspaper of general circulation of the city of Livermore within 15 days after its adoption and shall take effect and be in force 30 days from and after its adoption.

Section 9. *Filing.* The Planning Manager is directed to file a Notice of Determination for the Isabel Crossing Addendum with the Alameda County Clerk.

Section 10. *Recording.* The City Clerk is directed to record the Development Agreement within 10 days after the effective date of the Development Agreement.

Section 11. *Documents.* The documents that constitute the record of proceedings upon which this decision is based on can be found in the City Clerk's Office, 1052 S. Livermore Avenue, Livermore, California.

Section 12. *Severability.* If any part of this ordinance is declared unconstitutional or invalid by a court, such unconstitutionality or invalidity shall not affect any remaining parts.

The foregoing ordinance was introduced at the meeting of the City Council of the City of Livermore held on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

The ordinance was adopted at the regular meeting of the City Council held on _____, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Mayor, City of Livermore

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Planning Commission Resolution 19-24
Exhibit B – Development Agreement

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL APPROVE DEVELOPMENT AGREEMENT (DA) 22-001, FOR THE ISABEL CROSSING PROJECT, THAT WOULD VEST DEVELOPMENT RIGHTS FOR 20 YEARS, PROVIDE FINANCIAL CERTAINTY FOR THE APPLICANT, AND SECURE A RANGE OF COMMUNITY BENEFITS FOR THE CITY

CA Government Code Section 65864 (implemented by Livermore Development Code Chapter 9.04) allows local jurisdictions and private parties to enter into Development Agreements in order to vest certain development rights and to meet local public purpose.

On May 9, 2022, the City Council authorized staff to begin Development Agreement ("Agreement") negotiations with Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant").

On September 22, 2022, the City received an application from the Applicant to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA) 22-001, Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Agreement, together with the Project, staff recommendations, all public comments and testimony, and findings.

Together with this Resolution, the Planning Commission concurrently considered Resolutions for the following: 1) The Project's Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Master Sign Program Amendment (MSP) 24-00 applications; 2) The Project's Development Code Amendment (DCA) 24-001 application; 3) The Project's Specific Plan

Amendment (SPPA) 24-001 application; and 4) the Project's Consistency Determination (CD) 24-004

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Livermore has considered the Record Evidence and recommends the City Council adopt a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the California Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED, with respect to Development Agreement 22-001, the Planning Commission finds based upon the information presented that:

1. The Development Agreement provides benefit to the City.

   Findings: The Development Agreement will facilitate the development of the proposed Isabel Crossing master planned development project (Project), which provide substantial benefits to the City.

   The Project would contribute to the City's housing and economic development goals. The proposed development consists of 1,299 residential units on approximately 45 acres of land. This would consist of 535 market-rate for-sale townhomes, 10 affordable for-sale townhomes, 241 market-rate for-sale condos, 47 affordable for-sale condos, 160 market-rate for-rent apartments, and 306 affordable for-rent apartments. While the Project is only required to provide a total of 260 affordable units (20%) under the applicable Isabel Neighborhood Specific Plan (INSP), the Project proposes to provide a total of 363 affordable units; 28% of the total units provided and 103 more affordable units than would otherwise be required by the INSP. The units will be deed restricted for sale and rent to median-, moderate-, low-income and very low income households, with 65 very low income rental units, 113 low income rental units, 65 median income rental units, 63 moderate income rental units, 18 median income for-sale units, and 39 moderate income for-sale units. These affordable units – and in particular the higher number of low and very low income units than would otherwise be required by strict compliance with INSP standards – will contribute toward Livermore's 2023-2031 RHNA allocation of 4,570 units and provide much needed low and very low income housing units to help the city meet its specific RHNA goals of producing a total of 1,317 very low and 758 low income units during the current Housing Element cycle ending in 2031.

   This Project will also serve the best interests, and the public health, safety, and welfare of the residents and invitees of the City through: the provision of substantial public revenue in the form of impact fees and increased real property and sales taxes; the provision of land uses that are compatible with the physical nature of the Property and the surrounding area; a new commercial main street that would provide new permanent

jobs and community-serving retail and other commercial uses; new road and alternative transportation infrastructure including an access point for a future light rail station; new public open space and recreational facilities including a neighborhood park, private recreation center and multiple public plazas; and financial contributions to City funds. More information regarding each City benefit is described below:

Economic and Fiscal

According to the *Fiscal / Economic Analysis* report prepared by Kosmont, the Project will provide an estimated $1 million in net new annual tax revenue at full buildout, accounting for Project utility and service needs. Further, the Project would provide over 3,700 construction jobs onsite during the construction period, and an estimated $615 million in total economic output during construction (representing new labor income and goods and services produced within Livermore). During operations at full buildout, the Project would generate $43 million in new local retail spending, provide 200 new jobs, with an estimated $70 million total annual economic output (representing new jobs, new spending, and new wages). The Project represents an approximately $600 million initial investment into the City of Livermore.

Alternative Transportation Infrastructure

The Agreement secures one additional mile of bike lanes beyond the normal developer frontage obligations, one fully protected bike intersection, two additional bus stops, an extra 1,500-foot-long landscaped street median, and two fully-protected pedestrian crossings.

Commercial Uses

The Agreement ensures a non-membership grocer or food sales use will occur onsite, requires temporary commercial activation of the site, and incentivizes the Main Street retail uses to build out earlier than the current market would likely deliver retail uses onto Main Street.

Affordable Housing

The Agreement secures eight percent more affordable housing than required, representing 103 more overall units than required, representing an investment of approximately $15 million above the requirement. Of the total, the Project is providing 116 more Lower Income units than required. Further, the Agreement requires an $11.4 million low-income housing bond to ensure the low-income housing is constructed.

Architecture and Design

Given new state housing laws requiring objective design standards for new buildings, the Agreement secures high quality design that reflects the character of Livermore.

Public Art

The Agreement will ensure all Project-generated public art funds will be used within the Project site, and that a comprehensive Art Master Plan will be formed to secure high-quality pieces and one integrated design theme.

Financial Contributions

The Agreement secures an additional $1.2 million in public funding for the City's Community Benefit Fund and $800,000 into the Social Opportunity Endowment Fund. In addition, the Project will pay $2 million worth of Park Fees early, to facilitate the City's current capital park construction needs.

Public Safety

As a requirement of the Agreement, the Developer will install a range of closed-circuit television cameras and vehicle license plate reader cameras along the periphery and within the Project site. The cameras will be connected via fiber optic lines to the Real Time Awareness Center and will help increase the Police Department's situational awareness and keep residents safe.

Construction Sales Tax

Livermore will be designated as the point of sale for all construction materials, ensuring the City receives additional sales tax proceeds during construction.

2. The Development Agreement is consistent with the purpose, intent, goals, policies, programs, and land use designations of the General Plan, any applicable Specific Plan, and this Development Code.

Findings: The Project would not change the General Plan land use designation of Isabel Neighborhood ("IN") and would comply with the General Plan and IN's purpose, intent, goals, policies, and program. The Project is designed to develop a vibrant, safe, and complete neighborhood with a wide range of housing options at different affordability levels, commercial spaces, public open space and recreational amenities, public art and cultural opportunities, and new construction and permanent job opportunities, as well as supporting transit ridership and citywide goals for increased transit options and alternative transportation.

The Project would also be consistent with the regulations and provisions of the INSP, inclusive of the proposed Specific Plan Amendment. The Project proposes a new master planned development that would realign project planning areas, development blocks, land uses, infrastructure elements, and streets within subarea 3b and 3c of the INSP in a manner that substantially conforms to the intent of the INSP to create a vibrant, walkable mixed-use community. The neighborhood will include higher density residential uses providing a mix of product types, unit sizes, and affordability levels, public open space amenities that promote recreation and alternative forms of transportation including a new neighborhood park, recreation center, public plazas, new bike lanes and trails, public art and cultural opportunities, and job-producing

commercial uses within a new commercial main street, all within close, walkable proximity of one another.

Further, the Project ensures that its proposed land uses are compatible with existing neighboring residential and commercial uses and transportation infrastructure by minimizing conflicts between adjacent land uses with respect to scale, safety, noise, privacy, transportation, and other potential nuisances and hazards. The Project proposes contemporary architecture with traditional design elements and articulated facades, multiple building types that are differentiated while providing cohesive design and site plan layouts, and multiple material types, consistent with applicable General Plan and INSP goals and policies.

Together with the Density Bonus request, the Project conforms to all design and development standards required by the Specific Plan, Development Code, and the Citywide Design Standards and Guidelines.

3. The Development Agreement complies with the requirements of Government Code Sections 65864 through 65869.5.

   Findings: The Development Agreement between the City and the Developer regulates development of the Project site (Project Site) with the Project. Pursuant to the applicable requirements of the California Government Code governing development agreements, the Development Agreement specifies the duration of the agreement, the permitted uses of the property, the density and intensity of uses, the maximum height and size of proposed buildings, the provision of affordable housing, the provision and dedication of land for public purposes, and the timing and sequencing of proposed construction, among other terms and applicable requirements for California development agreements. Review, approval, and recordation of the Development Agreement will furthermore be conducted in accordance with the provisions of Government Code sections 65864 through 65869.5.

   Government Code Section 65867.5 requires that, if a Development Agreement includes a subdivision, that the Tentative Map complies with Government Code Section 66473.7, which mandates that sufficient water supply be made available for new subdivisions. The Project includes a Tentative Map. The Conditions of Approval require sufficient water supplies be made available. In addition, the Project EIR Addendum conducted a water supply analysis and found that both the City of Livermore (retailer) and Zone 7 (wholesaler) have sufficient water supplies to serve the Project over the next 20 years. Therefore, the Project complies with Government Code Section 65867.5.

BE IT FURTHER RESOLVED that the Livermore Planning Commission, based upon its own independent review of the Record Evidence and considerations, and based on the above findings which are necessary to protect the public health, safety, and general welfare, hereby recommends the City Council approve Development Agreement 22-001 and the Project.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends

the City Council direct the Planning Manager to file a Notice of Determination for the Project with the Alameda County Clerk if the Project is approved.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends the City Council direct the City Clerk to record with the Alameda County Recorder a copy of the Agreement within 10 days of the City entering into the Agreement.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends the City Council direct the Planning Manager to periodically review the terms of the Agreement at least every 12 months per Development Code section 9.04.070, and ensure the Applicant or Successor is demonstrating good faith compliance with the terms of the Agreement.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Kronzak, seconded by Commissioner Leary, the foregoing Resolution was adopted at the Planning Commission meeting of July 2, 2024 by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

Jacob Anderson, Chairperson

Stephen Riley

by Stephen Riley, Planning Manager
Secretary to the Planning Commission

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO: City Clerk City of Livermore 1052 S. Livermore Avenue Livermore, CA 94550 No fee for recording pursuant to California Government Code Section 27383	

DEVELOPMENT AGREEMENT (DA22-001) ISABEL CROSSING DEVELOPMENT PROJECT IN THE ISABEL NEIGHBORHOOD SPECIFIC PLAN AREA

This Development Agreement **("Agreement")** is entered into on _____, 2024, between the City of Livermore, a municipal corporation, **("City")** and ISABEL PORTOLA OWNER, LLC, a Delaware limited liability company qualified to do business in California **("Developer")**. At times in this Agreement, the City and the Developer are referred to individually as a **"Party"** and collectively as the **"Parties"** for certain terms, conditions, and responsibilities that benefit them or are owed by them to the other, either individually or collectively.

RECITALS

This Agreement is based on the following facts:

A. The City is authorized by California Government Code section 65864 *et seq.* **("Development Agreement Statutes")** and Livermore Development Code Chapter 9.04 to execute development agreements in order to vest certain rights in the Developer, and to meet certain public purposes of the local government, as set forth in those laws.

B. The Developer represents and warrants the following to the City, and City has relied upon such representations for this Agreement, as of the Effective Date:

(1) Organization. The Developer is a limited liability company duly organized, validly existing and in good standing under the laws of the State of Delaware, and qualified to do business in California, with full power and authority to conduct its business as presently conducted and to execute, deliver, and perform its obligations under this Agreement.

(2) Authorization. The Developer has taken all necessary action to authorize its execution, delivery and, subject to any conditions set forth in this Agreement, performance of the Agreement. Upon the Effective Date of this Agreement, this Agreement shall constitute a legal, valid, and binding obligation of the Developer, enforceable against the Developer in accordance with its terms.

(3) No Conflict. The execution, delivery and performance of this Agreement by the Developer does not and will not conflict with, or constitute a violation or breach of, or constitute a default under (i) the charter or incorporation documents of Developer, (ii) any applicable law, rule or regulation binding upon or applicable to the Developer, or (iii) any material agreements to which the Developer is a party.

C. The Developer is the owner of the property comprised of approximately 46 acres of undeveloped land located at the southwest corner of Isabel Avenue and Portola Avenue in the City of Livermore, County of Alameda, County Assessor Numbers 903-0010-054-00l; 903-0010-053-00; 903-0010-052-00; 903-0010-047-00; 903-0010-046-00; 903-0010-048-00; 903-0010-049-00; 903-0010-050-00; 903-0010-051-00; 903-0010-037-02; 903-0010-035-01, more particularly described in Exhibit A, attached hereto and incorporated herein by reference **("Property").**

D. The Property is located within the Isabel Neighborhood that is identified in the City's Isabel Neighborhood Specific Plan **("INSP")**. The INSP establishes the regulatory framework guiding private and public development and redevelopment within the Isabel Neighborhood planning area until 2040. The INSP planning area covers 1,138 acres that are located in the northwest part of the City. The objectives of the INSP include: create a safe, vibrant, complete neighborhood that includes amenities for residents, workers, and students; ensure new development that is compatible with existing development and community character; support transit ridership and citywide goals for increased transportation options, housing choices, and economic vitality; and support the Valley Link project through development of a complete neighborhood. The complete neighborhood envisioned by the INSP has a complete mix of housing, commercial and office uses, and community uses that provide residents and workers with easy well-connected access to everyday services such as grocery stores and restaurants. The INSP contains a subarea diagram, Figure 2-3, **("INSP Subarea Diagram")** that identifies the plan's subareas and corresponding land uses for property owners to use as a tool to prepare master plans for those subareas, with density averaged and land uses distributed across the subarea rather than at the parcel level, which is attached hereto as Exhibit K.

E. The Property is identified as subareas 3b and 3c within the INSP. Subareas 3b and 3c are planned by the INSP for a mix of uses, predominantly focused on higher density mixed-income residential uses with robust affordable housing requirements. Subareas 3b and 3c also include a neighborhood park and other public open space and recreational areas, in addition to focused commercial and retail uses. The INSP encourages developers to create "Master Plans" for different residential subareas to promote efficient and orderly development.

The Developer proposes to develop the Property into a mixed residential and commercial development consisting of approximately 1,299 dwelling units, approximately 75,000 square feet of commercial uses along a new commercial main street, public open space uses and amenities including a neighborhood park, community center, and public bike paths. The 1,299 dwelling units provided by the project include 363 new covenanted affordable units of which 178 will be provided as Low and Very Low Income affordable rental units, 128 Moderate- and Median-Income affordable units, and 57 Moderate and Median Income for-sale units. The Project's residential uses are provided within townhomes, multi-family apartments, and stacked flats provided with a variety of product types and sub-types. The Project also provides over two acres of neighborhood park and public recreational spaces, public plazas, public meeting places, and a location for a new access point for the future Valley Link Isabel Train Station. The project will also provide new streets, street lighting,

landscaping, and other public infrastructure and improvements as described herein and in the conceptual land use plan attached as Exhibit B **("Project").**

F. The Project furthers the INSP's goal to provide approved higher-density residential and other approved uses in an efficient and orderly manner and provides a master plan for INSP subareas 3b and 3c by creating nineteen (19) distinct planning areas **("Master Planning Areas")**, which are also depicted in Exhibit B, hereto. The Master Planning Areas proposed for the Project include a wide variety of higher density mixed-income housing product types and sub-product types and designs, in addition to park and public open space areas and commercial uses, and include the following, as further depicted on Exhibit B:

INSP Subarea	Planning Area	Project Description
3b	N1	5.18 acres with 94 3-story attached and 4 3- story detached townhouse-style residences.
3b	N2	3.08 acres with 54 3-story attached and 2 3- story detached townhouse-style residences
3b	N3-A	1.89 acres with 40, 3-story attached townhouse-style residences
3b	N3-B	1.50 acre Neighborhood Park
3b	N3-C	0.45 acres planned for a Recreation Center
3b	C1-A	2.89 acres with 62 3-story attached townhouse-style residences
3b	C1-B	1.49 acres with 114 multi-family apartment units, 50% of which shall be deed restricted as Median Income Rental Units and 50% of which shall be deed restricted Moderate Income Rental Units and 18,992 square feet of commercial uses, inclusive of a public plaza
3b	C1-C	0.17 acre Pocket Plaza
3b	C2-A	1.72 acres with 116 stacked flat condo units, 15 of which shall be deed restricted as For Sale Moderate Units and 20,719 square feet of commercial uses inclusive of a public plaza
3b	C2-B	0.99 acres with 16 3-story attached and 1 detached townhouse-style residences
3b	C2-C	0.19 acre Pocket Plaza

3b	C3	1.88 acres with 45 3-story attached townhouse-style residences
3b	C5	3.79 acres with 84 3-story attached townhouse-style residences
3b	TS	0.22 acre Town Square
3b	S1	2.55 acres with 172 stacked flat condo units 20 of which shall be deed restricted as For Sale Moderate Units and 23,924 square feet of commercial uses
3c	S2	3.36 acres with 102 3-story attached townhouse-style residences
3c	S3-A	1.12 acres with 114 multi-family apartment units all deed restricted as Lower Income Housing Rental Units
3c	S3-B	1.38 acres with 200 multi-family apartment units, 40 of which shall be dedicated as affordable multi-family rental housing units consistent with the applicable requirements of the City's Inclusionary Housing Ordinance
3c	S4	1.33 acres with 41 3-story attached townhouse-style residences, 10 of which shall be deed restricted as For Sale Moderate Units

G. The Developer has submitted an application to the City of Livermore for the following entitlements **("Entitlements")** for the Project, including Development Agreement (DA22-001) for this Agreement, as required under the Livermore Development Code to be vested in accordance with the Agreement subject to their conditions of approval:

- Vesting Tentative Tract Map 8659 (SUB22-008)
- Conditional Use Permit 24-002
- Site Plan Design Review 24-003
- Specific Plan Amendment 24-001
- Consistency Determination (CD) 24-004
- Master Sign Program Amendment (MSP) 24-001
- Development Code Amendment (DCA) 24-001

The Parties recognize the difficulty of predicting the precise timing and sequencing of all Project development, but also recognize the importance of ensuring that key Project elements are delivered in a sequence that meets the needs of the City and the public. The intent of the Parties is to ensure

the Project proceeds with reasonable diligence while providing the necessary flexibility for the Developer to respond to economic conditions and development opportunities, engage with future partners, lenders and builders, and go through the permitting process for the full buildout in a feasible, commercially reasonable manner. To achieve these purposes, this Agreement establishes certain sequencing parameters that ensure that key Project elements including infrastructure, commercial uses, parks, and affordable housing units are delivered in an orderly and logical manner, while also providing the Developer sufficient flexibility to respond to market conditions and development opportunities to ensure the successful buildout of the Project as a whole.

H. Reserved

I. Reserved

J. This Agreement will promote and encourage the development of the Project by providing the Developer and its creditors with a greater degree of certainty of the Developer's ability to expeditiously and economically complete the development effort for the Project, and the parties agree that the consideration to be received by the City pursuant to this Agreement and the rights secured to the Developer hereunder constitute sufficient consideration to support the covenants and agreements of the City and the Developer. By entering into this Agreement, the City desires to allow the Developer to design, apply for, and if approved to develop the Project pursuant to this Agreement, the land-use ordinances, rules, regulations and policies applicable on the "Effective Date," as defined in Section 3 below, and to vest in Developer, to the fullest extent possible under the law, all possible development entitlements in order to complete the Project.

K. The Project and the terms and conditions in this Agreement have been extensively reviewed and considered by the City and its officers, agencies and departments. That proposed use has been found to accommodate the City's recommendations and suggestions in order to protect the public's interest and to enhance the desirability, from the public's perspective, of the Project.

L. The City Council has also found that the Project and this Agreement are in the public interest and will provide substantial public benefits and help attain certain public objectives without limitation: (i) providing affordable housing to families and individuals; (ii) increasing the number of community parks and plazas for public recreation and discourse; (iii) providing improved bike lanes with increased safety; (iv) enhancing pedestrian and bicycle connectivity; (v) expanding the urban forest and providing carbon sequestration; (vi) providing commercial development to reduce food deserts and providing commercial activity to meet City and Regional goals; (vii) providing the City with additional revenue in the form of increased real property taxes and sales tax; (viii) providing a land use compatible with the physical nature of the project site and the surrounding area; and (ix) is in the public's interest.

M. As required by Government Code section 65867.5(c), the City Council has also found the provisions of this Agreement are consistent with the City's General Plan and the INSP.

N. The City conducted duly noticed public hearings on this Agreement pursuant to Government Code section 65867 and Livermore Development Code sections 9.04.040 and 9.04.050 and found that the provisions of this Agreement and its purposes are consistent with the objectives, policies, general land uses and programs specified in the City's General Plan and Livermore Development Code.

O. This Agreement was adopted by ordinance of the City Council on _____, 2024, and approved upon a second reading on _____, 2024, after notice and public hearings before the Planning Commission and City Council, and after City Council adoption/approval/certification of the Isabel Crossing and Not Net Loss Specific Plan Amendment Project EIR Addendum, CEQA Guidelines Section 15182 Exemption, and/or streamlining via CEQA Guidelines Section 15183 and the Final SEIR certified for the INSP and the Mitigation, Monitoring, and Reporting Program approved for the INSP, all in accordance with the California Environmental Quality Act, Public Resources Code section 21000 *et seq*.

NOW, THEREFORE, the City and Developer hereby agree that the aforementioned recitals are true and correct and are incorporated by reference as fully set forth below, and further agree as follows:

1. The Property. The Property which is the subject of this Agreement is described in Recital C above and Exhibit A, attached hereto.

2. The Project. The Project is described in Recitals E and F above, and Exhibit B, for a mixed residential and commercial development.

3. Effective Date. The effective date of this Agreement ("Effective Date") is the later of (a) thirty (30) days after the date the Ordinance approving this Agreement is adopted by the City Council and attested by the City Clerk, or (b) if a referendum petition is timely and duly circulated, filed and qualified by the Elections Official and thereafter ordered to election by the City Council, then the date the election results on the ballot measure by City voters approving this Agreement are certified by the City Council in the manner provided by the Elections Code. This Agreement shall be executed by the City within ten (10) days after the Effective Date and recorded as provided in Government Code section 65868.5.

4. Term. The duration of this Agreement is for a term of twenty (20) years, commencing on the Effective Date, and terminating on its anniversary date twenty (20) years later ("Term"). The term may be amended or extended as set forth in Section 12 and consistent with the Development Agreement Statutes and the Livermore Development Code by the written consent of the Parties; or, (ii) as set forth in Section 13. If the Agreement is not amended, extended, terminated, or cancelled as set forth in either Section 12 or Section 13 consistent with the Development Agreement Statutes and the Livermore Development Code, then this Agreement shall terminate on its 20th anniversary date without further action by the Parties.

5. Definitions. In addition to the terms defined elsewhere in this Agreement, Exhibit H contains defined terms that apply to this Agreement and to all Exhibits.

6. Exhibits. The following exhibits are attached to and incorporated into this Agreement:

   Exhibit A: Legal Property Description

   Exhibit B: Development Plans

   Exhibit C: Master Project Infrastructure Timing, Repair and Replacement and Impact Fee Special Provisions

Exhibit D: Affordable Housing

Exhibit E: Commercial Uses

Exhibit F: City Fee Schedule

Exhibit G: Form of Estoppel Certificate

Exhibit H: Definitions

Exhibit I: Fee Creditable Improvements

Exhibit J: Community Facilities District (CFD) Provisions

Exhibit K: INSP Figure 2.3, Subarea Diagram

Exhibit L: Core Vested Regulations

Exhibit M: Reserved

Exhibit N: Reserved

Exhibit O: Affordable Housing Template Agreement

Exhibit P: Public Art

Exhibit Q: Financial Contributions

Exhibit R: Law Enforcement Assets

Exhibit S: Proposed CFD Eligible Infrastructure

7. Vested Development Rights. As set forth in this Agreement, and during the term of this Agreement, the Developer has the right to develop and use the Property in accordance with the approved Project Approvals for the Project identified in Exhibit B and the following that regulate the uses for the Property, including its density and intensity of use, height and size of buildings, and the provisions for the reservation and dedication of land for public purposes, all as required by Government Code section 65865.2 for this Agreement:

    a. The City's General Plan, Isabel Neighborhood Specific Plan, and the Livermore Development Code in effect on the Effective Date. For reference, the INSP Land Use Designation from the General Plan, and the Land Use Map and Development Standards from the Isabel Neighborhood Specific Plan are attached hereto as Exhibit L ("Core Vested Regulations").

    b. In addition, all other City policies, ordinances, resolutions, rules, regulations and standards applicable to development or use of the Property on the Effective Date, except that Developer shall:

        i. Pay the processing and development impact fees that are in effect and

applicable citywide at the time the fees are paid by Developer to City. Payment for said fees shall be made when the City issues any building permits for the Project. As provided in Section 8(e) the Developer is not required to pay any new development impact fees enacted after the Effective Date unless they qualify as a Permitted Change in Applicable Regulations, but for those development impact fees enacted by the City on or before the Effective Date and identified in Exhibit F (City Fee Schedule") the Developer shall pay the corresponding amount for those fees that are in effect on the date the fees are paid;

ii. Comply with Building Code requirements that are in effect and applicable citywide at the time when the permits for building construction are issued by the City;

iii. Comply with construction and technical building standards or specifications for public improvements that are in effect and applicable citywide at the time when the permits for public improvement construction are issued by the City;

iv. Comply with changes in City laws, regulations, plans or policies applicable citywide, that are found by the City Council, based on substantial evidence, to be necessary to protect members of the public from a condition dangerous to their health or safety;

v. Comply with a change in City law, regulations, plans or policies that is one or more of the following:

1. Specifically mandated by state or federal law, or by any regional governmental agency that has legal authority over the City under state law or a joint powers agreement; or

2. A result of or in response to state or federal law, or regional agency action, made necessary in order for the City to avoid losing or not receiving substantial funding or other substantial public benefits or facilities that would be available to the City only if it makes such a change; or

3. Specifically mandated by, or necessary for compliance with or implementation of the terms of any permit, entitlement or other authorization necessary for the development of the Property issued or granted to the City, County and/or Developer by any federal, state or regional agency; and,

4. Comply with the Project conditions of approval, including all required mitigation measures from subsequent environmental review associated with, for all subsequent Project approvals that are consistent with this Agreement ("Subsequent Project Approvals").

c. Developer acknowledges pursuant to and consistent with Government Code section

65866, this Agreement does not prevent the City in subsequent actions applicable to the Property, from applying new rules, regulations, and policies which do not conflict with the rules, regulations, and policies applicable to the Property as set forth herein, nor shall this Agreement prevent the City from denying or conditionally approving a subsequent development project application on the basis of these existing or new rules, regulations, and policies.

d. Developer further acknowledges that execution of this Agreement by the City does not constitute approval of any required permits, applications, or allocations, and in no way limits the discretion of the City in the permit, allocation, and approval process in accordance with the limitations set forth herein.

e. City agrees that Developer, in Developer's sole discretion may reconstruct the Project, or any portion thereof, within the Term of this Agreement should it become necessary or desirable due to natural disaster, changes in seismic requirements, acts of God, acts of terrorism, or damage to work in progress by reason of fire, floods or other casualties, commercial infeasibility, or functional obsolescence. Any such reconstruction shall be subject to the Core Vested Regulations, and shall comply with the Project Approvals or subsequent Project Approvals, as applicable to the Project of portion thereof to be reconstructed, and shall comply with the technical building codes existing at the time of such reconstruction.

8. Developer Obligations.

a. The Developer agrees to all the terms, conditions, and covenants in connection with the Project that are set forth in the conditions of approval for the Entitlements as well as the Subsequent Project Approvals.

b. Subsequent to the approval of the Vesting Tentative Tract Map 8659 the Developer will record large lot Final Maps for all Master Planning Areas in accordance with the requirements of the Subdivision Map Act (California Government Code section 66410, et seq.) and the Livermore Development Code. Following any transfers of Master Planning Areas to successors who would construct the Planning Areas in accordance with the terms of this Agreement, said successors would prepare in-tract improvement plans and record small lot Final Maps or Condominium Maps for the respective Planning Areas.

c. As required by the Livermore Development Code and the Subdivision Map, the City's approval of Vesting Tentative Tract Map 8659 is conditioned upon the Developer constructing improvements and making dedications to the City to ensure the parcels created:

    i. Are provided with adequate public services and utilities, including any appropriate cable television services, to meet the needs of future residents or users;

    ii. Are of adequate design in all respects in compliance with this Development Code;

iii. Act to mitigate any potential environmental impacts specified in the Environmental Impact Report (EIR) or by other means; and

iv. Provide for proper grading and erosion control, including the prevention of sedimentation or damage to off-site property.

d. Developer shall provide adequate security for all public improvements required by Vesting Tentative Tract Map 8659 ("Master Project Infrastructure") when acquiring the City's approval for said map, and then prior to the issuance of any building permit as set forth in Exhibit C, Timing and Processing, construct such Master Project Infrastructure. Nothing in this Agreement shall prevent Developer from transferring the Developer obligations herein to a third-party developer or builder, in accordance with Section 10. To the extent any provision of this Agreement conflicts with the Conditions of Approval for the Vesting Tentative Tract Map, the Conditions of Approval shall control. (*BIA v. Patterson* (2008) 162 Cal.App.4th 1068.)

e. Developer shall pay all applicable fees as set forth in Section 7(b)(1) in the amounts that are in effect when the payment is made. A copy of the processing and development impact fees applicable on a citywide basis are attached as Exhibit F ("City Fee Schedule".) The amount specified for each processing and development impact fee reflects the amount in effect as of the Effective Date and are simply included for reference, and the Developer shall pay the amount corresponding to those fees that are in effect when the payment is made. Unless new Development Impact Fees that are adopted by the City after the Effective Date validly qualify as a Permitted Change in Applicable Regulations, they shall not apply to the Project or to the development of the Project, and shall not be a payment obligation of Developer, without Developer's prior written consent.

f. Developer shall use good faith efforts to the maximum extent allowed by law to require all persons and entities providing bulk lumber, concrete, structural steel and pre- fabricated building components, such as roof trusses, to be used in connection with the construction and development of, or incorporated into, the Project, to: (a) obtain a use tax direct payment permit; (b) elect to obtain a subcontractor permit for the job site of a contract valued at Five Million Dollars ($5,000,000) or more; or (c) otherwise designate the Property as the place of use of material used in the construction of the Project in order to have the local portion of the sales and use tax distributed directly to the City instead of through the county-wide pool. Developer shall instruct each of its subcontractors to cooperate with the City to ensure the full local sales/use tax is allocated to City. To assist City in its efforts to ensure that the full amount of such local sales/use tax is allocated to the City, Developer shall:

i. Provide City with an annual spreadsheet, which includes a list of all subcontractors with contracts in excess of the amount set forth above, a description of all applicable work, and the dollar value of such subcontracts. City may use said spreadsheet to contact each subcontractor who may qualify for local allocation of use taxes to the City.

ii. Include in all contracts with a general contractor, project manager for construction, and all subcontractors the following language:

"The Developer is requiring that all contractors and subcontractors on the jobsite participate in directing local tax to the City of Livermore wherever possible and consistent with legal requirements. This direction is not expected to increase the contractor's tax liability; however, it will increase the percentage amount of tax revenue the City will receive. The Developer is requiring that the contractors and subcontractors work together with the City officials and consultants to achieve an equitable outcome.

The Developer will require that the contractors and subcontractors exercise their option to obtain a California Department of Tax & Fee Administration construction site sub permit for the jobsite and allocate all eligible use tax payments to the City of Livermore. Prior to any construction on-site, the Developer will require that the contractor and subcontractor provide the City of Livermore with either a copy of their sub-permit that shows their CDTFA account number or a signed statement that sales and use tax does not apply to their portion of the project. The Developer will provide the City and their consultant with a list of subcontractors associated with the project."

g. The precise timing and sequencing of Project development is influenced by numerous factors such as market orientation and demand, interest rates, absorption, completion, and other economic and practical factors, some of which are not within the Developer's control. Nevertheless, the Developer understands the INSP's need for the Developer to deliver certain key Project elements to the City and the Livermore community as part of the consideration for this Agreement to ensure the development of a complete neighborhood contemplated by the INSP for residential and commercials places for residents and workers and easy well-connected access to everyday services. Therefore, the Developer agrees to all the terms, conditions, and covenants for the Project that are set forth in the Entitlements and the below Exhibits, and further agrees to construct and complete the following Project elements consistent with the schedule and/or sequencing for performance for each as set forth in corresponding Exhibits.

h. The City has extensively reviewed the terms and conditions of this Agreement and, in particular, has specifically considered and approved the impact and benefits of the Project upon the regional welfare. The terms and conditions of this Agreement have been found by the City to be fair, just, and reasonable, and to provide appropriate benefits to the City. This Agreement and the pursuit of the Project will serve the best interests, and the public health, safety, and welfare of the residents and invitees of the City and the general public. This Agreement will help ensure a desirable and functional community environment; provide effective and efficient development of public facilities, infrastructure and services in the vicinity of the Property; help maximize effective utilization of resources within the City, increase City tax revenues; and provide other substantial public benefits to the City and its resident by achieving the goals and purposes of the Government Code, the General Plan, the INSP and Livermore Development Code, which particular benefits include, without

limitation: (i) the development of a mixed-use multi-family housing development with significant dedicated affordable housing, including for-sale affordable units; (ii) provision of new housing that helps meet State and regional housing production goals; (iii) provision of substantial public revenue in the form of impact fees and increased real property and sales tax; (iv) the provision of a land use compatible with the physical nature of the Property and the surrounding area; (v) new infrastructure for alternative transportation including dedicated bicycle lanes, and other public improvements; and (vi) financial contributions from Developer to the City's Social Opportunity Endowment Fund, Community Benefit Fund, and Springtown Open Space Improvements. The community benefits of the Agreement are set forth further in the below Exhibits. The Developer agrees to all the terms, conditions, and covenants in connection with the Project that are set forth in the following Exhibits:

i. Exhibit C Master Project Infrastructure and Site Improvements sets for the infrastructure improvement requirements and the timeframes in which the Developer shall complete them.

ii. Exhibit D Affordable Housing Obligations sets forth the Developer's obligations for construction of affordable housing within the Project site.

iii. Exhibit E Commercial Uses sets forth the Developer's obligations for constructing a Temporary Commercial Activation site and for making a good faith effort to enter into lease agreements for specified commercial uses within the Project site.

iv. Exhibit J Community Facilities District (CFD) Provisions sets forth the Developer's obligations with respect to formation of a New Facilities CFD and Maintenance CFD.

v. Exhibit P Public Art sets forth the Developer's obligations to prepare a comprehensive Art Master Plan that covers the entire project site and provides for how the Developer's Public Art obligation for the project will be met.

vi. Exhibit Q Financial Contributions sets forth cash contributions the Developer shall pay, in addition to other consideration provided by Developer for this Agreement, to the Social Opportunity Endowment Fund, Community Benefit Fund, Public Art Fund, and to City Park Improvements.

i. The City and Developer shall enter into an Affordable Housing Agreement, the form of which is attached hereto as Exhibit O.

j. As permitted by Government Code section 65865.2, Developer shall commence and complete the "Master Project Infrastructure" as set forth in Exhibit C.

k. The Developer and any Successor(s) shall construct the Project in accordance with this Agreement and the Project Approvals for the Project identified in Exhibit B, including with respect to the approved architectural design, landscape design, site design, residential density, non-residential FAR and coverage, and any other design

feature, or development standard, subject to the Subsequent Approvals provisions, below.

9. City Obligations.

a. City agrees to all the terms, conditions, and covenants in connection with the Project that are set forth in the conditions of approval for the Entitlements as well as the Subsequent Project Approvals.

b. Subsequent Approvals for the Project

i. In connection with any future discretionary City approvals required by code for the Project, including approvals that only apply in one or more Planning Areas described in Recital F and depicted in Exhibit B, without limitation, Site Plan Review and Design Review (collectively "Subsequent Approvals"), if the Director or his or her designee determines that the request for a Subsequent Approval for Site Plan Review or Design Review substantially conforms with Exhibit B, the Site Plan Review or Design Review approval may be issued by the Director on behalf of the City in accordance with Livermore Development Code Section 9.07.030.B. Otherwise, the Director may refer a Site Plan Review or Design Review Subsequent Approval request to the Planning Commission. The City shall accept for processing and timely review and act on all applications for Subsequent Approvals in as expeditious a manner as is reasonably possible.

ii. The City acknowledges that Developer may require minor adjustments to the configuration or size of individual lots or parcels within a Planning Area in the VTTM, or infrastructure elements depicted thereon, to be modified from that shown on the VTTM in any Final Maps, which may be necessitated by changes occasioned by the final permitting and design of a Planning Area within the Project that would come after this Agreement. To facilitate development of the Project, the Parties agree that the size and configuration of the proposed lots or parcels and dimensions and/or locations of improvements within a Planning Area may be so adjusted at the Developer's discretion, subject to the provisions of and the approvals required by the Subdivision Map Act and the Livermore Development Code, and provided that the aggregate total density and intensity of the Project Site are not increased, and the permitted uses and design thereon are not substantially modified from those provided in the Project Approvals, and the parcels and lots and improvements thereon are in accordance with the Applicable Rules that apply to project upon approval including but not limited to INSP, Citywide Design Standards and Guidelines, Development Code and Municipal Code regulations., including without limitation, all minimum lot size, lot configuration, set-back and construction standards set forth therein.

iii. If the Director or his/her designee finds that a proposed amendment or modification to the Project or any portion thereof does not conflict with any material terms of this Agreement, Applicable Law, and state law requirements, the amendment shall be determined to be an "Administrative

Project Amendment" and the City Manager, the Director, or a designee may approve the Administrative Project Amendment on behalf of the City without notice and public hearing. The Parties herein agree and recognize that this assessment by the City is objective in nature and therefore an Administrative Project Amendment shall be a ministerial agency approval.

1. Without limiting the generality of the foregoing, lot line adjustments, minor increases or decreases in the intensity, scale or scope of the Project, minor alterations in vehicle circulation patterns or vehicle access points, substitutions of comparable landscaping for any landscaping shown on any final development plan or landscape plan, minor variations in the location of structures that do not substantially alter the design concepts of the Project, swapping out of building materials for replacement materials with similar appearance and quality, variations in the location or installation of utilities and other infrastructure connections or facilities that do not substantially alter the design concepts of the Project, and minor adjustments to the Project or Property legal description shall be treated as Administrative Project Amendments.

iv. The Developer reserves the right to apply to the City for permits to develop portions of the Project in a manner which may be materially inconsistent with the Project as described herein and approved with the Project Approvals ("Major Project Modifications"). In such event, such portion of the Project shall be reviewed pursuant to the rules, regulations, and procedures of the City in effect at the time the Developer makes application to the City for such Major Project Modifications, including, without limitation, at the City's discretion, to require an amendment to this Agreement or a new development agreement for the affected portions of the Project. Nothing herein shall be interpreted to require the City to approve a Major Project Modification.

v. As a result of constructability or financing issues, the Developer may reduce the quantity of Project residential units as follows, as approved by the Director:

1. Planning Areas S1 and C2-A. The Developer or any Successor(s) may reduce the quantity of units in Planning Areas S1 and C2-A, if the following findings can be made:

A. The Project shall provide a density of at least 50 dwelling units per acre in Planning Areas S1 and C2-A.

B. The Project shall provide at least 1,236 total housing units, which is collectively the minimum required in Isabel Neighborhood Specific Plan Subareas 3b and 3c.

C. The quantity and affordability levels of all affordable housing units in all Planning Areas shall remain as described in this Agreement and the Project Plans (Exhibit B) and shall not be reduced or diminished.

D. The building footprints, architectural style, and exterior design of each building shall substantially conform to the Project Plans (Exhibit B) and shall not be modified unless approved by the City under this Section of the Agreement.

2. All Other Planning Areas. The Developer or any Successor(s) may reduce the quantity of units in any other Planning Area, if the following findings can be made:

A. The quantity of units to be reduced in any Planning Area shall not exceed five percent (5%) of the total quantity of approved units for that Planning Area.

B. The Project shall provide at least 1,236 total housing units, which is collectively the minimum required in Isabel Neighborhood Specific Plan Subareas 3b and 3c.

C. The quantity and affordability levels of all affordable housing units in all Planning Areas shall remain as described in this Exhibit and the Project Plans (Exhibit B) and shall not be reduced or diminished.

D. The building footprints, architectural style, and exterior design of each building shall substantially conform to the Project Plans (Exhibit B) and shall not be modified unless approved by the City under this Section of the Agreement.

vi. The City has conducted extensive environmental review of the Project and has certified an Environmental Impact Report, a Supplemental Environmental Impact Report, and an Addendum that fully analyze the potential environmental impacts of the Project consistent with the requirements of CEQA. The City intends that future discretionary approvals for the Project, to the fullest extent permitted by law, shall be subject to CEQA's subsequent review provisions under Public Resources Code, Section 21166 and CEQA Guidelines, Sections 15162 and 15164, whereby any additional environmental review for such future discretionary approvals shall only be required where "major revisions" to the prior EIRs for the Project are required, as defined by CEQA.

c. Community Facilities District

i. The Property, or a portion thereof, is located within City of Livermore Community Facilities District No, 2016-2 (the "Existing CFD"). In accordance with this Section 9(c), and the Community Facilities District Financing Parameters set forth in Exhibit J attached hereto, Developer desires to form a new Community Facilities District with respect to the Project (the "New Facilities CFD") for the Property pursuant to the Mello Roos Community Facilities Act of 1983, California Government Code, Sections 53311 et seq., as the same may be amended from time to time, ("Mello Roos Act"), that, among other things, refunds a portion of the outstanding bonds of the Existing CFD, and pays the prepayment penalty for those bonds, in accordance with Section 53313.5(g) of the Mello Roos Act, thereby allowing for the release of the lien of the Existing CFD from the Property, and finances all of the facilities and improvements and fees described in Exhibit J, attached hereto (the "Community Facilities District (CFD) Provisions") and Exhibit S, attached hereto (the "Proposed CFD Eligible Infrastructure").

ii. At such time during the term of this Agreement as Developer submits a written request to the City Manager to establish the New Facilities CFD, the City Manager shall notify Developer whether the City is willing to establish the New Facilities CFD in accordance with Section C of Exhibit J or prefers the Developer to work with a joint powers authority to establish the CFD in accordance with Section D of Exhibit J, provided, however, that, at Developer's election, Developer shall have the right to pursue the adoption of a CFD with a joint powers authority instead of the City.

iii. The Developer and the City will cooperate to provide for annexation of the Property to the Isabel Maintenance CFD (as defined in Exhibit J) in accordance with Section B of Exhibit J.

d. Upon satisfaction of all Developer's and the subsequent owners' obligations related to the Property, or a portion of the Property, the City shall record a Notice of Termination for each affected parcel in a form satisfactory to the City Attorney in the Office of the Alameda County Recorder.

e. The City shall refund Developer Transferable Development Credits and Traffic Impact Fees as required pursuant to Exhibits C, E, and I.

10. Binding Effect; Recordation; Assignment.

a. This Agreement is binding upon, and the benefits of the Agreement shall inure to, all successors in interest to the Parties to this Agreement as set forth in Government Code section 65868.5

b. This Agreement shall:

i. be recorded in the office of the County Recorder;

ii. run with the land; and, shall

iii. be binding upon and inure to the benefit of the heirs, administrators, assigns, executors, and successors in interest and in title to the Property and all portions thereof.

c. Every contract, deed, or other instrument hereafter executed covering or conveying a portion of the Property shall be held conclusively to have been executed, delivered and accepted subject to the covenants and restrictions in this Agreement, regardless of whether such covenants or restrictions are set forth in such contract, deed or other instrument, unless the City expressly terminates the Agreement as to the portion of the Property transferred as set forth in Section 13.

d. Developer shall have the right to sell, transfer, or assign the Property or any portion or Planning Area thereof (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code, Sections 66410, et seq., as the same may be amended from time to time) to any person, partnership, joint venture, firm, or corporation at any time during the Term of this Agreement, together with the rights granted to and obligations imposed upon the Property pursuant to this Agreement and as set forth in Section 15. Developer shall give, prior to closing on any such transfer, written notice to the City of its intention to assign or transfer any of its interests, rights or obligations under this Agreement and a complete disclosure of the identity of the assignee or transferee, including copies of the Articles of Incorporation in the case of corporations and the names of partners in the case of partnerships. Any failure by Developer to provide said notice shall be curable in accordance with the provisions of Section 20. Any successor to Developer that owns or otherwise holds a controlling property interest and is assigned rights, obligations and requirements under this Agreement for only a portion of the Project or a Planning Area(s) that is less than the entire Property shall only have the rights, obligations and requirements of this Agreement that are, by its express terms, applicable to the Planning Area(s) or portions thereof of the Project owned or otherwise controlled by that successor of Developer.

e. Subject to the notice requirements herein, where the Developer sells or otherwise transfers title to any portion of the Property that includes Master Project Infrastructure, as described in Exhibit C ("Master Project Infrastructure Timing, Repair and Replacement and Impact Fee Special Provisions"), that subsequent owner and Developer shall be jointly and severally liable for any obligations under this Agreement as to that portion of the Property, unless Developer is released by City, which release shall not be unreasonably withheld, so long as the subsequent owner provides City with security equivalent to any security previously provided by Developer to secure performance of its obligations hereunder, if any.

f. Subject to the notice requirements herein, where the Developer sells or otherwise transfers title to any portion of the Property that includes one or more Planning Areas but does not include Master Project Infrastructure, so long as the subsequent owner provides City with security equivalent to any security previously provided by Developer to secure performance of its obligations hereunder, if any, City shall release Developer from any further obligations or requirements under this Agreement with respect to the construction of improvements within those transferred Planning Areas.

g. The provisions of this Agreement shall constitute covenants which shall run with the land comprising the Property for the benefit thereof and as a burden thereon, and the burdens and benefits hereof shall bind and inure to the benefit of all assignees, transferees, and successors to the Parties hereto.

11. Mortgagee Protections.

a. Developer shall have the same right to encumber Developer's right, title and interest in, to and under this Agreement and the Property that Developer would have absent this Agreement, pursuant to one or more Mortgages, provided that each such Mortgage is given for the purpose of securing funds to be used for financing the acquisition of the Property or any portion thereof, the construction of improvements thereon, and any other expenditures reasonably necessary and appropriate to develop the Property.

b. Except as otherwise set forth herein, all of the provisions contained in this Agreement shall be binding on and for the benefit of any person who acquires title to the property or any portion thereof by foreclosure, trustee's sale, deed in lieu of foreclosure, lease termination or expiration or other involuntary transfer under a Mortgage.

c. The City hereby agrees to cooperate in including in this Agreement by suitable amendment from time to time any provision which may reasonably be requested by any proposed Mortgagee for the purpose of allowing such Mortgagee reasonable means to protect or preserve the lien and security interest of the Mortgage hereunder as well as such other documents containing terms and provisions customarily required by Mortgagees (taking into account the customary requirements of their participants, syndication partners or ratings agencies) in connection with any such financing. The City agrees to execute and deliver (and to acknowledge, if necessary, for recording purposes) any agreement necessary to effectuate any such amendment; provided, however, that any such amendment shall not in any way materially adversely affect any rights of any Party under this Agreement. If there is any conflict between this Section and any other provision contained in this Agreement, this Section shall control. Nothing herein is intended to or shall require the City to approve any amendments to this Agreement unrelated to what is reasonably necessary to enable a Mortgagee to appropriately protect its lien or security interest, nor shall the City be required to take any action that may risk the priority of this Agreement as an encumbrance against the Property through the Term of this Agreement.

d. If the City receives notice from a mortgagee requesting a copy of any notice of default given hereunder and specifying the address for services thereof, and the said mortgagee has recorded a copy of such request in the official records of Alameda County in the manner required under Civil Code, Section 2924b with respect to Requests for Notices of Default, then the City shall deliver to such mortgagee, concurrently with service thereon to the applicable Party, any notice given to the Party with respect to any claim that such Party has not complied in good faith with the terms of this Agreement or has committed an event of default. Each mortgagee shall have the right, but not the obligation, for a period of ninety (90) days after the

receipt of such notice to cure or remedy, or to commence to cure or remedy, the claimed default or act of noncompliance set forth in the notice. If the default is of a nature which can only be remedied or cured by such mortgagee upon obtaining possession, such mortgagee may, but is not obligated to seek to obtain possession with diligence and continuity through foreclosure, a receiver or otherwise, and may, but is not obligated to, thereafter remedy or cure the default or noncompliance within thirty (30) days after obtaining possession. If any such default or noncompliance cannot, with diligence, be remedied or cured within such thirty (30) day period, then such mortgagee shall have such additional time as may be reasonably necessary to remedy or cure such default or noncompliance if such mortgagee commences that cure during such thirty (30) day period, and thereafter diligently pursues and completes such cure.

12. Amendment or Extension. As set forth in Development Agreement Statutes, including Government Code section 65868, this Agreement may be amended by the Parties, including amendments of, or extensions to, the Term set forth in Section 4 consistent with the procedures set forth in the Development Agreement Statutes and the Livermore Development Code, as they are amended from time-to-time. Developer shall send to the City a notice specifying the requested amendment or extension, and obtain the City's written consent, before submitting an application to the City to amend or extend this Agreement pursuant to the procedures set forth in the Development Agreement Statutes and the Livermore Development Code.

13. Cancellation; Termination.

    a. This Agreement may be canceled or terminated, in whole or in part, as follows:

        i. By formal application by any Party to cancel or terminate this Agreement as set forth in and as is consistent with the Development Agreement Statutes, including Government Code section 65868.

        ii. Upon the occurrence of any of the following events:

            1. Expiration of this Agreement's Term pursuant to Section 4;

            2. The release of the Developer, or a portion of the Property, from this Agreement as set forth in Sections 10(d) through 10(f), which cancellation or termination shall only be as to the Parties and as to the portion of the Property transferred as specified;

            3. The dedication of any portion of the Property to a public agency provided the termination shall only be as to the dedicated portion of the Property; and

            4. The conveyance of any portion of the Property to a homeowner's association for which all improvements required by the Project Approvals and Subsequent Project Approvals for that portion of the Property have been

completed or guaranteed to the City's satisfaction, but the termination shall only be as to that portion of property so conveyed.

b. Cancellation or termination of this Agreement as provided in this Section shall not constitute termination of any Project Approvals or Subsequent Project Approvals approved by the City for the Property prior to the date of cancellation or termination.

c. In the event this Agreement is terminated, neither party shall have any further rights or obligations hereunder except for those obligations of Developer set forth in Section 16 (No Damages Relief), Section 24 (Legal Actions), and Section 25 (Attorneys' Fees), except that the provisions of this Agreement that are specified to survive termination of this Agreement shall run with the land in perpetuity and remain in full force and effect following such termination.

d. The cancellation or termination of this Agreement, in whole or in part, pursuant to this section shall be processed by the City consistent with the requirements in the Development Agreement Statutes.

14. Reserved.

15. Release Upon Transfer.

a. *As to Developer upon Transfer*. Upon the sale, transfer, or assignment (collectively "Transfer") of Developer's title to any portion of the Property, then Developer and the subsequent owner of the portion of the Property transferred are jointly and severally liable for the Developer's obligations under this Agreement as to that portion of the Property transferred unless Developer is released by City as provided in this subsection, which release shall not be unreasonably withheld, and which release must be conditioned on the subsequent owner providing the City with security equivalent to any security previously provided by Developer to secure performance of the obligations hereunder for the portion of the Property transferred. Developer shall be released by City from its obligations under this Agreement with respect to the portion of the Property transferred provided: (i) Developer (or transferee) is not in default of this Agreement at the time of the transfer; (ii) Developer has provided prior written notice of the transfer to the City, subject to cure under Section 20, below; and, (iii) with respect to the transfer of any parcel or lot of the Property that has not been fully developed as contemplated by the Project, the intended transferee executes and delivers to the City a written assumption agreement in a form acceptable to the City in which (aa) the name and address of the transferee is set forth, and (bb) the transferee expressly assumes all obligations of the Developer under this Agreement as to the portion of the Property to be transferred. Failure to deliver a written assumption to the City prior to transfer of the portion of the Property to the subsequent owner shall not negate, modify, or otherwise affect the liability of any transferee or the Developer pursuant to the terms and conditions of this Agreement.

b. *As to Property transferred.* Upon a Transfer, as defined in subsection (a) above, of title to any portion of the Property, the subsequent owner of the portion of the Property transferred may request release of that portion of the Property from the

obligations under this Agreement, which release shall not be unreasonably withheld, provided that: (i) Developer (or transferee) is not in default of this Agreement at the time of the transfer; (ii) Developer has provided prior written notice of the transfer to the City; and, (iii) with respect to the transfer of any parcel or lot of the Property that has not been fully developed as contemplated by the Project, the intended transferee executes and delivers to the City a written assumption agreement in a form acceptable to the City in which (aa) the name and address of the transferee is set forth, and (bb) the transferee expressly assumes all obligations of the Developer under this Agreement as to the portion of the Property to be transferred. Failure to deliver a written assumption to the City prior to transfer of the portion of the Property to the subsequent owner shall not negate, modify, or otherwise affect the liability of any transferee or the Developer pursuant to the terms and conditions of this Agreement.

16. No Damages Relief. The parties acknowledge that neither Party would have entered into this Agreement had it been exposed to damage claims from the other Party for any breach thereof. As such, the Parties agree that in no event shall either Party be entitled to recover damages against the other Party for breach of this Agreement. To the extent permitted by law, specific enforcement of this Agreement, including specific performance of Developer's payment obligations set forth in Section 8 and Exhibit F, and the City's Traffic Impact Fee (TIF) and Transferable Development Credit (TDC) obligations set forth in Exhibit F, is the proper and desirable remedy.

17. Subsequent Legislation.

    a. To the fullest extent permitted by law, any initiatives, referenda, moratoria, or amendments to the Core Vested Regulations adopted or enacted after the Effective Date that contain "slow/no growth" measures, limit or in any way control the provision of public services or utilities to the Property, or which by their terms are intended to or by operation have such effect, shall have no application to the Project.

        i. Because the California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal.3d 465 (1984), that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over the parties' agreement, it is the Parties' intent to avoid that result by acknowledging, that unless provided for in this Agreement, Developer shall have the right (without obligation) to develop the Property in such order and at such rate and at such times as Developer deems appropriate within the exercise of its subjective business judgment, subject to the terms, requirements and conditions of the Entitlements and this Agreement. Developer will use its best efforts, in accordance with its own business judgment and taking into consideration market conditions and other economic factors influencing Developer's business decision, to commence or to continue development, and to develop the Project in a regular, progressive, and timely manner in accordance with the terms, requirements and conditions of the Entitlements and this Agreement. Nothing in this subsection concerning the expectations set by the Parties for the timing of development in response to *Pardee Construction Co.*

v. City of Camarillo, 37 Cal.3d 465 (1984) is intended, nor shall it be construed, to relieve Developer from any time related requirements set forth in the schedules of performance for specified Project elements, the Subdivision Map Act, the Project Approvals, or the Subsequent Project Approvals.

b. The Parties agree that the terms and conditions in this Agreement, and the Financial Contributions and amenities provided by Developer to the City for this Agreement, were negotiated based upon the specific Project contemplated by the Agreement and in conjunction with housing law in effect at the time of Project approval. In the event the Developer or any Successor(s) seek to utilize additional housing laws adopted by the State of California to alter, amend, or terminate the applicable development standards, approved uses, or the material terms of this Agreement for Planning Areas C1-B, C2-A, S1, C1-C, C2-C or TS as of the Effective Date of this Agreement ("Commercial Block Standards") which were specifically negotiated to ensure the Project in the Isabel Neighborhood Specific Plan Area has the appropriate mix of uses for a complete neighborhood, then the specific changes will be evaluated by the City pursuant to provisions of Section 9(b), regarding Subsequent Approvals for the Project, as set forth therein, to determine whether the changes constitute an Administrative Project Amendment, a Major Project Modification, an amendment to this Agreement, or a new development agreement. If the change in state housing law nonetheless enables revisions to Commercial Block Standards in a manner that eliminates the commercial uses, plazas or affordable housing for those areas, then the Developer or any Successor must still deliver the undelivered commercial tenant spaces, affordable units, and plazas to the City as part of any new development agreement and the City may eliminate its Fee Reduction obligations under Section 8 of Exhibit E, Commercial Uses, for the Planning Area in which such changes are sought.

18. Force Majeure.

a. The Term of this Agreement shall be extended by, and the performance by any Parties of their obligations hereunder (other than for payment of money) shall be excused during, any period of "Force Majeure" as hereinafter defined. "Force Majeure" means a delay caused by any war, insurrection, acts of God, acts of public enemy, labor disputes or strikes, labor or materials shortages or embargoes, pandemic, fire, unusual delay in transportation, earthquakes, floods, tornadoes or extreme wind or other adverse weather conditions not reasonably foreseeable by Developer, third party litigation or referenda against the Project, restrictions imposed by other government agencies that reasonably prevent the Project from going forward, or other similar basis for excused performance not within the reasonable control of the Party, excluding financial inability to perform.

b. An extension of time for Force Majeure shall only be for the period of the delay, which period shall commence to run from the time of the notification of the delay by the Party requesting the extension to the other Party. The Party requesting an extension of time under this Section shall give notice promptly following knowledge of the delay to the other Party. If, however, notice by the Party claiming such

extension is sent to the other Party more than thirty (30) days after knowledge of the commencement of the delay, the period shall commence to run upon the earlier of (i) thirty (30) days prior to the giving of such notice or (ii) the date that the other Party received knowledge of the events giving rise to the delay.

c. The Force Majeure provisions in this Section do not apply to any proceedings with respect to bankruptcy or receivership initiated by or on behalf of Developer or, if not dismissed within ninety (90) days, by any third parties against Developer.

19. Annual Review. Review of the Agreement shall be made annually, consistent with Government Code section 65865.1 and Livermore Development Code Chapter 9.04. If, as a result of an annual review, the City finds and determines, on the basis of substantial evidence, that the Developer or successor in interest thereto has not complied in good faith with the terms or conditions of this Agreement, then the City may amend or terminate this Agreement as set forth in Section 12 and Section 13 of this Agreement, respectively.

a. No later than sixty (60) days before the yearly anniversary of the Effective Date, Developer shall submit to the Director, in a form which the Director may reasonably establish, information demonstrating Developer's compliance with this Agreement. The failure of the Developer to timely submit this document shall be a curable breach.

b. On or before the yearly anniversary of the Effective Date, the Director shall make a determination regarding whether or not Developer has complied in good faith with the provisions and conditions of this Agreement. This determination shall be made in writing with reasonable specificity, any determination of non-compliance must be supported by substantial evidence, and a copy of the determination shall be provided to Developer in a manner prescribed in this Section. The failure of the Director of the City to make a determination on Annual Review shall not be considered a breach of the Agreement.

c. In the event the Director makes a finding and determination of non-compliance, Developer shall be entitled to appeal that determination to the Planning Commission in the manner prescribed by Livermore Development Code Section 9.15.

d. If, as a result of this Annual Review procedure, it is found and determined by the Director if no appeal is taken, or the Planning Commission on appeal, that Developer has not complied in good faith with the provisions and conditions of this Agreement, upon receipt of the notice of default, Developer shall promptly commence to cure the identified default(s) at the earliest reasonable time after receipt of the notice of default and shall complete the cure of such default(s) not later than sixty (60) days after receipt of the notice of default, or such longer period as is reasonably necessary to remedy such default(s), by mutual consent of the City and the Developer, provided that Developer shall continuously and diligently pursue such remedy at all times until such default(s) is cured.

e. If the Director finds and determines that Developer has not cured a default pursuant to this Section, the City may elect to terminate or modify this Agreement pursuant to Sections 12 and 13.

f. Developer shall reimburse the City for its actual costs, reasonably and necessarily incurred, to accomplish the required Annual Review.

20. Notice of Default and Right to Cure. Whenever the City delivers any notice to the Developer of the occurrence of a Developer event of default (a "Cure Notice"), the City shall not exercise any remedy available to it unless and until each of the following have occurred: (a) written notice of the Developer event of default is provided to each and every then-existing holder of record of any Security Financing Interest (each an "Encumbrance Holder") that has notified the City in writing of (i) its interest in receiving such a notice, and (ii) its address for the receipt of such notice; and (b) such Developer event of default remains uncured after the expiration of the applicable cure period set forth in Section 19(d), above. The Cure Notice shall be sent simultaneously with any similar notice or notices of a Developer event of default that the City may be required to provide to Developer in this Agreement. An Encumbrance Holder shall have the right and the power to cure any Developer event of default specified in a Cure Notice within the cure periods set forth in Section 19(d), above, and, if such Developer event of default is so cured, this Agreement shall remain in full force and effect. Nothing contained in this Agreement shall be deemed to permit or authorize such Encumbrance Holder to undertake or continue the construction or completion of the improvements (beyond the extent necessary to conserve or protect such improvements or construction already made) without first having expressly assumed in writing the Developer's obligations to the City under this Agreement. The Encumbrance Holder in that event must agree to complete, in the manner provided in this Agreement, the construction of the improvements. Any such Encumbrance Holder properly completing construction of the improvements pursuant to this section shall assume all rights and obligations of Developer under this Agreement and shall be entitled, upon written request made to the City, to a Certificate of Occupancy from the City.

21. Remedies for Default. If a Party is in default under this Agreement, then the non-defaulting Party may pursue one or more of the following courses of action, after 30 days' written notice to the defaulting Party (or such longer period as may be required to cure the default so long as such defaulting Party commences the cure within such 30 day period and diligently pursues the cure to completion): (a) waive the default; (b) in the City's case, pursue administrative remedies including denial or otherwise withholding issuance of building permits, certificates of occupancy or other approvals; (c) pursue judicial remedies; or (d) terminate this Agreement. Any purported default by a party hereunder shall be subject to, and tolled by, any event of Force Majeure (or any other event or circumstance beyond the reasonable control of the party obligated to perform) which prevents such party from performing the act necessary to avoid or cure such purported default. Any such tolling shall end at the termination of the event of Force Majeure or other event or circumstance.

22. Rights and Remedies Cumulative. Except as otherwise provided, the rights and remedies of the Parties are cumulative, and the exercise or failure to exercise any right or remedy shall not preclude the exercise, at the same time or different times, of any right or remedy for the same default or any other default.

23. No Litigation. There is no existing or, to the Developer's actual knowledge, pending or threatened litigation, suit, action or proceeding before any court or administrative agency affecting the Developer or the Property that would, if adversely determined, materially and

adversely affect the Developer or the Property or the Developer's ability to perform its obligations under this Agreement or to develop the Project.

24. Legal Action. If the City chooses to defend any third party claim or suit challenging any action taken by the City with regard to this Agreement or any procedure or aspect of the City's approval of the development of the Project, including the environmental review process, the Developer in its capacity as either Developer or owner of the Property agrees to reimburse the City for its reasonable attorney's fees, expert witness fees, and related costs as the City may incur in connection with its retention of outside counsel, and for any award of court costs or fees against the City. The City has the right to choose and retain such legal counsel as the City deems appropriate. After expenses reach $100,000, and each $100,000 thereafter, the Parties will confer to review the status of the litigation and their options for proceeding or settling, and they will negotiate in good faith about how the subsequent expenses will be allocated. The Developer in its capacity as the Developer or owner of the Property shall have no obligation to reimburse the City for costs incurred after the date on which the Developer or owner of the Property gives the City written notice of their decision to settle a case, even if the City does not agree to the settlement.

25. Attorney's Fees. In the event any legal action is commenced to interpret or to enforce the terms of this Agreement or to collect damages as a result of any breach thereof, each Party shall bear their own attorneys' fees and no attorneys' fees may be awarded to the Party prevailing in the action.

26. Parties Not Co-Venturers. Nothing in this Agreement is intended to or does establish the Parties as partners, co-venturers, or principal and agent with one another.

27. Notices. The regular and email address of each party for the purpose of all notices permitted or required by this Agreement follows:

To City:
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550
Attention: Community Development Director
Email: bcsmith@livermoreca.gov

With a copy to:
City Attorney
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550
Email: cityattorney@livermoreca.gov

To Developer:
Isabel Portola Owner, LLC
Jim Stringer
1875 Century Park East, Suite 1130
Los Angeles, CA 90067
Email: jimstringer@harridgedevelopmentgroup.com

Isabel Portola Owner, LLC
C/O Harridge Development Company 6363

Brad Woomer
Wilshire Boulevard, Suite 600
Los Angeles, California 90048
Email: Brad@harridgedevelopmentgroup.com

With a copy to: Sblend A. Sblendorio
Hoge, Fenton, Jones, & Appel, Inc.
6801 Koll Center Parkway, Suite 210
Pleasanton, California 94566-77077
Email: sblend.sblendorio@hogefenton.com

The written address of either party set forth above may be changed by written notice given not less than five (5) days prior to the date such change is to be in effect. All notices under this Agreement shall be in writing, shall be properly addressed and shall be sent by personal delivery, United States mail (registered, certified, or Express Mail, return receipt requested and postage prepaid), or by overnight courier delivery service. All such notices shall be considered delivered:

(i) if personally delivered, on the date of delivery; (ii) if sent by United States mail in the manner prescribed above, on the date shown on the return receipt for acceptance or rejection; or (iii) if sent by overnight courier delivery service, on the date of delivery or attempted delivery as shown by the written delivery record of such service.

All notices pursuant to this Agreement shall also be transmitted with an email courtesy copy to be sent at the time the written notice is transmitted by personal delivery, U.S. mail, or overnight courier service, and the email courtesy copy shall be transmitted with a delivery receipt requested.

28. No Third Party Beneficiaries. This Agreement is entered only for the benefit of the Parties executing this Agreement, and their respective successors in interest. This Agreement is not for the benefit of any other individual, entity or person. Nothing herein shall be construed to create any right of any third party to enforce this Agreement or to seek any benefit therefrom.

29. Time Is of the Essence. Time is of the essence for each provision of this Agreement for which time is an element.

30. Survival. Upon termination of this Agreement, the following provisions of this Agreement shall survive: Section 16 (No Damages Relief); Section 17 (Subsequent Legislation); Section 24 (Legal Actions); Section 25 (Attorneys' Fees); and Section 37 (Integration; Tolling Agreement; Entire Understanding of the Parties). This Section 30 exists for reference purposes only, and does not alter the scope or nature of the surviving provisions.

31. Estoppel Certificates. Developer may, at any time, request City to respond in writing: (i) whether this Agreement is in full force and effect; (ii) whether this Agreement has been amended or modified, and if so amended, the nature of any such amendments; or (iii) whether to the best of City's knowledge Developer is in default in the performance of any of its obligations under this Agreement, and if in default, the nature of any such default. City shall endeavor in good faith to respond to any such request within thirty (30) days

following the receipt thereof. Developer shall be entitled to one certificate of compliance per year without any fee being assessed by the City. For any additional certificates of compliance requested in a single year, the City may charge the requesting party a reasonable fee related to the actual cost to prepare the additional certificate. The form for the estoppel certificates shall be in substantially the same form as the form attached hereto as Exhibit G. The Parties acknowledge City's production of an estoppel certificate is an administrative function that may be performed by the City Manager or their designee.

32. Titles and Sections. Any titles of the sections or subsections of this Agreement are inserted for convenience of reference only and shall be disregarded in interpreting any part of its provision. References "Sections" are to sections of this Agreement, unless otherwise specifically provided.

33. Applicable Law. This Agreement is governed by and shall be interpreted under and pursuant to the laws of the State of California.

34. Further Assurances. Each Party hereby agrees to perform, or cause to be done or performed, all such further acts, and shall execute and deliver all such further agreements, certificates, instruments, and documents, as such other Party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement.

35. No Obligation to Build Project. The Parties herein acknowledge that it is their mutual intent to ensure that the Project is commenced and developed promptly and in a commercially reasonable manner, provided, however, that this Agreement confers upon Developer the rights and obligations provided herein, but does not impose the affirmative obligation on Developer to actually commence the construction of the Project; Developer may elect not to commence the construction of the Project, in its sole and absolute discretion, and such election shall not breach this Agreement, but once Developer commences construction on any aspect of the Project, then it must be developed in accordance with this Agreement.

36. Severability. If any term, provision, covenant or condition of this Agreement is held in a final disposition by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall continue in full force and effect, and shall be valid and enforceable to the fullest extent permitted by law, unless the rights and obligations of the Parties have been materially altered or abridged by such invalidation, voiding or unenforceability.

37. Integration; Tolling Agreement; Entire Understanding of the Parties. This Agreement constitutes the entire understanding and agreement of the Parties with respect to Developer's application to develop the Property, except for the Project Entitlements, the development agreement burdening the Property prior to the execution of this Agreement, and the Tolling Agreement executed by the Parties on June 29, 2023 ("Tolling Agreement"). With respect to the Tolling Agreement, this Agreement shall constitute the City's final and unappealable approval for the Alternative Project contemplated by the Tolling Agreement once its approval is beyond the period where it is subject to a timely legal challenge or referendum, and shall thereby give effect to the waivers, releases and discharges of all claims, demands, obligations, liabilities, causes of action, damages, losses, costs, and expenses against the City related in any way to the Preliminary Application, and

Preliminary Project as those terms are defined in the Tolling Agreement. This section is not intended to modify, and shall not be interpreted to modify, any terms and conditions in the Tolling Agreement, but is intended to effectuate the Developer's waivers, releases and discharges in that Tolling Agreement.

38. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have signed this Development Agreement on the dates indicated below.

DEVELOPER
Isabel Portola Owner, LLC,
a Delaware limited liability company

Date: 6/26/24 By: _____
David Schwartzman
Authorized Signatory

CITY OF LIVERMORE

Date: _____ By: _____
Marianna Marysheva,
City Manager

Attest:

_____
City Clerk

Approved as to Form:

_____
Deputy/Assistant/City Attorney

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Los Angeles)

On June 26, 2024 before me, Josie Manlutac Santos, Notary Public
(insert name and title of the officer)

personally appeared David Schwartzman,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

JOSIE MANLUTAC SANTOS
Notary Public - California
Los Angeles County
Commission # 2376607
My Comm. Expires Sep 26, 2025

Signature _____ **(Seal)**

Livermore Isabel Investments, LLC

City of Livermore Community Development Department
Planning Division
City of Livermore
1052 S. Livermore Ave
Livermore, CA 94550 1052
Email: planning@cityoflivermore.net

Re: Letter of Authorization/ Ownership Disclosure

To Whom it May Concern:

Livermore Isabel Investments, LLC owns an 85% Membership Interest in Isabel Portola Investments, LLC, which is the 100% owner of Isabel Portola Holdings, LLC, which is the 100% owner of Isabel Portola Owner, LLC, the Owner of the 45-acre property located at Assessor Parcel Numbers 903-0010-046-00 through 903-0010-054-00 (the "Site") in the City of Livermore, California ("City").

SP Harridge Livermore LLC owns a 15% Membership Interest in Isabel Portola Investments, LLC, which is the 100% owner of Isabel Portola Holdings LLC, which is the 100% owner of Isabel Portola Owner, LLC, the owner of the Property. SP Harridge Livermore LLC is the Managing Member pursuant to the terms of the Operating Agreement, which is defined as" the Member which has been authorized and directed to manage the day-to-day business and affairs of the Company and is authorized to sign on behalf of Isabel Portola Owner, LLC.

The undersigned hereby confirm, acknowledge and agree that David Schwartzman, for the purposes of this application, is an authorized signatory for Isabel Portola Holdings, LLC and its wholly-owned subsidiary Isabel Portola Owner, LLC.

Sincerely,

Livermore Isabel Investments, LLC
By Joshua Peck,
Vice President

Sincerely,

SP Harridge Livermore, LLC
By David Schwartzman
Authorized Signatory

Exhibits:

Exhibit A:	Legal Property Description
Exhibit B:	Development Plans
Exhibit C:	Master Project Infrastructure Timing, Repair and Replacement and Impact Fee Special Provisions
Exhibit D:	Affordable Housing
Exhibit E:	Commercial Uses
Exhibit F:	City Fee Schedule
Exhibit G:	Form of Estoppel Certificate
Exhibit H:	Definitions
Exhibit I:	Fee Creditable Improvements
Exhibit J:	Community Facilities District (CFD) Provisions
Exhibit K:	INSP Figure 2.3, Subarea Diagram
Exhibit L:	Core Vested Regulations
Exhibit M:	Reserved
Exhibit N:	Reserved
Exhibit O:	Affordable Housing Template Agreement
Exhibit P:	Public Art
Exhibit Q:	Financial Contributions
Exhibit R:	Law Enforcement Assets
Exhibit S:	Proposed CFD Eligible Infrastructure

EXHIBIT A

(Legal Description of the Land)

Real property in the City of Livermore, County of Alameda, State of California, described as follows:

PARCELS 1, 2, 3, 4, 5, 6 AND 7, PARCEL MAP 9770, FILED SEPTEMBER 10, 2008 IN BOOK 310, PAGES 3 THROUGH 8, INCLUSIVE, OF MAPS, ALAMEDA COUNTY RECORDS.

EXHIBIT B – Development Plans Placeholder

(Refer to Exhibit C of the Project Resolution - Architectural Plans for full Development Plans)

EXHIBIT C

Master Project Infrastructure Timing, Repair and Replacement and Impact Fee Special Provisions

Introduction

This Exhibit C describes the Developer obligations for the timing and completion of the major project infrastructure for the Project.

Timing and Processing

1. Phase I Project Infrastructure Timing and Sequencing:

    a. *Offsite, Bus Stop, and Bike Lane Improvements.* Shall be completed by the Developer and operational within the following timelines:

        i. Portola/North Canyons/Campus Hill Drive Improvements: All Offsite, Bus Stop, and Bike Lane Improvements located on or adjacent to Portola Avenue/ North Canyons Parkway/Campus Hill Drive shall be completed within twenty-four (24) months of the issuance of improvement plan approvals for such work by the City, subject to Enforced Delay provisions.

        ii. Isabel Avenue Improvements. All Offsite, Bus Stop, and Bike Lane Improvements located on or adjacent to Isabel Avenue shall be completed within forty-eight (48) months of the issuance of improvement plan approvals for such work by the City, subject to Enforced Delay provisions.

    b. *Primary Internal Improvements*. The Primary Internal Improvements shall be completed within sixty (60) months of the commencement of their construction. The Primary Internal Improvements are intended to be constructed by Developer in one continuous phase. For clarity, this time limit is subject to Enforced Delay conditions.

    c. *Caltrans Embankment Master Landscaping*. The Parties recognize that the proposed landscaping work on the California Department of Transportation ("Caltrans") embankment (as depicted in Exhibit I) is dependent upon obtaining Caltrans approval.

        i. Prior to Improvement Plan approval for the Isabel Avenue Improvements as required by the Livermore Development Code and Engineering Plan Check and Procedures Manual, Developer shall engage the City of Livermore and Caltrans for the proposed landscaping work on the Caltrans embankment.

        ii. If, with reasonably diligent efforts, Developer is unable to obtain CA Department of Transportation approval for the work prior to the commencement of construction of the Offsite Improvements, Developer may submit a written request to the Director to be relieved of the obligation, which approval the Director shall not unreasonably withhold.

d. *Campus Hill Drive Bike Lanes*. Prior to Improvement Plan approval, Developer shall submit an engineer's estimate identifying total costs of the north and southbound bike lanes along Campus Hill Drive. Prior to Improvement Plan approval, Director shall determine whether a Class II or Class IV bike lane (as those terms are used in the Livermore Active Transportation Plan) shall be constructed.

e. *Law Enforcement Assets.* Developer or Successor shall install all Perimeter Assets subject to the following:

   i. Perimeter Assets shall be installed within forty-eight (48) months of the issuance of improvement plan approvals by the City, subject to force majeure provisions in the Agreement.

   ii. Perimeter Assets shall connect to the Livermore Police Department's Real Time Awareness Center, as approved by the Director, Police Chief, and Administrative Services Director.

   iii. Perimeter Assets shall be located on City traffic signals, streetlights, or other infrastructure, as approved by the Director, Police Chief, and Administrative Services Director.

f. *Mutual Cooperation.* The Parties recognize that the Developer and another separate project to the east (Shea) are responsible for a range of on and offsite improvements within the public right-of-way along Isabel Avenue and Portola Avenue. In order to promote timely, efficient, and coordinated construction within the public right-of-way, and in order to minimize traffic delays and hazardous roadway conditions, the Developer shall work cooperatively with Shea and the City to coordinate all construction activities within the public right-of-way, to the extent practical.

2. <u>Phase II Project Infrastructure Timing and Sequencing:</u>

a. *Park and Plaza Design*. Developer shall submit Park and Plaza designs no later than the time of the submittal of the Improvement Plans and shall include the information below:

   i. As approved by the Director and LARPD, the Park design plans shall include: a picnic area with tables, barbeques, and a shade structure adjacent to the children's play area; the children's play area shall include a shade structure; and the park shall include design details ensuring appropriate space activation, enclosures, and programming.

   ii. The Parties shall coordinate on the final design of the Neighborhood Park with LARPD, subject to the credit provisions, below.

   iii. Park design shall include a law enforcement camera or cameras connected to the Livermore Police Department's Real Time

   iv. Awareness Center, as approved by the Police Chief, Director, and LARPD.

v. Developer shall work with the City of Livermore and LARPD to incorporate motion-detection lighting in the park, as agreed upon and approved by the Police Chief, Director, and LARPD.

vi. Developer shall work with the City of Livermore and LARPD to explore including stationary outdoor exercise equipment in the park.

b. *Timing of Opening of Neighborhood Park.* The Neighborhood Park (Planning Area N3-B) shall be fully constructed and shall open prior to the Final Building Permit Inspection of Planning Areas N1, N2, N3-A and either C3 or C5.

c. *Timing of the Town Square.* The Town Square (TS) shall be constructed and opened prior to the issuance of the first Certificate of Occupancy for a residential unit in Planning Area S1.

d. *Timing of Pocket Plazas.* The Pocket Plazas (C1-C and C2-C) shall be constructed and open prior to the issuing a Certificate of Occupancy for the first residential unit of the respective adjacent Planning Areas, Planning Areas C2-A and C1-B.

e. *Timing of Temporary Commercial Activation.* The timing for the Temporary Commercial Activation shall be as set forth in Exhibit E.

f. *Primary Internal Streets (Final Lift).* The final lift for Primary Internal Streets shall be completed prior to the first Residential Move-In or Commercial Move-In for the nearest adjacent Planning Area.

g. *Valley Link Access Easement.* Developer shall provide to the City an irrevocable offer of an easement for access and permanent operation for a potential Valley Link Tunnel and Landing Area or Valley Link Overcrossing and Landing Area, on the Final Map, as approved by the Director.

h. *Law Enforcement Assets.* Controllers, cameras, sensors, etc. necessary for monitoring public safety in the Project Area. See Exhibit R for the location of said equipment.

i. All Interior Assets, except Knox Boxes, shall connect to the Livermore Police Department's Real Time Awareness Center, as approved by the Director, Police Chief, and Administrative Services Director.

ii. All Interior Assets, except Knox Boxes, shall be located on City streetlights or other infrastructure, as approved by the Director, Police Chief, and Administrative Services Director.

i. Developer or Successor shall work cooperatively with the Director, Police Chief, and Fire Chief to assess the feasibility of Commercial Block Knox Box installation.

j. *Recreation Facility Access.* The Project's recreation facility (Planning Area N3-C) shall be accessible by any for-sale resident within the Project site, including all for-sale affordable units.

EXHIBIT C

Developer Repair and Replacement Obligation

1. Infrastructure and Improvement Repair. Regarding the Phase I and Phase II Project Infrastructure, if, following the final release of performance bonds by the City for said infrastructure but before completion of the Project, said infrastructure is damaged or destroyed as a result of Project construction activities, the Developer shall ensure such infrastructure is adequately repaired or, if necessary, replaced with like new features that substantially conform to the original work to the reasonable satisfaction of the Director.

2. Master Landscaping Performance. It shall be the sole responsibility of the Developer to ensure all Master Landscaping shall take and thrive. Master Landscaping shall be subject to an 18-month establishment period from initial planting. If any Master Landscaping dies or is identified as unhealthy by a certified arborist or landscape architect within the establishment period, Developer shall take reasonably necessary steps to replace or restore the Master Landscaping, including but not limited to any necessary changes to irrigation, soil, spacing, etc. within six months of notification of such dead or unhealthy Master Landscaping.

Impact Fees

1. Park Fees

    a. *Pocket Plaza Improvements.* Pocket Plaza and the Town Square (Planning Areas C1-C, C2-C, and TS) permanent improvements shall be eligible for Park Fee credits for construction of public improvements. The total credit amount shall be determined by an engineer's estimate prior to Improvement Plan approval, as approved by the Director.

    b. *Neighborhood Park Improvements.* Neighborhood Park (Planning Area N3-B) permanent improvements shall be eligible for Park Fee credits for construction of public improvements. The total credit amount shall be determined by an engineer's estimate prior to Improvement Plan approval, as approved by the Director.

    c. *Neighborhood Park Land.* The Neighborhood Park land (Planning Area N3-B) of 1.5 acres shall be eligible for $2 million in Park Fee credits.

2. Traffic Impact Fees

    a. *Credits.* All infrastructure identified as credit eligible in Exhibit I shall be eligible for City Traffic Impact Fee ("TIF") credits.

    b. *Credit Procedure.* The City shall credit the Developer, or assignee, in accordance with all standards listed in the Traffic Impact Fee on Development section of the Livermore Municipal Code (Chapter 12.30).

    c. *Main Street Reimbursement.* Upon issuance of the final core and shell Certificate of Occupancy for all commercial spaces in either Planning Area C1-B or C2-A, the City shall reimburse the Developer's, or their assignee, Traffic Impact Fees

EXHIBIT C

for all Main Street Improvements, from Gateway Avenue to Street A, in the amount of an engineer's estimate, up to $2.2 million.

EXHIBIT D

Affordable Housing

Introduction

This Exhibit D establishes Developer Obligations for construction of affordable housing within the Project site.

1. Low Income Rental Housing Units (Planning Area S3A)

    a. *Quantity and Location*. The Project shall construct one hundred and fifty two (152) units of "low income" multi-family rental housing units in Planning Area S3A ("**Low Income Housing Units**").

    b. *Affordability Levels*. The units shall be comprised of fifty three (53) units reserved for "Very Low Income Household" rental housing, as the term is defined in Health & Safety Code, Section 50105, and ninety nine (99) units reserved for "Lower Income Household" rental housing, as the term is defined in Health & Safety Code, Section 50079.5 (collectively, "**Low Income Housing Units**"). Said Low Income Housing Units shall be constructed within Planning Area S3A.

    c. *Unit Mix*. The unit mix shall include one-bedroom, two-bedroom, and, three-bedroom units. With respect to three-bedroom units, the Parties recognize and agree that the intent of this Agreement is to include three- bedroom affordable units in Planning Area S3A. However, to maintain flexibility for the purpose of ensuring the proposed affordable units in Planning Area S3A are consistent with the requirements of public affordable housing financing providers' point-system-based competitive application processes while also ensuring the overall economic viability of the Low Income Housing Units, the final unit mix and number of three- bedroom units in Planning Area S3A shall be determined by Developer and/or the Affordable Developer in the manner that maximizes the units' eligibility for earning points for subsidized public affordable housing financing while maintaining economic viability for the Low Income Housing Units. Planning Area S3A shall not contain any age restricted residential units.

    d. *City Concurrence on Affordable Housing Developer*. Developer may elect to transfer Planning Area S3A to or otherwise partner with a third-party affordable housing developer ("**Affordable Developer**") to provide the Low Income Housing Units. However, prior to any such transfer or partnership being finalized, Developer shall obtain the City's prior approval of the Affordable Developer, which shall not be unreasonably withheld, conditioned, delayed or denied, so long as said Affordable Housing Developer makes a reasonable demonstration of relevant experience developing affordable housing and the financial ability to develop the Project's Low Income Housing Units.

    e. *Affordable Housing Timing*. Within twenty-four (24) months of the Effective Date of this Agreement, Developer and/or the Affordable Developer shall have submitted to

the State of California complete applications for tax credit and multifamily housing bond financing for the Low Income Housing Units.

f. *Performance Bond to Fund Low Income Housing Units*. On or before the date upon which the Final Map that includes Planning Area S3A is recorded, Developer shall post in an escrow account the sum of eleven million, four hundred thousand dollars ($11,400,000.00) (the "**Low Income Housing Amount**") in cash ("**Low Income Housing Cash Payment**") or, provided at Developer's sole expense, a performance bond ("**Low Income Housing Bond**") with the City as the obligee and sole beneficiary in the Low Income Housing Amount. The Low Income Housing Amount can be met through a combination of a Low Income Housing Cash Payment and a Low Income Housing Bond, so long as it totals the full Low Income Housing Amount. The Low Income Housing Cash Payment or Low Income Housing Bond shall secure: (i) delivery of fee title of S3-A to the Affordable Developer; (ii) delivery of the S-3A Pad; and (iii) close of escrow by the affordable Developer of Low Income Housing Tax Credit (LIHTC) financing for the final number of Low Income Housing Units to be constructed in Planning Area S3A [(i), (ii) and (iii) above being hereinafter collectively referred to as the "**LIHTC Financing Conditions**"]. The Low Income Housing Bond and escrow instructions shall enable the City to, in its sole and absolute discretion, withdraw the Low Income Housing Cash Payment or put a call on the Low Income Housing Bond for the Low Income Housing Amount no sooner than six (6) years from the Effective Date if Developer has not completed the LIHTC Financing Conditions ("**LIHTC Time Limit**"). In such a case, the Low Income Housing Cash Payment or Low Income Housing Bond funding shall be used by the City to fund the construction of the Project's Low Income Housing Units on Parcel S3-A. The Low Income Housing Cash Payment or Low Income Housing Bond shall be immediately released upon Developer's completion the LIHTC Financing Conditions. For clarity, the six (6) year LIHTC Time Limit is subject to Enforced Delay provisions. The entirety of the Low Income Housing Cash Payment or Low Income Housing Bond in the Low Income Housing Amount is not required to be expended by the City if sufficient low income project financing can be obtained to construct the Project's final permitted number of Low Income Housing Units. The City's release of the Low Income Housing Amount does not remove the Developer's obligation to provide the Low Income Housing units, as described in this exhibit. The Developer, Affordable Developer, and all successors are obligated to ensure the Low Income Housing units are constructed and made available for rent in accordance with this Agreement and the approved Project plans.

g. *Developer Obligations*. Developer meets all *Performance Bond to Fund Low Income Housing Units* requirements under this Agreement for the provision of Low Income Housing Units in Planning Area S3A and shall not be in breach of this Agreement with respect to the same where it either: (1) transfers Planning Area S3A to an Affordable Developer with funding commitments sufficient to construct the final number of approved Low Income Housing Units; or (2) places in an escrow account, consistent with the requirements of this subsection, the Low Income Housing Bond, the Low Income Housing Cash Payment, or a combination thereof, in the full Low Income Housing Amount; and transfers Planning Area S3A in fee title to the City of Livermore, as described in the *Land Ownership Transfer* section below. Developer

has elected to work with a third-party Affordable Developer to provide the Project's Low Income Housing units. The Developer, Affordable Developer, and all successors are obligated to ensure the Low Income Housing units are constructed and made available for rent in accordance with this Agreement and the approved Project plans, as the same may be amended pursuant to this Agreement, as agreed upon by both Parties.

h. *Land Ownership Transfer*. If the LIHTC Time Limit is reached without Developer having met the LIHTC Financing Conditions, the City may, at its own election and in its sole discretion, deliver written notice to Developer stating the City wishes to take ownership of Planning Area S3-A to ensure the construction of the Low Income Housing Units using the Low Income Housing Amount. If, at the time of such written notice is provided by the City, Developer is the fee owner of Planning Area S3-A, Developer shall deed fee ownership of Planning Area S3A to the City at no cost to the City, to enable the City to develop Low Income Housing Units pursuant to the requirements of this Section. If Developer transfers ownership of Planning Area S3A to an Affordable Developer before the LIHTC Time Limit is reached, said transfer shall include a binding commitment and written agreement from the Affordable Developer to agree to take Planning Area S3A subject to the City retaining an extinguishable right of reversion of fee ownership if the LIHTC Time Limit is reached without the LIHTC Financing Conditions having been met. The grounds upon which this reversion right is extinguishable shall only be where said extinguishment is required by a bona fide provider of affordable financing for the Low Income Housing Units, in which case the reversion right shall be permanently and irrevocably extinguished by the City, conditioned upon the closing of affordable financing. Where such extinguishment is required, either Developer or the Affordable Developer shall deliver to the City a letter from said provider of affordable housing financing indicating it is requiring extinguishment of the reversion right herein, wherein the City shall promptly – but in no case more than ten (10) business days of receipt of said letter – deliver to Developer or the Affordable Developer written confirmation that its right of reversion is permanently waived and extinguished pursuant to the terms of this provision conditioned upon the closing of the affordable housing financing.

   i. *Clean Title*. For any transfer to the City of ownership of Planning Area S3A under this provision, title shall be delivered free of liens, loans, notes, taxes, and other encumbrances, except for: (1) any easements, encumbrances and exceptions depicted on the Final Map; (2) any easements for utilities, storm drains or other flood control devices or conveyances; and (3) any other easements or encumbrances expressly agreed to by the City.

i. *Cooperation*. The Parties covenant and agree to cooperate with one another to help achieve the key purpose of this Agreement that Developer and/or the Affordable Developer to obtain affordable housing financing for the Low Income Housing Units and to execute and deliver to the other all such other and further instruments and documents as may be necessary to carry out this purpose, which may include, without limitation, the City issuing a formal written release of its reversionary ownership rights hereunder in connection with the closing of affordable project financing by

EXHIBIT D
Affordable Housing

Developer and/or the Affordable Housing Developer.

2. Moderate/Median Income Rental Housing

a. *Moderate Income Housing in Planning Area C1-B.* The Project shall construct one hundred and fourteen (114) units of "median and moderate income" multi-family rental housing units, which shall be comprised of fifty- seven (57) units reserved for "persons and families of moderate income," as the term is defined in Health & Safety Code, Section 50093(b) [120% area median income ("**AMI**") level] ("**Moderate Income Rental Units**"), and fifty-seven (57) units reserved for "persons and families of median income," as the term is defined in Health & Safety Code, Section 50093(c) [100% AMI level] ("**Median Income Rental Units**"), all of which are to be constructed in Planning Area C1-B.

b. *Unit Mix*. The unit mix for Moderate and Median Income Rental Units in Planning Area C-1B stated herein shall include one, two, and three bedroom units. The mix shall be 25 percent 3-bedroom units, 25 percent 2-bedroom units, 25 percent 1-bedroom units, and 25 percent studio units. An equal quantity of Median and Moderate Income Rental units shall be provided for each bedroom type, and any fractional units shall be apportioned to the Median category.

c. *Timing Requirements*. The timing requirements for the provision of Moderate and Median Income Rental Units in Planning Area C1-B of the Project is as set forth in Exhibit C.

3. Inclusionary Housing in Planning Area S3-B

a. The Project shall construct forty (40) units of affordable multi-family rental housing units consistent with the Affordable Housing requirements under Section 10.06.050-A.1.c.2 of the Livermore Development Code, as the same is in effect on the Effective Date**,** all of which are to be constructed in Planning Area S3-B. Said total comprises twenty percent (20%) of the planned 200 rental housing units in Planning Area S3-B.

b. *Unit Mix.* The inclusionary housing units in Planning Area S3-B shall consist of one and two bedroom units consistent with the units sizes and product types indicated for Planning Area S3-B on Exhibit B. However, if any three bedroom units are built in Planning Area S3-B, a proportionate number of such units shall be included as inclusionary housing units consistent with the unit size limitations set forth in Exhibit B.

4. Moderate/Median Income For-Sale Housing

a. *For-Sale Affordable Units In Planning Area S1*. The Project shall provide a total of twenty (20) for-sale affordable units, which shall be comprised of fifteen (15) units for "persons and families of moderate income," as the term is defined in Health & Safety Code, Section 50093(b) [120% AMI level] ("**Moderate Income For-Sale Units**"), and five (5) units reserved for "persons and families of median income," as

the term is defined in Health & Safety Code, Section 50093(c) [100% AMI level] ("**Median Income For- Sale Units**") in Planning Area S1.

i. *Unit Mix*. The affordable unit mix shall match the market-rate unit mix. The same proportion of one- two- and three-bedroom units shall be apportioned to market-rate and affordable units. If two-and- three-bedroom affordable units are provided, Developer may select which of the market-rate two-and-three-bedroom units are designated as affordable units in Planning Area S1. All affordable units must represent a unit type that is also sold as market-rate and must be adequately dispersed around the Planning Area, as determined by the Director.

b. *For-Sale Affordable Units In Planning Area C2-A.* The Project shall provide a total of fifteen (15) for-sale affordable units, which shall be comprised of eleven (11) Moderate Income For-Sale Units, and four (4) Median Income For-Sale Units, all of which are to be constructed in Planning Area C2-A.

i. *Unit Mix*. The affordable unit mix shall match the market-rate unit mix. The same proportion of one- two- and three-bedroom units shall be apportioned to market-rate and affordable units. If two-and- three-bedroom affordable units are provided, Developer may select which of the market-rate two-and-three-bedroom units are designated as affordable units in Planning Area C2-A. All affordable units must represent a unit type that is also sold as market-rate and must be adequately dispersed around the Planning Area, as determined by the Director.

c. *For-Sale Affordable Units In Planning Area S4.* The Project shall provide a total of ten (10) for-sale affordable units, which shall be comprised of seven (7) Moderate Income For-Sale Units, and three (3) Median Income For-Sale Units, all of which are to be constructed in Planning Area S4.

i. *Unit Mix*. The affordable unit mix shall match the market-rate unit mix. The same proportion of one- two- and three-bedroom units shall be apportioned to market-rate and affordable units If two-and-three-bedroom affordable units are provided, Developer may select which of the market- rate two-and-three-bedroom units are designated as affordable units in Planning Area S4. All affordable units must represent a unit type that is also sold as market-rate and must be adequately dispersed around the Planning Area, as determined by the Director.

d. *Affordable Unit Maximum Sale and Rent Prices*. The City shall establish the maximum sales and rent prices for the Project's for-sale and for-rent affordable units, in accordance with applicable City ordinances and policies and applicable state and federal law and policy on an annual basis, except that all rents and sales prices for units receiving state tax credit shall be established by state standards.

5. Additional Affordable Units:

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Affordable Housing

a. *Developer will provide an additional* twelve (12) Moderate and Median Income For-Sale Units within Planning Areas S1 or C2-A ("Additional Affordable Units").

b. *Affordability Levels*. The Additional Affordable Units shall be comprised of six (6) Moderate Income For-Sale Units, and six (6) Median Income For- Sale Units.

c. *Unit Mix*. The Additional Affordable Units shall all be the smallest three- bedroom unit types available in Planning Areas S1 or C2-A.

6. Compliance with Inclusionary Ordinance and Specific Plan. Except as allowed by this Agreement and the Project Approvals, Project shall fully conform to the City's Inclusionary Housing Ordinance (Livermore Development Code Section 10.06.050) and INSP affordable housing policies, including with respect to security, the Low-Income Housing Agreement, monitoring, restriction, alternative means of compliance, and enforcement. Nothing in this Agreement shall preclude the City from enforcing the applicable provisions of the Inclusionary Housing Ordinance, the Low-Income Housing Agreement, and INSP policies related to affordable housing.

7. Low Income Housing Agreement. Prior to issuance of building permits on any Planning Area upon which Affordable Housing is to be constructed, the City and Developer shall enter into an Affordable Housing Agreement which shall detail Affordable Housing requirements for the Project and be consistent with the requirements of this Agreement, which Affordable Housing Agreement shall be substantially consistent with the City's standard form of agreement attached hereto as Exhibit O, as said standard form agreement may be amended by the City from time to time. In addition to any other revisions agreed to by the Parties, the Affordable Housing Agreement shall include additional provisions stating that the City may pre-approve certain Affordable Developers for the Project. The Low-Income Housing Agreement shall be recorded separately from this Agreement.

EXHIBIT E

Commercial Uses

Introduction

This Exhibit E describes the Developer obligations for the timing and completion of the commercial uses for the Project.

Timing and Processing

1. Commercial and Residential Construction/Linkage

    a. *Planning Areas C1A and C1B.* Building Permits shall not be issued for Planning Area C1A until building permits have been issued and impact fees have been paid for Planning Area C1B.

    b. *Planning Areas C2A and C2B.* Building Permits shall not be issued for Planning Area C2B until building permits have been issued and impact fees have been paid for Planning Area C2A.

    c. *Planning Areas S1 and S2.* Building permits for more than forty-two (42) residential dwelling units in Planning Area S2 shall not be issued until building permits have been issued and impact fees have been paid for Planning Area S1.

2. Occupancy of Planning Area S1

    a. Developer shall be required to make all reasonable efforts to enter into a long-term lease agreement with a Permanent Commercial Grocer or Food Hall in the Retail Market portion of Planning Area S1, as shown in Exhibit B (Development Plans), within 24 months of S1 Certificate of Occupancy issuance.

    b. Until a long-term lease agreement is secured, temporary interim uses shall be allowed in the Retail Market portion of Planning Area S1 through Temporary Use Permits, as described in Livermore Development Code Chapter 9.09, or as amended, and as approved by the Director. The temporary uses shall have the following characteristics, as determined by the Director:

        i. Shall be allowed in the subject zone; and

        ii. Shall be of a neighborhood serving character (e.g. food service, entertainment, etc.).

    c. If the Developer is not able to secure a long-term lease with a Permanent Commercial Grocer or Food Hall within such 24 months, Developer may lease the Retail Market portion of Planning Area S1 to any food based use (either fresh or prepared food), provided that a minimum of 25% of the floor area is reserved for fresh food retail

use, unless otherwise approved in writing by the Director.

3. Temporary Commercial Activation

a. *Plan Approval*. Prior to Final Occupancy of the Project's 50th residential dwelling unit, Developer shall submit a site plan and management plan that identify locations, sizes, uses, operations and maintenance of all Temporary Commercial Activation uses. The plans shall be approved in writing by the Director.

b. *Pad Construction.* As described in Exhibit C (Master Infrastructure), the Temporary Commercial Activation site shall be constructed prior to issuance of the Project's first residential dwelling unit Building Permit.

c. *Location*. The Temporary Commercial Activation site shall be located on one of the Project's Commercial Blocks. If a Commercial Block with the Temporary Commercial Activation Site is to be developed, the Temporary Commercial Activation site shall be relocated to a vacant Commercial Block, at Developer's discretion, or another location agreed to by the Parties, until the limit established in the *Period of Operation* section is reached.

d. *Timing*. Prior to issuance of a building permit for the Project's 195th residential dwelling unit, the Temporary Commercial Activation site shall be operational and open to the public.

e. *Period of Operation*. Unless otherwise approved by the City, Temporary Commercial Activation shall remain in operation until a building permit is issued for the third of the Project's three Commercial Blocks, or as otherwise agreed to by the Developer and Director in writing.

f. *Operations and Management.*

i. The Developer or its management entity shall be responsible for tenanting, leasing, and managing all temporary commercial operators on the Temporary Commercial Activation site, as approved by the Director.

ii. The Developer or its management entity shall ensure the Temporary Commercial Activation site is publicly accessible and operational a minimum of two days a week on average throughout the year, as determined by the Director.

iii. Developer or its management entity shall ensure the Temporary Commercial Activation site remains in good condition at all times and that sufficient facilities are provided to ensure proper site function to facilitate commercial activity and use by the public (e.g. parking, trash, restrooms, seating areas, etc.).

g. *Leases*. All Temporary Commercial Activation site operators herein will be required to enter into commercial leases with Developer or its management entity on terms reasonably satisfactory to Developer or its management entity, which shall include

standard commercial lease terms including, without limitation, permitted use restrictions, tenant improvement and permitting requirements, repair and maintenance requirements, casualty provisions, insurance requirements, common area maintenance expenses, and time, place and manner restrictions, among other standard commercial lease terms for temporary leases for similar uses in similar locations. In Developer's sole and absolute discretion, if the Temporary Commercial Activation site operator is a commercial retail operation providing goods or services to the community, the Temporary Commercial Activation site operator may be provided a base rent of zero, and Developer or its management entity may instead accept rent as a commercially reasonable percentage of monthly gross receipts.

h. *Vacancy and Rent.* If the Developer cannot find rent-paying commercial operators for the Temporary Activation site and the Temporary Commercial Activation site is vacant for more than three months, use of the site shall be offered rent free or otherwise with a base rent of zero until such time as suitable rent paying tenants can be identified.

4. Main Street and Gateway Avenue Ground Floor Uses.

a. *Non-Commercial Uses*. The following uses shall be permitted in up to 50 percent of Main Street and Gateway Avenue ground floor tenant spaces (Planning Areas C1-B, C2-A, an S1), excluding the S1 Retail Market space of 18,500 square feet as described in Exhibit B (Development Plans):

i. Flexible Co-Workspace Uses, as defined in this Agreement and as amended;

ii. Public and Quasi Public Uses, as defined in the Livermore Development Code, as amended; and

iii. Office Core uses, as defined in the Isabel Neighborhood Specific Plan, as amended.

b. *Restaurant and Retail Uses*. At least 75 percent of all tenant spaces directly fronting onto the public plazas (Planning Areas C1-C, C2-C, and TS) shall be occupied with restaurant, retail and related uses, as determined by the Director and as allowed in the Ground Floor Retail/ Overlay Flex Space and Office Core zones.

c. *Public and Quasi Public Dedication*. Upon written request of the City, the Developer shall dedicate the northern-most ground floor tenant space not to exceed 3,000 gross square feet unless agreed to in writing by Developer in Planning Area C2-A to public/ quasi-public uses, to include but not limited to: a public library, art space, police substation, bike share facility, etc. Compensation for the Public and Quasi Public tenant space and any required tenant improvements shall be negotiated in good faith between the Parties prior to the City occupying the tenant space. Compensation may include art fee contributions, or other compensation as agreed upon mutually by the Director and the Developer.

5. The Parties recognize that the successful permanent and temporary use of the commercial component of Planning Area S1 and the temporary activation of the Commercial Blocks

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Commercial Uses

depends on the Developer's ability and on the City's support to attract and enter into permanent and temporary leases with reputable, desirable Permanent Commercial Grocers, Temporary Commercial Operators, and Temporary Commercial Activation uses.

6. Mutual Cooperation. The Parties will work cooperatively to: meet regularly with prospective tenants, leasing agents, brokers, vendors, and coordinators; establish timelines for permit and document review and submittal; and will collaboratively provide for a positive environment to attract permanent and temporary commercial uses to the Project.

7. Operations of Pocket Plazas

    a. *The Pocket Plazas* (Planning Areas C1-C and C2-C) and the Town Square (Planning Area TS) shall be operated and maintained by the owner or tenant of the respective adjacent Planning Areas, Planning Areas C1-B, C2-A, and S1, or in accordance with another arrangement approved by the Director.

8. Fee Reductions

    a. *Downtown Traffic Impact Fee Rate Reduction.* The Project creates a walkable, dense, compact mixed-use commercial Gateway and Main Street core (Planning Areas C1B, C2A, and S1), which is similar to a downtown environment and lessens the traffic impact on the City. Therefore the Developer may obtain reimbursement of the Project's City Traffic Impact Fees ("TIF") in the amount of the difference between the applicable standard citywide TIF rates and the reduced Downtown TIF rates for said fees ("Downtown Fee Rate Reduction") upon the performance of the mixed-use Planning Areas. This strategy reduces TIF from the citywide rate to the Downtown Rate when a complete neighborhood with mix of uses is completed and operational.

    Payment of Citywide TIF and reimbursement shall occur as follows:

        i. At time of building permit issuance for residential units and non- residential spaces, the developer shall pay citywide TIF rate.

        ii. Once the final core and shell Certificate of Occupancy for commercial areas is issued for the first Commercial Block, the City shall reimburse the developer, or their assignee, 50% of the difference between the citywide TIF rate and the Downtown TIF rate, collected to date.

        iii. Once the final core and shell Certificate of Occupancy for commercial areas is issued for the second Commercial Block, the City shall reimburse the developer the remaining difference between the citywide TIF rate and the Downtown TIF rate, collected to date.

        iv. After the final core and shell Certificate of Occupancy for commercial areas is issued for the second Commercial Block, the Developer shall pay the Downtown TIF rate.

        v. The TIF fee shall be collected at time of building permit issuance. Fees for

which credits or reimbursement are provided pursuant to this provision shall not be included in the Project Community Facilities District (Exhibit J).

vi. The City shall retain all interest earned on TIF fees collected up until the time of reimbursement. All interest earned shall be committed to TIF related expenditures.

b. *Transferrable Development Credit ("TDC") in-lieu fees.* The NLUGB Initiative (Initiative) establishes a Transferable Development Credit program which assigns credits to property owners in North Livermore, which may be used within the Urban Growth Boundary ("UGB") to increase allowable development elsewhere in the City.

The purpose of Initiative (Section 1) is to (among other items) prevent further sprawl, reduce traffic congestion and hazards, limit air pollution, and avoid government expenditures for extended facilities and services.

The Initiative finds (Section 2h) that more compact, properly planned residential development lowers housing and other living costs; and reduces the costs of public facilities and services, especially where infrastructure is available.

The Initiative acknowledges the necessity to provide housing beyond the UGB and authorizes Council to approve housing beyond the UGB to meet state housing requirements (Section 4c). The Initiative states (Section 20b) that development credits may be used, as the City Council approves in accordance with the General Plan and other City regulations, in areas within the City boundary and Urban Growth Boundary to build dwelling units and commercial and industrial space, including space that otherwise would not be permitted or not permitted until a later time. Additionally, with reasonable justification, the Council may permit more development per credit in some receiving areas and for certain types of uses.

The 2022 Housing Element of the Livermore General Plan identifies the Project Site in the Housing Sites Inventory and states a majority of the 6th cycle regional housing allocations (4,570 units) will be constructed in the Isabel Neighborhood. Falling short of the estimated number of units will require the City to identify additional housing locations due to no net loss obligations and potentially require identifying sites outside of the UGB. The Livermore General Plan states the TDC requirements in a specific plan area, if any, shall be set forth in the specific plan for that area.

Specific Plan policy P-IMP-6: Transferable Development Credit (TDC) regulations shall be applied to the Specific Plan consistent with Livermore Development Code. Modifications to the TDC program may be made through a Development Agreement on a project-specific basis as recommended by the Director and approved by City Council if such modifications are shown to be necessary to meet Specific Plan goals.

The Livermore Municipal Code establishes a TDC in-lieu fee whereby development can choose to pay a fee for units constructed above baseline density rather than acquiring land in North Livermore. The in-lieu fee is adjusted based on density range and product type ranging from 1.5 credits for single family units to 1/2 credit for

multi-family units.

Further, section 4.02.60(D)(4) of the LDC authorizes the Council to, through the adoption of a specific plan and implemented consistently by development agreement, make modifications to the transferable development credits regulations to meet the specific plan's density, design policies, and goals that are not inconsistent with the transferable development credit program.

The Project proposes the highest densities on each mixed-use "**Commercial Block**" (Planning Areas C1B, C2A, and S1). Given such densities, the Parties find the following:

i. Under today's market conditions, constructing at these densities along with commercial uses can be challenging;

ii. The Commercial Block densities are critical in supporting the City's overall housing goals and in helping the City meet its 6th Cycle RHNA obligations;

iii. The mixed-use Commercial Blocks create more compact and dense development within the Urban Growth Boundary, preventing sprawl, reducing traffic congestion and hazards, limiting air pollution, and avoiding government expenditures for extended facilities and services, as contemplated by the Initiative; and

iv. The Commercial Blocks' density ranges, mix of uses, and proximity to future transit warrant a higher level of development per credit than other areas in the City.

The higher density of development per credit shall only be assessed once the Commercial Blocks are built, consistent with the provisions of this agreement. Therefore, consistent with the Initiative, General Plan, Specific Plan, and Livermore Municipal and Development Codes, the parties agree to modify the TDC program as follows:

i. At time of Master Final Map, Developer shall pay Transfer Development Credit in-lieu fees for all units proposed as part of the Project. The Project is comprised of a range of multifamily product types and subject to a fee equivalent of 1/2 TDC credit per unit.

ii. The City shall reimburse the developer 7/16 credit per unit within each individual Commercial Block if the following performance triggers are met (this credit is based on the density range for the mixed-use Commercial Blocks):

    a. A Building Permit is issued for a Commercial Block within 7 years of the effective date of this agreement.

        1. The Director may permit reimbursement beyond 7 years if the

EXHIBIT E
Commercial Uses

Project shows significant and substantial progress towards completion, as determined by the Director.

b. The density of the Commercial Blocks as a whole meets all other requirements of this Agreement, including Section 9(b)(v) related to unit reductions.

iii. The City shall retain all interest earned on TDC fees collected up until the time of reimbursement in the City's TDC Fund.

CITY OF LIVERMORE COMMUNITY DEVELOPMENT DEPARTMENT

EXHIBIT F

DEVELOPMENT IMPACT AND CONNECTION FEES

EXHIBIT B

TYPE OF FEE	CITY CODE AND RESOLUTION	WHEN PAYABLE	AMOUNT OF FEE
City Storm Drainage	Title 13.44.020,050,100 Ord. 1923 Reso. 2010-177	With Building Permit	$0.54/SF Impervious Surface
County Storm Drainage Building Zone 7	ACFC & WCD Co. Ord. 0-2010-001 Reso. R-2001-4	With Building Permit	$1.00/SF Impervious Surface
County Storm Drainage Public Improvements e.g. streets, sidewalks, trails, etc.	ACFC & WCD Co. Ord. 0-2010-001 Reso. R-2001-4	With filing of Final Map or approval of Improvement Plans	$1.00/SF Impervious Surface
County Storm Drainage - Capital Improvements	ACFC & WCD Co. Ord. 0-2010-001 Reso. R-2001-4	With award of contract	$1.00/SF Impervious Surface
Sanitary Sewer Connection	Title 13.28.050 Ord. 1740 Reso. 2010-177	With Building Permit	**See Attached Exhibit "A"**
Park Land Dedication	Title18.32.020 Ord. 1744 Reso. 2004-259	Concurrently with, or before the filing of the first parcel or final map	The City may approve a credit against the Park Facilities Fee for park land dedication made under LMC 18.32.020. The credit may not exceed the value of the dedication requirement. See LMC 12.60.070 for credit details N/A for Non-Residential
Park Facilities Fee	Title 12.60 Ord. 1743 Reso. 2005-152	With Building Permit	**See Attached Exhibit "B"**
City Water Connection (1)	Title 13.20.020 Ord. 1507 Reso. 2010-177	With Building Permit	5/8" $5,340 3/4" $8,009 1" $13,349 1-1/2" $26,698 2" $42,717 Price per User for Meter Size, FOR LARGER METERS, INQUIRE
Alameda County Water Connection Zone 7	Ord. FC 72-1 as amended by FC-96-1792 and updated 10-20-10	With Building Permit **See Zone 7 Attachment**	5/8" $34,530 3/4" $51,795 1" $86,325 Price per User for Meter Size, FOR LARGER METERS, INQUIRE
In-Lieu Low Income Housing Fee (Residential) For Sale & Neighborhood Plan Areas	Title 3.26 Reso. 2021-181 Ord. 1988 and 1989	With Building Permit	$39.94/SF for all residential housing developments 10 units or less. Projects more than 10 units are subject to must-build requirement of ordinance. Rental projects 10 units or less are exempt from In-Lieu. Effective 7/28/21, on-site requirement applies for 11+unit projects.
Low Income Housing Impact Fee (Commercial and Industrial)	Title 3.26 Reso. 99-18 Ord. 1549	With Building Permit	**Commercial** / **Unit** / **KSF Fee per Unit** Retail Commercial / KSF / $1,935 Discount/Service Retail / KSF / $1,457 Office Commercial / KSF / $1,243 Hotels/Motels / Room / $949 **Industrial** Manufacturing / KSF / $597 Warehouse/Storage / KSF / $173 Business/Commercial Park / KSF / $1,234 Industrial, High Intensity / KSF / $612 Industrial, Low Intensity / KSF / $387

(1) Areas within the California Water Service Area do not pay a City water connection fee. Areas within the Greenville/Vasco Assessment District or within Triad Park do not pay a City water connection fee. The fee for a single family residential unit is the 5/8 inch meter fee.

(2) All projects within the Downtown Specific Plan are subject to both City Wide General Plan & Downtown Specific Plan cost recovery. Any project that paid planning entitlement fees prior to July 27, 2008 is not subject to this fee, regardless of when they pull building permits.

NOTE: Subject to adjustment each year per Construction Cost Index

NOTE: No impact fees can be charged for ADUs less than 750 square feet. Impact fees allowed for ADUs 750 square feet or larger but shall be charged proportionately in relation to square footage of the primary dwelling.

EXHIBIT F

CITY OF LIVERMORE COMMUNITY DEVELOPMENT DEPARTMENT

DEVELOPMENT IMPACT AND CONNECTION FEES

EXHIBIT B

TYPE OF FEE	CITY CODE AND RESOLUTION	WHEN PAYABLE	AMOUNT OF FEE
Traffic Impact Fee **NOTE:** If special Assessment District exists, special calculations are required	For info regarding the appropriate development categories see Section 12.30 of the City of Livermore Municipal Code Reso 2005-151 Ord. 1742	With Building Permit	**See Attached Exhibit "C"**
Tri-Valley Transportation Development (TVTD) Fee See Attached Annual Adjustment to TVTD Fee	Title 12.24.050 Ord. 2012 Reso. 2014-184 *Reso 2015-01 **Reso 2019-03	With Building Permit	Residential — Fee Per Unit Single family — $5,057.00 Multi-family — $3,484.00 Affordable Housing* — $0.00 ADU/SDU** — $0.00 Non Residential — Per KSF Retail — $3,740.00 Office — $8,590.00 Industrial — $5,000.00 Average Peak Hour Trip Other — $5,620.00

SCHOOL IMPACT FEES:

The City of Livermore collects School Mitigation Development Fees (school fees) on behalf of the Livermore Valley Joint Unified School District. The fees must be paid for by cash or a check made out to the City of Livermore. Fees are due upon issuance of a qualifying building permit.
See Attached Exhibit "D"

SOCIAL / HUMAN SERVICES FACILITY

Social/Human Services Facility Fee	Title 12.70 Ord. 1851	With Building Permit	**See Attached Exhibit "E"**

ART IN PUBLIC PLACES

Art in Public Places Fee (Development)	Ord. 1836 Title 12.51	0.33% of total project valuation
Public Art Enrichment (CIPs)	Ord. 2065 Title 12.50	1.0% of total project valuation

DOWNTOWN SPECIFIC PLAN DEVELOPMENT FEES

TYPE OF FEE	CITY RESOLUTION	AMOUNT OF FEE
In-Lieu Payment for Public Open Space	Resolution 2005-041	$50 per square foot of required open space
In-Lieu Parking Fee	Resolution 2017-006	$22,890.31
Downtown Revitalization Fee	Title 12.32	Residential — Fee Per Unit Dwelling Unit — $6,988 Non Residential (6) — Per SF Retail/Office — $21.53

SOUTH LIVERMORE VALLEY SPECIFIC PLAN DEVELOPMENT FEES (1)

TYPE OF FEE	CITY CODE AND RESOLUTION	FEE PER RESIDENTIAL UNIT
Plan preparation fee	Resolution 2003-114	$1,706
Recycled water fee	Resolution 98-175	20% of the current Alameda County Water Connection Fee
Major attraction fee	Resolution 2003-114	$1,562
South Livermore Road Improvement fee	Resolution 2003-114	$13,229

City Wide - Transferrable Development Credits (TDC) Program In-Lieu Fee
Ordinance 1979, Development Code Section 4.02.06D

1.5 Credits per single-family detached dwelling, in excess of baseline density within a density range of 1-7 du/acre, 1.25 credits per single family detached dwelling in excess of baseline density within a density range of 8-14 du/acre and 1/2 credit per multi-family attached dwelling - Current In-Lieu credit is $16,352.31. TDC Ordinance does not apply to residential projects in Downtown Specific Plan, affordable units covered by an agreement and residential projects that have received housing units through the City's Housing Implementation Program (HIP).

(1) Areas within the California Water Service Area do not pay a City water connection fee. Areas within the Greenville/Vasco Assessment District or within Triad Park do not pay a City water connection fee. The fee for a single family residential unit is the 5/8 inch meter fee.

(2) All projects within the Downtown Specific Plan are subject to both City Wide General Plan & Downtown Specific Plan cost recovery. Any project that paid planning entitlement fees prior to July 27, 2008 is not subject to this fee, regardless of when they pull building permits.

NOTE: Subject to adjustment each year per Construction Cost Index

NOTE: No impact fees can be charged for ADUs less than 750 square feet. Impact fees allowed for ADUs 750 square feet or larger but shall be charged proportionately in relation to square footage of the primary dwelling.

CITY OF LIVERMORE
COMMUNITY DEVELOPMENT DEPARTMENT

EXHIBIT F

EXHIBIT B

EXHIBIT A
Wastewater Connection Fee Schedule
(fees Calculated from base year)

User Classification	Avg Daily Wastewater Flow Factor Gallons Per Day/Unit	Unit[1]	Cost Per GPD	Cost Per Unit
Residential (BOD & SS = 285 mg/L)				
Single-family residential	180	House	$44.26	$7,966.31
Multi-family residential				
Studio	95	Residential Unit	$44.26	$4,204.44
One Bedroom	107	Residential Unit	$44.26	$4,735.53
Two Bedroom	138	Residential Unit	$44.26	$6,107.50
Three Bedroom	157	Residential Unit	$44.26	$6,948.39
Four Bedroom	180	Residential Unit	$44.26	$7,966.31
Commercial (BOD & SS = 285 mg/L unless otherwise shown)				
Auto repair shops/Auto dealers	0.11	Square Foot of Bldg	$44.26	$4.87
Assembly Facilities[2]	0.15	Square Foot of Bldg	$44.26	$6.64
Eating drinking facilities w/o cooking	0.35	Square Foot of Bldg	$44.26	$15.49
Gas Stations	0.47	Square Foot of Bldg	$44.26	$20.80
General Use	0.04	Square Foot of Bldg	$44.26	$1.77
Gyms, Health Clubs	0.30	Square Foot of Bldg	$44.26	$13.28
Hotels, Motels (excluding dining facilities)	0.15	Square Foot of Bldg	$44.26	$6.64
Markets	0.19	Square Foot of Bldg	$44.26	$8.41
Mixed Use[3]	0.10	Square Foot of Bldg	$44.26	$4.43
Medical/Dental Office/ Clinic	0.22	Square Foot of Bldg	$44.26	$9.74
Restaurants (1,000 mg/L BOD, 600 mg/L SS)	0.55	Square Foot of Bldg	$65.22	$35.87
Warehouse/Distribution	0.01	Square Foot of Bldg	$44.26	$0.44
Industrial/Other (Other Wastewater Customers Not Listed Above)				
Calculate Case-by-Case Based on Actual Flows/Strengths and Following Rates				
Connection Fee = (F x "Flow") + (B x "BOD") + (S x "SS")				
F = Flow cost $/gpd $34.28				
B = BOD cost $/lb-day $2,981.54				
S = SS cost $/lb-day $1,213.68				
discharge				
flow, in				
"BOD" = The				
"SS" = The				

Governing Municipal Code Section: 13.28.050
Index Used: ENR 20- City Construction Cost Index

Indices:	*Base Year* (A)	*Previous Fee Update* (B)	*Current Fee Update* (C)	*% Change Previous Update to Current Update* (D) =(C/B)-1
Index Date	May-10	Jun-22	Jun-23	
Index Value	8,761.47	13,110.50	13,229.57	0.91%

Discussion:

The base year unit fees for Flow, BOD, and SS were determined in the March 2010 Wastewater, Water, Storm Drain Connection Fee Study for Expansion of Sanitary Sewer, Water Reclamation Plant, and Wastewater Disposal Facilities prepared for the City of Livermore by Craig R. Lawson Utility Management Consultant.

Notes:

1. Building square footage means the square footage sum of the floor area at each floor level included with the surrounding principal outside faces of exterior walls of a building or portions thereof, including mezzanines and lobbies. It does not include floor area devoted to vehicle parking, necessary interior driveways and ramps. The gross floor area of a building or portions thereof that doesn't have surrounding exterior walls shall include the usable area under the horizontal projection of the roof or floor above.

2. Theaters can alternately estimate daily flow based on 2 gallons per seat ($87.72 per seat)

3. Mixed Use applies to parcels with Mixed Use zoning in the Downtown Core District and in the INSP.

4. This value is based by formula on BOD

6. Adjustments. The city council may, by resolution, adjust the fee schedule, including the flow factors, from time to time. Once the fee is established, it shall automatically be increased annually based upon the Engineering News Record (ENR) 20- City construction Cost Index. In calculating the adjustment, the rate (in each use category, including the flow, BOD and SS costs) for the base year is multiplied by the index for the then-current year, divided by the base year index.

EXHIBIT B
Park Facilities Fee Schedule

LAND USE	TOTAL FEE
Residential (per dwelling unit)	
Single Family (& 4 bedroom multi-family)	$25,065
Multi-Family 3 bedrooms	$21,809
Multi-Family 2 bedrooms	$19,220
Multi-Family 1 bedroom	$14,872
Multi-Family Studio	$13,288
Senior Housing	$4,265
Non-Residential (per 1,000 sq ft)	
Commercial	$3,178
Office	$4,544
Industrial	$2,113
Warehouse	$1,587

Source - Park Facilities Fee Study (2004) Table 8; MuniFinancial

EXHIBIT C

Traffic Impact Fees Schedule

Land Uses	Units of Use	Fee Rates
Citywide Except Downtown		
Residential		
Single-Family	d.u.	$11,869
Multi-Family		
Studio	d.u.	$5,531
1 Bedroom	d.u.	$6,193
2 Bedroom	d.u.	$8,002
3 or more Bedroom	d.u.	$9,358
Senior Housing	d.u.	$3,642
Commercial	K s.f.	$32,235
Office	K s.f.	$20,636
Industrial	K s.f.	$12,812
Warehouse	K s.f.	$6,473
Hotel/Motel	per/room	$9,306
Downtown Specific Plan		
Multi-Family		
Studio	d.u.	$3,395
1 Bedroom	d.u.	$3,802
2 Bedroom	d.u.	$4,913
3 or more Bedroom	d.u.	$5,745
Commercial	K s.f.	$14,595
Other	Average Peak Hour Trip	$14,883

CITY OF LIVERMORE
COMMUNITY DEVELOPMENT DEPARTMENT

EXHIBIT F

Exhibit "D"

LIVERMORE VALLEY JOINT UNIFIED SCHOOL DISTRICT
SUMMARY OF SCHOOL MITIGATION PROGRAM

Livermore Valley Joint Unified School District
Resolution: 008 - 22/23 - Fee Effective October 8, 2022

INDUSTRIAL/WAREHOUSE/MANUFACTURING	$0.78/sq.ft.
OFFICE	$0.78/sq.ft.
RESEARCH & DEVELOPMENT	$0.78/sq.ft.
HOSPITALS	$0.78/sq.ft.
RETAIL & SERVICES	$0.624/sq.ft.
HOTEL/MOTEL:	$0.316/sq.ft.
SELF STORAGE	$0.06/sq.ft.
RESIDENTIAL: (Includes single family home, multi-family home, manufactured home, and mobile home)	$4.79/sq.ft.
SENIOR HOUSING (Includes manufactured home or mobile home located in a mobile home park, subdivision, cooperative or condominium for mobile homes limited to 55 and older residents.)	$0.78/sq.ft.
RESIDENTIAL ADDITIONS (Residential additions 500 sq.ft. or less and senior housing projects are exempt)	$4.79/sq.st. (501 sq.ft. or more)

* Additions are cumulative over time to a limit of 500 sf before fees are assesed. Once assessed, fees are paid on the entire added square footage.

** The fee owed is based upon the fee amount in effect at the time the fee is paid.

LIVERMORE VALLEY JOINT UNIFIED SCHOOL DISTRICT
685 East Jack London Blvd, Livermore, Ca 94551

FACILITIES PLANNING AND CONSTRUCTION
Jan Shipley, Construction Supervisor (925) 606-3390
Facilities Fax Number (925) 606-3327

EXHIBIT F

EXHIBIT E Social and Human Service Facility Fee Schedule		
Land Uses	**Units of Use**	**Fee Rates**
Residential Uses		
Single-Family Detached	d.u.	$1,677
Single-Family Attached	d.u.	$1,415
Multi-Family	d.u.	$1,298
Mobile Home	d.u.	$996
Secondary Unit	d.u.	$996
Non-Residential Uses		
Commercial		
Office	K s.f.	$7
Retail	K s.f.	$5
Service	K s.f.	$5
Industrial		
Manufacturing/R&D	K s.f.	$3
Warehousing	K s.f.	$2
Office	K s.f.	$6
Construction/Repair/Wholesale	K s.f.	$3
Other Non-Residential	K s.f.	$5

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

EXHIBIT B

100 North Canyons Parkway
Livermore, CA 94551
(925) 454-5000

EXHIBIT F

December 13, 2023

Andrew Hall
City of Livermore
101 W. Jack London Blvd.
Livermore, CA 94550

Subject: 2024 Municipal and Industrial (M&I) Water Connection Fee Increase

Dear Andrew Hall,

This letter is to inform you that on October 18, 2023, the Zone 7 Board of Directors voted to increase the basic connection fee for the Zone 7 and Dougherty Valley service areas. Within Alameda County, the basic fee (5/8-inch size displacement type meter) will increase to **$34,530** from $33,730, and within Contra Costa County (Dougherty Valley) the basic fee (5/8-inch size displacement type meter) will increase to **$33,130** from $32,360, **all effective January 1, 2024**. A new water service connection fee schedule is enclosed. Please distribute revised fee schedule to appropriate staff.

If there are any questions, please contact me at jli@zone7water.com or at (925) 454-5017. Thank you for your help in this matter.

Sincerely yours,

Junming Li
Junior Engineer

Enclosure

Cc: Paul Spence, City of Livermore, Community Development Director
Franc Moufarrej, City of Livermore, Building Official
Valerie Pryor, Zone 7, General Manager
Osborn Solitei, Zone 7, Assistant General Manager
Jarnail Chahal, Zone 7, Acting Assistant General Manager
JaVia Green, Zone 7, Financial Analyst
Elizabeth Foss, Zone 7, Financial Analyst
Ken Minn, Zone 7, Groundwater Resources Manager

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

EXHIBIT F

EXHIBIT B

100 North Canyons Parkway
Livermore, CA 94551
(925) 454-5000

WATER CONNECTION FEE INFORMATION SHEET

New fee schedule effective January 1, 2024

I. GENERAL BACKGROUND

A. The Water Connection Charge Ordinance No. FC 72-1 as amended for Zone 7 was established January 18, 1972. The ordinance is applicable over the Zone 7 area that includes Livermore, Pleasanton, Dublin, Sunol, and surrounding communities. The Ordinance requires a one-time water connection fee for all new water services from a water system that is directly connected to the Zone 7 water supply system. This fee is used for funding the costs of expanding the Zone 7 water treatment and distribution system to serve new development.

B. The amount charged for a water connection is determined by the size of the meter to be installed. The meter sizes and corresponding water connection fees are listed below.

II. PROCEDURES FOR PAYMENT OF WATER CONNECTION FEES IN LIVERMORE, PLEASANTON, & DUBLIN

The water connection fees are collected by the Building Departments of the Cities of Livermore and Pleasanton, and by the Dublin San Ramon Services District, which are agents for Zone 7. For that area within the California Water service area which is located outside of the Livermore city limits, connection fees will be paid at the Zone 7 office in Livermore.

III. WATER CONNECTION FEE SCHEDULE - FEES ARE REVIEWED AND SUBJECT TO PERIODIC MODIFICATION

Meter Size	Meter Brand/Type	Fee Factor	Connection Fee
5/8" & 1" FS	DISPLACEMENT TYPE	10	$34,530
3/4"	DISPLACEMENT TYPE	15	$51,795
1"	DISPLACEMENT TYPE	25	$86,325
3/4" Short Diehl	ULTRASONIC METER **(Pleasanton only)**	30	$103,590
3/4" Long Diehl	ULTRASONIC METER **(Pleasanton only)**	30	$103,590
1" Diehl	ULTRASONIC METER **(Pleasanton only)**	55	$189,915
1" Kamstrup	ULTRASONIC METER **(Livermore only)**	55	$189,915
1 1/2"	DISPLACEMENT TYPE	50	$172,650
	KAMSTRUP ULTRASONIC **(Pleasanton only)**	120	$414,360
	OMNI C2	160	$552,480
	OMNI T2	160	$552,480

2"	OMNI WITH 50 GPM RESTRICTION	50	$172,650
	DISPLACEMENT TYPE	80	$276,240
	OMNI WITH 80 GPM RESTRICTION	80	$276,240
	Mueller MVR	115	$397,095
	OMNI WITH 120 GPM RESTRICTION	120	$414,360
	SENSUS SR/SRII	160	$552,480
	KAMSTRUP SHORT ULTRASONIC **(Pleasanton only)**	160	$552,480
	KAMSTRUP LONG ULTRASONIC **(Pleasanton only)**	160	$552,480
	OMNI C2	160	$552,480
	OMNI T2	200	$690,600
	evoQ4 MAGNETIC **(Pleasanton only)**	220	$759,660

Note - Connection fees for meters 3-inch and larger and for meters with fee factors other than those listed above, will be determined by Zone 7, using the fee factor for Maximum Rate for Continuous Operation, as defined by AWWA. These fees are based on the Maximum Continuous Flow Rate through a 5/8" meter and are proportional based on flow ratings for the various sized meters. Flow ratings for displacement type meters are defined by AWWA C700 for Cold-Water Meter -- Displacement Type, Bronze Case. Flow ratings for turbine type meters are defined by AWWA C701 for Cold Water Meters -- Turbine Type, For Customer Service. Any changes to meter capacities will affect the above connection fees.

IV. EXEMPTIONS

No fee will be collected for SEPARATE private fire service connections. See Section VI of the Ordinance (copy available upon request).

V. PARTIAL EXEMPTIONS

A partial exemption sometimes applies for domestic fire sprinkling systems up to 1" meter size. See Section VI of the Ordinance (copy available upon request).

VI. FOR FURTHER INFORMATION

Contact Junming Li at (925) 454-5017, or jli@zone7water.com.

EXHIBIT F

Zone 7 M&I Connection Fee
Rate Schedule

EXHIBIT B

Effective January 1, 2024

Meter Size	Meter Brand/Type	Recommended Maximum Rate for Continuous Use (gpm)	Connection Fee Amount
5/8" & 1" FS*	DISPLACEMENT TYPE	10	$34,530
3/4"	DISPLACEMENT TYPE	15	$51,795
1"	DISPLACEMENT TYPE	25	$86,325
3/4" Short Diehl	ULTRASONIC METER **(Pleasanton only)**	30	$103,590
3/4" Long Diehl	ULTRASONIC METER **(Pleasanton only)**	30	$103,590
1" Diehl	ULTRASONIC METER **(Pleasanton only)**	55	$189,915
1" Kamstrup	ULTRASONIC METER **(Livermore only)**	55	$189,915
1 1/2"	DISPLACEMENT TYPE	50	$172,650
	KAMSTRUP ULTRASONIC **(Pleasanton only)**	120	$414,360
	OMNI C2	160	$552,480
	OMNI T2	160	$552,480
2"	OMNI WITH 50 GPM RESTRICTION	50	$172,650
	DISPLACEMENT TYPE	80	$276,240
	OMNI WITH 80 GPM RESTRICTION	80	$276,240
	Mueller MVR	115	$397,095
	OMNI WITH 120 GPM RESTRICTION	120	$414,360
	SENSUS SR/SRII	160	$552,480
	KAMSTRUP SHORT ULTRASONIC **(Pleasanton only)**	160	$552,480
	KAMSTRUP LONG ULTRASONIC **(Pleasanton only)**	160	$552,480
	OMNI C2	160	$552,480
	OMNI T2	200	$690,600
	evoQ4 MAGNETIC **(Pleasanton only)**	220	$759,660
3" to 10"			**

* Per Fee Ordinance Section VI, combined domestic and fire service connections are subject to the connection charge based on the meter size for the combined system, except the basic charge shall be collected for combined systems, up to a maximum one-inch (1") meter size, for single family and duplex housing units with fire sprinkler systems approved by the appropriate fire department and installed in accordance with applicable building requirements. Contact the Zone 7 office with any additional questions.

** Connection fees for meter sizes 3-inches and above will be determined by using the fee factor for maximum rate for continuous use.

Fees for meters other than those listed above will be determined based upon the AWWA maximum continuous flow rating for the brand, type, and size of meter.

These fees are based on the Maximum Continuous Flow Rate through a 5/8" meter as defined by AWWA C700 for Cold-Water Meter -- Displacement Type, Bronze Case.
Any changes to meter capacities will affect the above connection fees.

Currently, the Diehl, Kamstrup, & evoQ4 meters are only available in Pleasanton and/or Livermore as indicated in the table.

EXHIBIT F

RESOLUTION NO. 044-19/20

TO UPDATE STATUTORY DEVELOPER FEES IMPOSED ON NEW RESIDENTIAL AND COMMERCIAL/INDUSTRIAL DEVELOPMENT PROJECTS PURSUANT TO EDUCATION CODE SECTION 17620

WHEREAS, the School Board ("Board") of the Livermore Valley Joint Unified District ("District") provides for the educational needs for TK-12 students within the City of Livermore and a portion of the unincorporated counties of Alameda and Contra Costa (collectively, "Counties"); and

WHEREAS, The State Allocation Board has taken action pursuant to Government Code Section 65995(b)(3), which authorizes Districts to increase Statutory Developer Fees to $4.08 per square foot for assessable space of residential development and $0.66 per square foot of chargeable covered and enclosed space for all categories of commercial/industrial development, as long as such Statutory Developer Fees are properly justified by the District pursuant to law; and

WHEREAS, new residential and commercial/industrial development continues to generate additional students for the District's schools and the District is required to provide school facilities ("School Facilities") to accommodate those students; and

WHEREAS, overcrowded schools within the District would have an impact on the District's ability to provide an adequate quality education and negatively impacts the educational opportunities for the District's students; and

WHEREAS, the District does not have sufficient funds available for the construction or reconstruction of the School Facilities, including acquisition of sites, construction of permanent School Facilities, and acquisition of interim School Facilities, to accommodate students from new residential and commercial/industrial development; and

WHEREAS, the Board of the District has received and considered two studies entitled "Residential Development School Fee Justification Study for Livermore Valley Joint Unified District" and "Commercial/Industrial Development School Fee Justification Study for Livermore Valley Joint Unified District" ("Studies"), which Studies include information, documentation, and analysis of the School Facilities needs of the District, including (a) the purpose of the Statutory Developer Fees; (b) the use to which the Statutory Developer Fees are to be put; (c) the nexus (roughly proportional and reasonable relationship) between the residential and commercial/industrial development; and (1) the use for Statutory Developer Fees; (2) the need for School Facilities; (3) the cost of School Facilities; and the amount of Statutory Developer Fees from new residential and commercial/industrial development; (d) a determination of the impact of the increased number of employees anticipated to result from the commercial/industrial development (by category) upon the cost of providing School Facilities within the District; (e) an evaluation and projection of the number of students that will be generated by new residential development; (f) the new School Facilities that will be required to serve such students; and (g) the cost of such School Facilities; and

WHEREAS, said Studies pertaining to the Statutory Developer Fees and to the capital facilities needs of the District were made available to the public as required by law before the Board considered at a regularly scheduled public meeting the Statutory Developer Fees; and

EXHIBIT F

WHEREAS, all required notices of the proposed Statutory Developer Fees have been given; and

WHEREAS, a Public Hearing was held at a regularly scheduled meeting of the Board of the District relating to the proposed Statutory Developer Fees; and

WHEREAS, Education Code Section 17621 provides that the adoption, increase or imposition of any fee, charge, dedication, or other requirement, pursuant to Education Code Section 17620 shall not be subject to Division 13 (commencing with Section 21000) of the Public Resources Code.

NOW, THEREFORE, THE SCHOOL BOARD OF THE LIVERMORE VALLEY JOINT UNIFIED SCHOOL DISTRICT DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. That the Board accepts and adopts the Studies.

Section 2. That the Board finds that the purpose of the Statutory Developer Fees imposed upon new residential development is to fund the additional School Facilities required to serve the students generated by the new residential development upon which the Statutory Developer Fees are imposed.

Section 3. That the Board finds that the Statutory Developer Fees imposed on new residential development will be used only to finance those School Facilities described in the Study and related documents and that these School Facilities are required to serve the students generated by the new residential development within the District; and that the use of the Statutory Developer Fees will include construction or acquisition of additional School Facilities, remodeling existing School Facilities to add additional classrooms, and technology, and acquiring and installing additional portable classrooms and related School Facilities, with the specific location of new schools, remodeling of existing School Facilities, and additional portables to be determined based on the residence of the students being generated by such new residential development, as well as any required central administrative and support facilities, within the District.

Section 4. That the Board finds that there is a roughly proportional, reasonable relationship between the use of the Statutory Developer Fees and the new residential development within the District because the Statutory Developer Fees imposed on new residential development by this Resolution, will be used to fund School Facilities which will be used to serve the students generated by such new residential development.

Section 5. That the Board finds that there is a roughly proportional, reasonable relationship between the new residential development upon which the Statutory Developer Fees are imposed, and the need for additional School Facilities in the District because new students will be generated from new residential development within the District and there is not sufficient capacity in the existing School Facilities to accommodate all additional students.

Section 6. That the Board finds that the amount of the Statutory Developer Fees levied on new residential development as set forth in this Resolution is roughly proportional and reasonably related to, and does not exceed the cost of, providing the School Facilities required to serve the students generated by such new residential development within the District.

EXHIBIT F

Section 7. That the Board finds that the purpose of the Statutory Developer Fees imposed on new commercial/industrial development is to fund the additional School Facilities required to serve the students generated by the new commercial/industrial development upon which the Statutory Developer Fees are imposed.

Section 8. That the Board finds that the Statutory Developer Fees imposed on new commercial/industrial development (by category) will be used only to finance those School Facilities described in the Studies and related documents and that these School Facilities are required to serve the students generated by such new commercial/industrial development; and that the use of the Statutory Developer Fees will include construction or acquisition of additional School Facilities, remodeling existing School Facilities to add additional classrooms and technology, and acquiring and installing additional portable classrooms and related facilities, with the specific location of new schools, remodeling of existing School Facilities, and additional portables to be determined based on the residence of the students being generated by such new commercial/industrial development, as well as any required central administrative and support facilities within the District.

Section 9. That the Board finds that there is a roughly proportional, reasonable relationship between the use of the Statutory Developer Fees and new commercial/industrial development by category within the District because the Statutory Developer Fees imposed on commercial/industrial development by this Resolution will be used to fund School Facilities which will be used to serve the students generated by such new commercial/industrial development.

Section 10. That the Board finds that there is a roughly proportional, reasonable relationship between the new commercial/industrial development by category, upon which the Statutory Developer Fees are imposed, and the need for additional School Facilities in the District because new students will be generated from new commercial/industrial development within the District and the District does not have sufficient student capacity in the existing School Facilities to accommodate these anticipated students.

Section 11. That the Board finds that the amount of the Statutory Developer Fees levied on new commercial/industrial development by category as set forth in this Resolution is roughly proportional and reasonably related to and does not exceed the cost of providing the School Facilities required to serve the students generated by such new commercial/industrial development within the District.

Section 12. That the Board finds that a separate account has been established for the deposit of Statutory Developer Fees imposed on residential and commercial/industrial development and that said account has at all times since been separately maintained, except for temporary investments, from other funds of the District.

Section 13. That the Board finds that the funds of the account, described in Section 12, consisting of the proceeds of Statutory Developer Fees have been imposed for the purposes of constructing and reconstructing those School Facilities necessitated by new residential and commercial/industrial development, and thus, these funds may be expended for those purposes. The Statutory Developer Fees may also be expended by the District for the costs of performing any study or otherwise making the findings and determinations required under subdivisions (a), (b), and (d) of Section 66001 of the Government Code. In addition, the District may also retain, as appropriate, an amount not to exceed in any fiscal year, three percent (3%) of the fees collected in that fiscal year pursuant to Education Code Section 17620 for reimbursement of the administrative costs incurred by the District in collecting the Statutory Developer Fees.

EXHIBIT F

Section 14. That the Board hereby increases the Statutory Developer Fees as a condition of approval of new residential development projects and imposes the Statutory Developer Fees on such development projects in the following amounts:

A. $4.08 per square foot of assessable space for new single family detached residential development and new multifamily attached residential development, including new residential projects, manufactured homes and mobile homes as authorized under Education Code Section 17625, and including residential construction other than new construction where such construction results in an increase of assessable space, as defined in Government Code Section 65995, in excess of 500 square feet. However, these amounts shall not be imposed on any development project used exclusively for housing senior citizens, as described in Civil Code Section 51.3, or as described in Subdivision J of Section 1569.2 of the Health and Safety Code or paragraph 9 of subdivision (d) of Section 15432 of the Government Code or any mobile home or manufactured home that is located within a mobile home park, subdivision, cooperative or condominium for mobile homes limited to older persons as defined by the Federal Fair Housing Amendments of 1988.

B. $0.66 per square foot of assessable space for new residential development used exclusively for the housing of senior citizens, as described in Section 51.3 of the Civil Code or as described in subdivision J of Section 1569 of the Health and Safety Code or paragraph 9 of subdivision (d) of Section 15432 of the Government Code or any mobile home or manufactured home that is located within a mobile home park, subdivision, cooperative or condominium for mobile homes limited to older persons as defined by the Federal Fair Housing Amendments of 1988.

Section 15. That this Board hereby increases the Statutory Developer Fees as a condition of approval of new commercial/industrial development projects and levies the Statutory Developer Fees on such development projects in the following amounts per square foot of chargeable covered and enclosed space for the following categories of commercial/industrial development:

Retail and Services	$0.624
Office	$0.66
Research and Development	$0.66
Industrial/Warehouse/Manufacturing	$0.66
Hospitals	$0.66
Hotel/Motel	$0.316
Self-Storage	$0.018

Section 16. That the proceeds of the Statutory Developer Fees established pursuant to this Resolution shall continue to be deposited into that account identified in Section 12 of this Resolution, the proceeds of which shall be used exclusively for the purpose for which the Statutory Developer Fees are to be collected, including accomplishing any study, findings or determinations required by subdivisions (a), (b) and (d) of Section 66001 of the Government Code or retaining an amount not to exceed in any fiscal year, three percent (3%) of the fees collected in that fiscal year pursuant to Education Code Section 17620 for

reimbursement of the administrative costs incurred by the District in collecting the Statutory Developer Fees or in financing the described Study or in defending the imposition of Statutory Developer Fees.

Section 17. That the Superintendent, or her designee, is directed to cause a copy of this Resolution to be delivered to the building official of the Cities and Counties within the District's boundaries and the Office of Statewide Health Planning and Development ("OSHPD") along with a copy of all the supporting documentation referenced herein and a map of the District clearly indicating the boundaries thereof, advising the Cities, Counties, and OSHPD that new residential and commercial/industrial development is subject to the Statutory Developer Fees readopted pursuant to this Resolution and requesting that no building permit or approval for occupancy be issued by any of these entities for any new residential development project, mobile home, or manufactured home subject to the Statutory Developer Fees absent a certification from this District of compliance of such project with the requirements of the Statutory Developer Fees, nor that any building permit be issued for any non-residential development absent a certification from this District of compliance with the requirements of the applicable Statutory Developer Fees.

Section 18. That the Board hereby establishes a process that permits the party against whom the commercial/industrial Statutory Developer Fees are imposed, the opportunity for a hearing to appeal that imposition of Statutory Developer Fees for commercial/industrial development as required by Education Code Section 17621(e)(2). The appeal process is as follows:

A. Within ten (10) calendar days of being notified, in writing, (by personal delivery or deposit in the U.S. Mail) of the commercial/industrial Statutory Developer Fees to be imposed or paying the commercial/industrial Statutory Developer Fees, pursuant to Education Code Section 17620, a party shall file a written request for a hearing regarding the imposition of commercial/industrial Statutory Developer Fees. The party shall state in the written request the grounds for opposing the imposition of commercial/industrial Statutory Developer Fees and said written request shall be served by personal delivery or certified or registered mail to the Superintendent of the District.

B. The possible grounds for that appeal include, but are not limited to, the inaccuracy of including the project within the category pursuant to which the commercial/industrial Statutory Developer Fees are to be imposed, or that the employee generation or pupil generation factors utilized under the applicable category are inaccurate as applied to the project.

C. Within ten (10) calendar days of receipt of the written request for a hearing regarding the imposition of commercial/industrial Statutory Developer Fees, the Superintendent of the District, or her designee, shall give notice in writing of the date, place and time of the hearing to the party appealing the imposition of commercial/industrial Statutory Developer Fees. The Superintendent, or her designee, shall schedule and conduct said hearing within thirty (30) calendar days of receipt of the written request. The Superintendent, or her designee, shall render a written decision within ten (10) days following the hearing on the party's appeal and serve it by certified or registered mail to the last known address of the party.

D. The party against whom the commercial/industrial Statutory Developer Fees are imposed may appeal the Superintendent's, or her designee's, decision to the Board of the District.

E. The party appealing the Superintendent's, or her designee's decision, shall state in the written appeal the grounds for opposing the imposition of the commercial/industrial Statutory Developer Fees and said written appeal shall be served by personal delivery or certified or registered mail to the Superintendent of the District.

F. The possible grounds for that appeal to the Board of the District include, but are not limited to, the inaccuracy of including the project within the category pursuant to which the commercial/industrial Statutory Developer Fees are to be imposed, or that the employee generation or pupil generation factors utilized under the applicable category are inaccurate as applied to the project.

G. Within ten (10) calendar days of receipt of the written request for a hearing regarding the imposition of commercial/industrial Statutory Developer Fees, the Superintendent of the District, or her designee, shall give notice in writing of the date, place and time of the hearing to the party appealing the imposition of commercial/industrial Statutory Developer Fees. The Board of the District shall schedule and conduct said hearing at the next regular meeting of the Board, provided that the party is given notice at least five (5) working days prior to the regular meeting of the Board. The Board shall render a written decision within ten (10) days following the hearing on the party's appeal and serve the decision by certified or registered mail to the last known address of the party.

H. The party appealing the imposition of the commercial/industrial Statutory Developer Fees shall bear the burden of establishing that the commercial/industrial Statutory Developer Fees are improper.

Section 19. That the Superintendent is authorized to cause a certificate of compliance to be issued for each development project, mobile home and manufactured home for which there is compliance with the requirement for payment of the Statutory Developer Fees in the amount specified by this Resolution. In the event a certificate of compliance is issued for the payment of Statutory Developer Fees for a development project, mobile home or manufactured home and it is later determined that the statement or other representation made by an authorized party concerning the development project as to square footage is untrue, then such certificate shall automatically terminate, and the appropriate City shall be so notified.

Section 20. That no statement or provision set forth in this Resolution, or referred to therein shall be construed to repeal any preexisting fee previously imposed by the District on any residential or nonresidential development.

Section 21. That the District's Statutory Developer Fees will become effective sixty (60) days from the date of this Resolution unless a separate resolution increasing the fees immediately on an urgency basis is adopted by the Board.

EXHIBIT F

APPROVED AND ADOPTED by roll call vote this 17th day of March 2020.

AYES:	Bueno	✓	Prusso	✓	Rogge	✓	Wenzel	✓	White ✓
NOES:	Bueno		Prusso		Rogge		Wenzel		White
ABSTENTIONS:	Bueno		Prusso		Rogge		Wenzel		White
ABSENT:	Bueno		Prusso		Rogge		Wenzel		White

BY: _____

President of the Board of Education Livermore
Valley Joint Unified School District of Alameda
County and Contra Costa County, State of California

ATTEST: _____

Clerk of the Board of Education Livermore
Valley Joint Unified School District of Alameda
County and Contra Costa County, State of California

EXHIBIT F

Scott Perkins
TVTC Chair
Vice Mayor
San Ramon
(925) 973-2544

Jean Josey
TVTC Vice-Chair
Councilmember
Dublin
(925) 833-2530

Renee Morgan
Mayor
Town of Danville
(925) 918-3999

David Haubert
Supervisor District 1
Alameda County
(925) 551-6995

Candace Andersen
Supervisor District 2
Contra Costa
(925) 957-8860

Brittni Kiick
Councilmember
City of Livermore
(925) 960-4019

Karla Brown
Mayor
City of Pleasanton
(925) 931-5001

To: Tri-Valley Transportation Council

From: TVTC Finance Committee
By: Technical Advisory Committee (TAC)

Date: April 19, 2021

Subject: ADOPT the Tri-Valley Transportation Development Fee Construction Cost Index Annual Adjustment

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BACKGROUND

The Joint Exercise of Powers Agreement (JEPA) for the Tri-Valley Transportation Development Fee (TVTDF) specifies that the TVTDF amounts are to be adjusted automatically as of July 1 of each year to reflect changes in regional construction costs. JEPA Section 3(D)(I) requires the TVTC adopt the adjustment by a simple majority.

DISCUSSION

The amount of the adjustment is based on the change in the "Construction Cost Index" (CCI) for the San Francisco Bay Area, as reported annually in the Engineering News Record (ENR). The December 2020 ENR CCI for the San Francisco Bay Area is **+3.2%**.

RECOMMENDATION

The TVTC Finance Committee recommends the TVTC adopt the Tri-Valley Transportation Development Fee Construction Cost Index Annual Adjustment and notify each TVTC member agency to collect the TVTDF rates as listed below starting **July 1, 2021**:

Single Family Residential	$5,057.00/Dwelling Unit (DU)
Multi-Family Residential	$3,484.00/DU
Office	$8.59/sq. ft. Gross Floor Area
Retail	$3.74/sq. ft. Gross Floor Area
Industrial	$5.00/sq. ft. Gross Floor Area
Other	$5,620.00/average am/pm peak hour trip
ADU/SDU	$0
Affordable Housing	$0

EXHIBIT F

TVTDF Historical Fee Rates

	2019	2020	2021
Single Family Residential (per DU)	$4,650.56	$4,901.00	$5,057.00
Multi-Family Residential (per DU)	$3,203.48	$3,376.00	$3,484.00
Office (per SF Gross Floor Area)	$7.90	$8.33	$8.59
Retail (per SF Gross Floor Area)	$3.41	$3.63	$3.74
Industrial (per SF Gross Floor Area)	$4.60	$4.85	$5.00
Other (average am/pm peak hour trip)	$5,167.00	$5,446.00	$5,620.00
Affordable Housing *	$0.00	$0.00	$0.00
ADU/SDU**	$0.00	$0.00	$0.00

*Pursuant to Resolution 2015-01 Adjusting the Tri-Valley Transportation Development Fee Schedule

**Pursuant to Resolution 2019-03 – Resetting the Accessory Dwelling Unit/Secondary Dwelling Unit Fee in the Tri-Valley Transportation Development Fee Program

EXHIBIT G

FORM OF ESTOPPEL CERTIFICATE

Isabel Portola Owner, LLC
1875 Century Park East, Suite 1130
Los Angeles, CA 90067

RE: Estoppel Certificate – Development Agreement dated _____ by and between the City of Livermore, a California municipal corporation (the "City") and Isabel Portola Owner, LLC, a Delaware limited liability company qualified to do business in California ("Developer"), recorded on _____ as Document No. _____ in the official records of Alameda County, California (the "Development Agreement")

To Whom it May Concern:

Pursuant to the Development Agreement, request has been made of the undersigned to make this Estoppel Certificate to you in your capacity as [status of party requesting Estoppel Certificate], on behalf of the City, in connection with the [event triggering request for Estoppel Certificate] regarding that certain real property described in Recital C of the Development Agreement ("Property"). Capital terms used and not defined herein shall have the same meaning ascribed to them in the Development Agreement.

Pursuant to Section 31 of the Development Agreement, the undersigned, on behalf of the City, certifies as follows:

1. The Development Agreement as defined herein is in full force and effect and has not been amended, modified or assigned, either orally or in writing; and

2. There exists no material default in the performance of the obligations set forth in the Development Agreement, and any and all development obligations affecting the Property have been, to date, satisfied in full.

The undersigned understands that you are relying on this Estoppel Certificate in connection with [event triggering request for Estoppel Certificate]. The statements set forth herein shall be binding only to the extent required by the Development Agreement and for no other purpose and to no other persons or entities.

The City of Livermore, a municipal corporation

By: _____

Name: _____

Its: _____

EXHIBIT H

Introduction

In addition to terms defined elsewhere in the Agreement and its Exhibits, this Exhibit H identifies definitions for convenience.

Definitions

1. "Affordable Housing" means the Low Income Housing Units, the Moderate Income Rental Units, the Median Income Rental Units, the Moderate Income For- Sale Units, and the Median Income For-Sale Units, collectively, as these terms are defined herein.

2. "Commercial Blocks" means Planning Areas C1-B, C2-A, and S1, as shown on Exhibit B (Development Plans).

3. "Commercial Component of Planning Area S1" means a first-floor commercial tenant space of approximately 23,924 square feet as described in Exhibit B (Development Plans).

4. "Commercial Component of Planning Area C2-A" means a first-floor commercial tenant space of at least 27,918 square feet as described in Exhibit B (Concept Design Plan).

5. "Community Benefit Fund" means the City's Community Benefit Fund with the purpose of building a vibrant and amenity-rich community consistent with Isabel Neighborhood Specific Plan goals and Strategic Plan Goals.

6. "Enhanced Paving" means decorative surface designs with greater detail than typical, including unique colors, materials, patterns, etc. Examples of such paving include decorative stamped asphalt, scored asphalt, inlaid thermoplastic, etc., to be located along Main Street and at primary Project entrance points.

7. "Flexible Co-Workspace" means any office use that provides a communal workspace or shared facilities for multiple employers, employees, or users. Such communal or shared space may consist of any of the following: offices, breakrooms, kitchens, restrooms, and any other rooms necessary to facilitate shared office work.

8. "Food Hall" means a marketplace with multiple vendors, with a focus on local vendors or selling locally-sourced food or beverage products. At least 8,000 gross square feet of commercial building space shall be occupied by vendor within the Food Hall that sell fresh, unprepared foods such as meat, fish, dairy, grains, fruit, vegetables, and related items,. The Director may revise the square footage limit upon the written request of the Developer.

9. "Fully Furnished" means the provision of seating, tables, landscape, hardscape, walkways, public art, and other amenities for Outdoor Plaza Areas in Planning Areas C1-C, C2-C, and TS, as identified in Recital F and Exhibit B (Development Plans).

10. "Knox Box" means a mutual locking mechanism installed on building entries to provide 24-

hour fire and law enforcement access to the building.

11. "LARPD" means the Livermore Area Recreation and Park District.

12. "Landing Area" is as described in Exhibit C

13. "Landscaping" means any tree, shrub, or groundcover installed as part of the Phase I or Phase II Project Infrastructure.

14. "Low Income Housing Amount" is as defined in Exhibit D.

15. "Low Income Housing Cash Payment" is as defined in Exhibit D.

16. "Low Income Housing Rental Units" means the Project's units of "low income" multi-family rental housing reserved for "Very Low Income Household" rental housing, as the term is defined in Health & Safety Code, Section 50105, and the units reserved for "Lower Income Household" rental housing, as the term is defined in Health & Safety Code, Section 50079.5.

17. "LIHTC Financing Conditions" is as defined in Exhibit D.

18. "Permanent Commercial Grocer" means a business that generally conforms to NAICS code 445110, "Supermarkets and Other Grocery (except Convenience) Stores." Such establishments are generally known as food markets and grocery stores and primarily engaged in retailing a general line of groceries and sundries and prepared food.

19. "Phase I Project Infrastructure" means all of the following components as depicted in Exhibit C:

    a. *"Primary Internal Improvements"*:

        i. The construction of the first lift of pavement for the Primary Internal Streets, including sidewalks, crosswalks and intersections, and Enhanced Paving, as shown in Exhibit B.

        ii. Main arterial sewer, water, storm water, and joint trench conduit along Primary Internal Streets, as identified in Exhibits B.

        iii. Delivery of mass graded pads within Planning Areas.

        iv. Utilities (sewer, storm drain, water and joint trench conduit only) stubbed to Planning Area S3A, as identified on the VTTM and depicted in Exhibit B.

        v. Delivery of paved, 15,000 square foot temporary commercial activation space with temporary water and power, as described in Exhibit E.

        vi. Sidewalk, curb, gutter, street trees, irrigation (water and power) on Primary Internal Streets and Project Frontage.

        vii. Bioretention areas on Primary Internal Streets.

EXHIBIT H

viii. Trail corridor in the southern side of Planning Areas S1, S2 and S4, providing a pedestrian connection along Isabel Avenue between Gateway Drive and Shea Center Drive.

ix. Street Lighting on Primary Internal Streets.

b. *"Offsite Improvements"*

i. Traffic signal at the intersection of Isabel Avenue and Gateway Avenue.

ii. Traffic signal at the intersection of Isabel Avenue and Street A, including Enhanced Paving in the intersection and in four- legged crosswalks.

iii. Traffic signal at the intersection of Isabel Avenue and Gateway Avenue, including enhanced intersection paving and four-legged crosswalks with enhanced paving.

iv. Traffic signal at the intersection of Portola Avenue and Main.

v. Street, including enhanced intersection paving and four-legged crosswalks with enhanced paving.

vi. Isabel Avenue center median improvements, including curb, planter, landscaping, street trees, irrigation (water and power) connected to the City's centralized irrigation system, etc. from Portola Avenue to Interstate-580 interchange up to the Caltrans Right-of-Way.

vii. Caltrans Embankment Landscaping;

viii. Enhanced at-grade crossing at intersection of Gateway Avenue and Isabel Avenue.

1. The enhanced at grade crossing shall include bulb outs, center median refuge, flashing beacons, or any other features to enhance pedestrian safety, comfort, and visibility.

c. "*Bus Stop Improvements*"

i. Bus stop located on the easternmost northbound lane of Highway 84/Isabel Ave, directly to the north of Street A, as identified in Exhibit B (Development Plans).

ii. Bus stop located on the westernmost southbound lane of Highway 84/Isabel Ave, directly to the south of Street A, as identified in Exhibit B (Development Plans).

iii. Bus Stop located on the westbound lane of Portola Avenue, within 150 east or west of the Cayetano Park entrance.

iv. Concrete pad and shelter for the existing bus stop located on the south side

of Portola Avenue at the Montage Drive intersection.

d. *"Bike Lane Improvements"*

i. Class IV bike lane on the south side of Portola Avenue, aligning from the Project's western property boundary to Isabel Avenue.

ii. Class IV bike lane on the southbound Isabel Avenue frontage between Portola Avenue and the Interstate 580 interchange up to the Caltrans Right-of-Way.

iii. Class IV bike lane on south side of Portola Ave from Collier Canyon Road to the Project's western property boundary.

iv. Class IV bike lane on north side of Portola Avenue from Campus Hill Drive to Montage Drive.

v. Class IV bike lane on the north side of Portola Avenue from Collier Canyon Road to Copper Crest Common.

vi. Class IV bike lane on the north side of Portola Avenue from the Cayetano Park entrance to Campus Hill Drive.

vii. Class IV bike lanes on the east and west sides of Campus Hill Drive, from Portola Avenue to Heligan Lane, subject to the Director's determination if the bike lane will be Class IV or Class II as set forth Exhibit C.

viii. Separated bike islands at the southwest, northwest, and northeast corners of the Isabel Avenue/Portola Avenue intersection, as shown in the Development Plans (Attachment B).

ix. Class III bike lane along Gateway Avenue from the western project boundary to Collier Canyon Road.

x. Class II bike lane along the northbound Shea Center Drive frontage.

e. *"Law Enforcement Assets – Perimeter"*

i. All Vehicle License Plate Reader and CCTV cameras identified as "Perimeter Assets" on Exhibit R.

ii. All necessary fiber optic and electrical connections to all required Vehicle License Plate Reader and CCVT cameras.

20. "Phase II Project Infrastructure" means all of the following components as depicted in Exhibit C:

a. *Final lift of pavement for Primary Internal Streets;*

b. *Neighborhood Park in Planning Area N3-B;*

EXHIBIT H

c. *Town Square in Planning Area TS;*

d. *Pocket Plazas in Planning Areas C1-C and C2-C;*

e. *Pedestrian lighting on Primary Internal Streets; and*

f. *"Law Enforcement Assets – Interior".*

i. All CCTV cameras identified as "Interior Assets" on Exhibit R.

ii. Knox Boxes or other mutual access tools installed at each exit stairwell of each Commercial Block, granting access to both Livermore Fire Department and Livermore Police Department personnel, as feasible.

21. "Primary Internal Street(s)" means each of the Project's public streets that serve Subareas and connect to existing public streets, including Main Street, Gateway Avenue, Street A, Street B, and Street C, as identified on Exhibit B (Development Plans).

22. "Social Opportunity Endowment (SOE) Fund" means the City's Social Opportunity Endowment Fund with the purposes of providing a long-term stable funding source for the delivery of quality human services to low-income city residents.

23. "Springtown Open Space Improvements" (CIP No. 202319) means the new three-four-acre park within the Springtown Open Space between the Springtown Library and Springtown Homeowner Association facilities. The park will include the following:

a. *an active play area,*

b. *shade structures and picnic benches, and*

c. *a multipurpose field and a community garden.*

24. "Temporary Commercial Activation" is as defined below and in Exhibit E.

a. Shall mean an area of no less than 15,000 square feet in the aggregate that is located adjacent to and easily accessible from Main Street for use as temporary commercial space. The Temporary Commercial Activation shall include the installation of asphalt, concrete, and/or other landscape and hardscape elements, lighting, temporary trees, temporary power, temporary water, temporary restroom and sanitation facilities, temporary parking, temporary seating, and other elements necessary to facilitate commercial activity and use by the public, subject to Community Development Department Director approval, but shall not require the construction of vertical structures or buildings.

b. *Uses*. The type of uses and events allowable as Temporary Commercial Activation shall include but are not limited to: sale of fresh and prepared food, drink and related products ("Temporary Commercial Operator"), which may include mobile food vendors; specialty goods retail; general commercial services provided to the general public; community events such as live music, cultural arts performances, farmer's

markets, outdoor films, or similar community event uses.

25. "Temp Power" means temporary power is provided to the Planning Area authorized for temporary electrical service.

26. "Temp Water" means water service available to the Planning Area authorized for temporary use for fire suppression purposes.

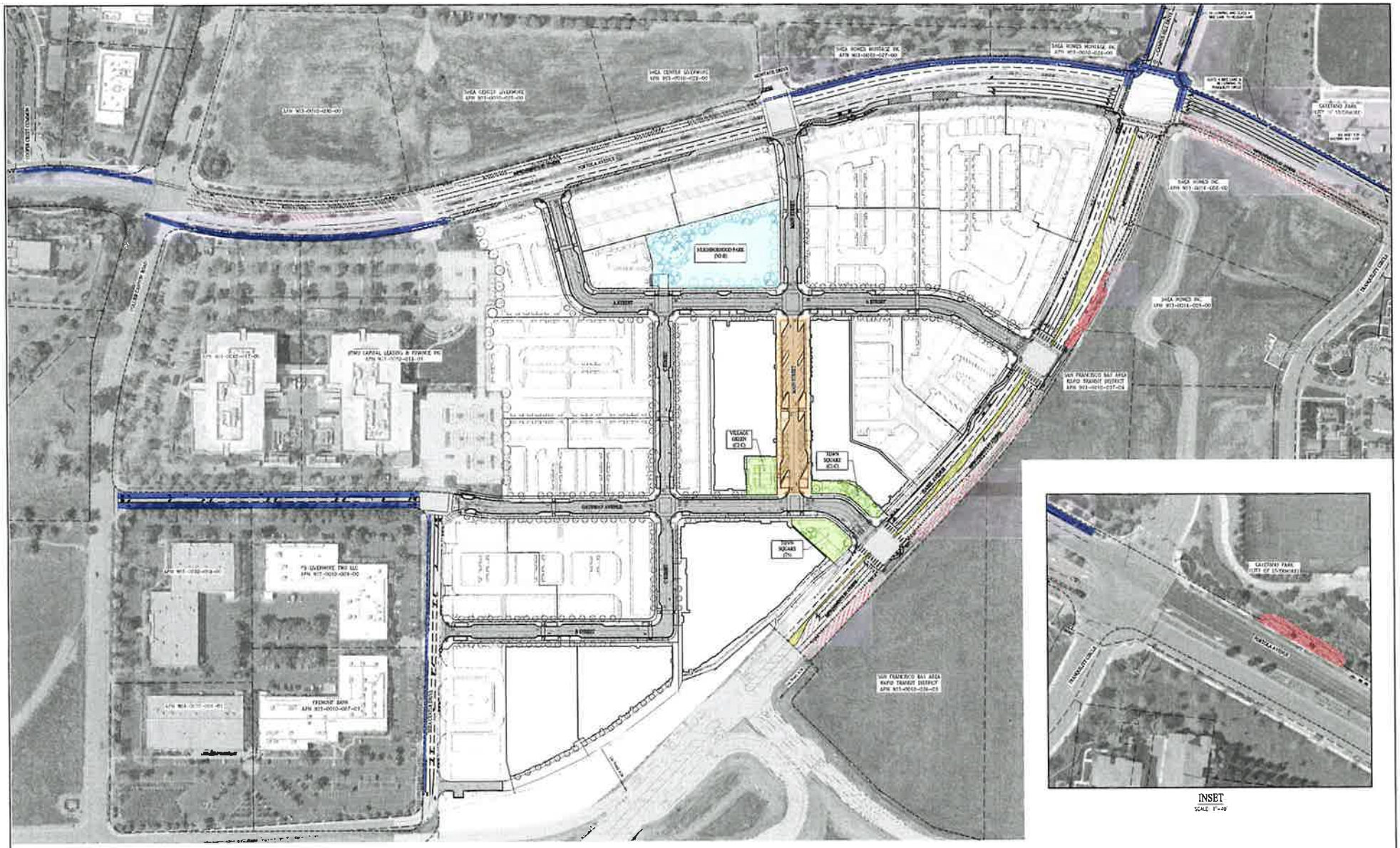
27. "TIF" means traffic impact fees.

28. "Tolling Agreement" is as defined in Section 37.

EXHIBIT I

EXHIBIT B

EXHIBIT B



INSET
SCALE: 1" = 40'

LEGEND

PROJECT BOUNDARY

IMPROVEMENTS BY OTHERS

FEE CREDIT SUMMARY	
DESCRIPTION	ELIGIBLE FEE CREDIT
OFFSITE BIKE LANE IMPROVEMENTS (ISABEL AVENUE, PORTOLA AVENUE, GATEWAY AVENUE, SHEA CENTER DRIVE, CAMPUS HILL DRIVE)	TRAFFIC IMPACT FEE CREDIT
RAISED/LANDSCAPED MEDIAN (ISABEL AVENUE)	TRAFFIC IMPACT FEE CREDIT
TOWN SQUARE AND VILLAGE GREEN	PARK IMPROVEMENT FEE CREDIT
NEIGHBORHOOD PARK	PARK LAND AND IMPROVEMENT FEE CREDIT
GATEWAY AVENUE (BETWEEN ISABEL AVENUE & MAIN STREET) & MAIN STREET (BETWEEN A STREET & GATEWAY AVENUE)	TRAFFIC IMPACT FEE CREDIT
OFFSITE BUS STOP IMPROVEMENTS	TRAFFIC IMPACT FEE CREDIT

POTENTIAL FEE CREDITABLE IMPROVEMENTS

ISABEL CROSSING

CITY OF LIVERMORE ALAMEDA COUNTY CALIFORNIA

SCALE: 1" = 80' DATE: JUNE 26, 2024

cbg CIVIL ENGINEERS • SURVEYORS • PLANNERS

SAN RAMON • (925) 866-0322
ROSEVILLE • (916) 780-4436
WWW.CBGCIVIL.COM

2389

EXHIBIT J

Community Facilities District (CFD) Provisions

A. General Terms

1. Formation of the New Facilities CFD**.** If Developer submits a written request to the City Manager to establish the New Facilities CFD during the term of the Development Agreement, the City Manager shall, within sixty (60) days, notify the Developer in writing whether the City, subject to City Council approval, is willing to establish the New Facilities CFD in accordance with Section C of this Exhibit J or prefers the Developer to work with a joint powers authority to establish the CFD in accordance with Section D of this Exhibit J.

2. Annexation of the Property into the Isabel Maintenance CFD. Developer shall annex the Property into City of Livermore Community Facilities District No. 2023-1 (Isabel Neighborhood Specific Plan Services) ("**Isabel Maintenance CFD**") in accordance with Section B of this Exhibit J.

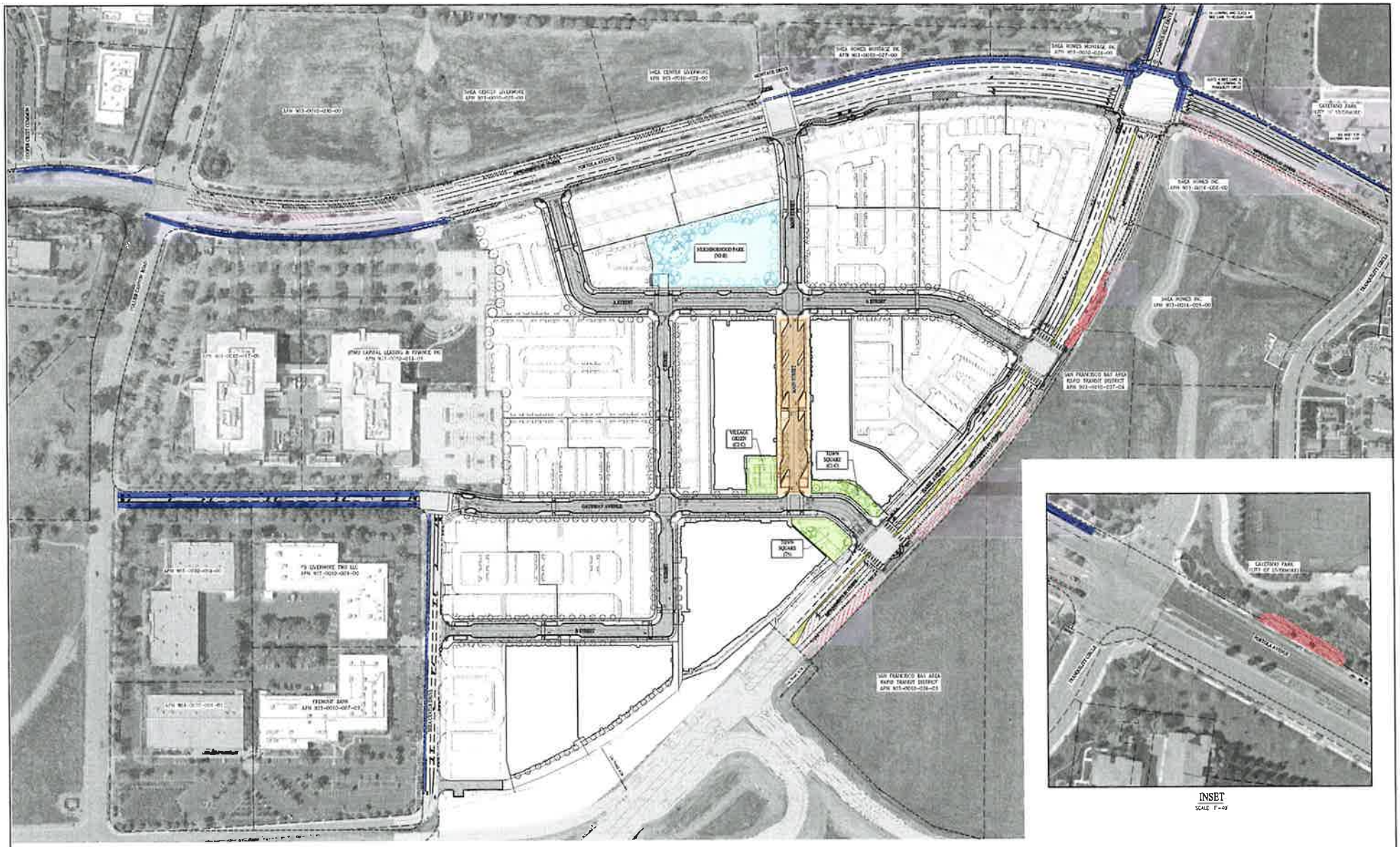
3. Tax Rate Limitation. The Total Tax Obligation (as defined below) for each residential unit in the Project as a result of the annexation of the Property to the Isabel Maintenance CFD and the formation of the New Facilities CFD, calculated at the time of the Resolution of Intention for the New Facilities CFD and based upon the expected or assigned special tax rates (and not on the back-up special tax rates) for the New Facilities CFD and the Isabel Maintenance CFD special tax rates set forth in Section B of this Exhibit J, shall be no greater than one and eighty-six hundredths percent (1.86%) of the anticipated sales price of such residential unit ("**Tax Rate Limitation**"). The anticipated sales price of a residential unit may be based on reasonable projections of value over time proposed by the Developer and acceptable to the City.

For purposes of this Section, the term "**Total Tax Obligation**" means, with respect to a residential unit at the time of calculation, the sum of: (a) the ad valorem taxes actually levied or projected to be levied if the residential unit were developed at the time of calculation; (b) the Maximum Facilities Special Tax Rates levied or projected to be levied in the New Facilities CFD if the residential unit were developed at the time of calculation; (c) the maximum Isabel Maintenance CFD special tax rates; and (d) all other special taxes (based on assigned special tax rates) or assessments secured by a lien on the residential unit levied or projected to be levied if the residential unit was developed at the time of calculation. Homeowner's association fees shall not be included in the calculation of the Total Tax Obligation.

4. Disclosure to Property Owners. Developer agrees to provide, or cause to be provided, the disclosure to purchasers of property in the Project related to the Isabel Maintenance CFD and the New Facilities CFD in the manner and at the time required by the Mello Roos Act.

5. Limitation on Other Land-Secured Financing Districts. Other than the Isabel Maintenance CFD, the New Facilities CFD and one or more citywide special tax or assessment districts, City shall not form any additional land-secured financing district over any portion of the property in the Project without Developer's written consent which may be given in its sole discretion.

EXHIBIT B



FEE CREDIT SUMMARY	
DESCRIPTION	ELIGIBLE FEE CREDIT
OFFSITE BIKE LANE IMPROVEMENTS (ISABEL AVENUE, PORTOLA AVENUE, GATEWAY AVENUE, SHEA CENTER DRIVE, CAMPUS HILL DRIVE)	TRAFFIC IMPACT FEE CREDIT
RAISED/LANDSCAPED MEDIAN (ISABEL AVENUE)	TRAFFIC IMPACT FEE CREDIT
TOWN SQUARE AND VILLAGE GREEN	PARK IMPROVEMENT FEE CREDIT
NEIGHBORHOOD PARK	PARK LAND AND IMPROVEMENT FEE CREDIT
GATEWAY AVENUE (BETWEEN ISABEL AVENUE & MAIN STREET) & MAIN STREET (BETWEEN A STREET & GATEWAY AVENUE)	TRAFFIC IMPACT FEE CREDIT
OFFSITE BUS STOP IMPROVEMENTS	TRAFFIC IMPACT FEE CREDIT

LEGEND

PROJECT BOUNDARY

IMPROVEMENTS BY OTHERS

POTENTIAL FEE CREDITABLE IMPROVEMENTS

ISABEL CROSSING

CITY OF LIVERMORE ALAMEDA COUNTY CALIFORNIA

SCALE: 1" = 80' DATE: JUNE 26, 2024

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EXHIBIT J

B. Formation of the Isabel Maintenance CFD

1. Timing for Annexation to the Isabel Maintenance CFD. Prior to recordation of the initial final map for the Project], Developer and City shall complete annexation of the Property into the Isabel Maintenance CFD. The parties agree that the steps required to complete the annexation of the Property into the Isabel Maintenance CFD shall include (a) execution and delivery by the Developer of a Unanimous Approval prepared by the City's bond counsel and special tax consultant, (b) approval of the annexation by the City Council and (c) recordation of a notice of special tax lien in accordance with the Mello Roos Act.

2. Isabel Maintenance CFD Special Tax Rates. The maximum special tax rates applicable to the Property pursuant to the rate and method of apportionment for the Isabel Maintenance CFD ("Isabel Maintenance CFD RMA") shall be not less than the following:

ISABEL MAINTENANCE CFD MAXIMUM SPECIAL TAX RATES
FISCAL YEAR 2024/25*

Land Use Category	Maximum Special Tax Rate	Per
Residential Property	$434.74	Unit
Non-Residential Property	0.00	BSF
Mixed-Use Property	See below	
Accessory Dwelling Unit	See below	

*On July 1 of each Fiscal Year, commencing on July 1, 2025, the Maximum Special Tax rates for the Property 1 shall be increased by the February annual percentage change in the Consumer Price Index for all Urban Consumers ("CPI-U") for the San Francisco-Oakland- Hayward, CA, plus one percent (1.0%). If the percentage change in the CPI-U is negative, the Maximum Special Tax rates shall not be decreased. In the event the index described above ceases to be published, it shall be replaced by another reasonably comparable index, as determined by the City.

3. Perpetual Term of Isabel Maintenance CFD. Developer acknowledges that the Isabel Maintenance CFD RMA shall authorize the City to levy special taxes on the Property for a perpetual term.

4. Increased Isabel Maintenance CFD Special Taxes Following Delinquencies. Consistent with Section D of the Isabel Maintenance CFD RMA, under no circumstances will the special taxes levied by the City for the Isabel Maintenance CFD on any taxable parcel in the Project be increased by more than 10% as a consequence of delinquency or default in the payment of special taxes levied by the City for the Isabel Maintenance CFD by the owner of any other taxable parcel in the Isabel Maintenance CFD.

C. Formation of the New Facilities CFD by the City

1. Petition for the New Facilities CFD Formed by the City. At any time during the term of the Development Agreement, but only after annexation of the Property into the Isabel

Maintenance CFD is complete and after the City Manager has notified Developer that the City wishes to establish the New Facilities CFD, Developer may submit a petition to City in accordance with the Mello Roos Act to establish the New Facilities CFD over the Property. In its petition, Developer may include proposed specifications for the New Facilities CFD, including (subject to the Tax Rate Limitation for residential units) the maximum rates ("New Facilities CFD Special Tax Rates") of the special taxes to be levied by the City for the New Facilities CFD ("New Facilities CFD Special Taxes"), the term of the New Facilities CFD, the New Facilities CFD boundaries, and any proposed tax zones. Developer's proposed specifications will be based on Developer's development plans, market analysis, and required preferences, but in all cases will be subject to the Development Agreement and the City's goals and policies for community facilities districts adopted in accordance with the Mello Roos Act ("Goals and Policies"). Unless otherwise agreed by the City and the Developer in connection with the formation of the New Facilities CFD, the New Facilities CFD will not include any improvement areas. Following City's receipt of a petition, Developer and City will meet with City's public financing consultants to determine reasonable and appropriate terms of the proposed New Facilities CFD that are consistent with this Exhibit J and the City's goals in policies for community facilities districts in effect as of the date of this Agreement.

2. Commencement of Formation of New Facilities CFD. Within ninety (90) days following City's receipt of a petition and a reasonable deposit required by Section 53318 of the Mello Roos Act, the City Council shall adopt one or more resolutions of intention to form the New Facilities CFD consistent with the petition. Formation of the New Facilities CFD shall be subject to City Council approval after holding a public hearing in accordance with the Mello Roos Act. The resolutions of intention for the New Facilities CFD shall include a rate and method of apportionment of special tax (the "New Facilities CFD RMA") and authorization to issue one or more series of special tax bonds ("New Facilities CFD Bonds"). Upon City Council approval of the New Facilities CFD and a favorable two-thirds vote in a special tax election in accordance with the Mello Roos Act, the City shall record a notice of special tax lien required by Section 3114.5 of the California Streets and Highways Code (the "Notice of Special Tax Lien") against each taxable parcel within the New Facilities CFD.

3. City Manager Obligations. Subsequent to City Council adoption of the Resolution(s) of Intention, the City Manager shall recommend the City Council approve a Resolution of Formation and shall fully support the formation of a New Facilities CFD for the Project, as described in this Exhibit.

4. Cooperation. The New Facilities CFD RMA shall be consistent with the Developer's petition so long as such petition is consistent with this Development Agreement and the Goals and Policies. Developer and City will each use good faith reasonable efforts at all times to furnish timely to the other, or to obtain and then furnish to the other, any information necessary to develop the New Facilities CFD RMA, such as Developer's plans for the types, sizes, numbers, and timing for construction of buildings within the New Facilities CFD.

5. Maximum New Facilities CFD Special Tax Rates for Developed Property. The New Facilities CFD RMA will specify the maximum New Facilities CFD Special Tax rates (the "Maximum New Facilities CFD Special Tax Rates") for Developed Property (property for

which a building permit has been issued) within the New Facilities CFD. The Maximum New Facilities CFD Special Tax Rates for Developed Property may vary based on sizes, densities, types of buildings to be constructed, and other relevant factors. The New Facilities CFD RMA will establish Maximum New Facilities CFD Special Tax Rates assuming that any New Facilities CFD Bonds issued will have a minimum debt service coverage- ratio of one hundred ten percent (110%).

6. Term of the New Facilities CFD and Bonds. The New Facilities CFD shall have a term of not less than thirty-five (35) years following the initial fiscal year in which the New Facilities CFD Special Taxes are levied. The City and the Developer expect that the New Facilities CFD Bonds will be structured with a term not to exceed thirty-five (35) years.

7. No Requirement for Credit Enhancements. The City shall not obligate the Developer to provide credit enhancements pertaining to the New Facilities CFD. Nothing in this paragraph shall be deemed to prohibit the City from requiring capitalized interest for any New Facilities CFD Bonds not to exceed eighteen (18) months, a value-to-burden ratio for the New Facilities CFD Bonds of greater than three-to-one or the funding of one or more debt service reserve funds for the New Facilities CFD Bonds.

8. Compliance with Tax Rate Limitation. The Maximum New Facilities CFD Special Tax Rates will be set so that the Total Tax Obligation on any residential unit within the New Facilities CFD will comply with the Tax Rate Limitation.

9. Escalation of Maximum New Facilities CFD Special Tax Rates. If requested by the Developer in its petition for the New Facilities CFD, the Maximum New Facilities CFD Special Tax Rates shall increase by two percent (2%) per year.

10. Use of Special Taxes For Direct Payment of Eligible Facilities.

    a. Developer and City agree that the New Facilities CFD RMA and the New Facilities CFD formation proceedings shall provide that Eligible Facilities may be financed directly on a pay-as-you-go basis from Remainder Taxes (as defined below) both before and after the issuance of CFD Bonds, but the Developer (or its assigns) shall not be entitled to pay-as-you-go financing for longer than 10 years after the initial levy of New Facilities CFD Special Taxes in the New Facilities CFD ("pay-as-you-go period"). Accordingly, the New Facilities CFD RMA will provide that Remainder Taxes may be used to directly finance Eligible Facilities for the pay-as-you-go period. For the New Facilities CFD, annually, on the day following each Principal Payment Date (as defined below), all Remainder Taxes will be deposited in the applicable Remainder Taxes Project Account (as defined below).

        i. The term "Remainder Taxes" means, in each year, as of the day following the Principal Payment Date, all New Facilities CFD Special Taxes collected prior to such date in excess of the total of: (a) debt service on the outstanding New Facilities CFD Bonds in the current calendar year, if any; (b) priority and any other reasonable administrative costs that are payable by City or expected to be payable by City prior to the receipt of additional New Facilities CFD Special Tax proceeds; and (c) amounts levied to replenish

any reserve fund as of the Principal Payment Date, including amounts reserved for reasonable anticipated delinquencies, if any.

ii. The term "Principal Payment Date" means, either before or after New Facilities CFD Bonds are issued, September 1 of each year, regardless of whether principal payments are actually due in any particular year.

iii. The term "Remainder Taxes Project Account" means a separate account created by City for the New Facilities CFD and maintained by City to hold all Remainder Taxes of the New Facilities CFD to be used for financing Eligible Facilities.

b. *No Pledge for New Facilities CFD Debt Service.* Remainder Taxes deposited in the Remainder Taxes Project Account will not be deemed or construed to be pledged for payment of debt service on any New Facilities CFD Bonds, and neither Developer nor any other person will have the right to demand or require that City or Fiscal Agent, as applicable, use funds in the Remainder Taxes Project Account to pay debt service, although the City may reserve the right in the applicable indenture to use amounts in the Remainder Taxes Project Account to pay administrative costs, debt service on any New Facilities CFD Bonds or replenishment of debt service reserve funds for the New Facilities CFD Bonds.

11. Prepayment. The New Facilities CFD RMA will include provisions allowing a property owner within the New Facilities CFD to prepay its New Facilities CFD Special Tax obligation as long as it is not in default in the payment of New Facilities CFD Special Taxes. Prepaid New Facilities CFD Special Taxes (defined below) will be placed in a segregated account in accordance with the applicable indenture. The New Facilities CFD RMA and the indenture will specify the use of prepaid New Facilities CFD Special Taxes. Before New Facilities CFD Bonds are issued, all prepayment amounts other than those required for administrative expenses shall be used to finance Eligible Facilities ("Prepaid New Facilities CFD Special Taxes").

12. New Facilities CFD Bonds. Subject to approval of the City Council, the City, on behalf of the New Facilities CFD, intends to issue one or more series of New Facilities CFD Bonds for the purposes set forth in this Exhibit J, but only upon the written request of Developer. The City and Developer intend for the proceeds of any such New Facilities CFD Bonds to refund all outstanding bonds of the Existing CFD, pay the prepayment penalty for those bonds, allow for the release of the lien of the Existing CFD from the Property, and finance the Eligible Facilities.

a. *Underwriting.* The City shall select its financing team for any New Facilities CFD Bonds, including bond counsel, disclosure counsel, municipal advisor, underwriter and special tax consultant.

b. *Timing of Sale.* Developer has informed the City that it intends to ask the City to issue the New Facilities CFD Bonds as soon as possible after the Property in the CFD has achieved a 3:1 value-to-lien ratio. Notwithstanding the foregoing, the parties have agreed that (i) the New Facilities CFD Bonds shall be sold no sooner than the

issuance of any applicable state and federal environmental and cultural permits for the Project (unless otherwise mutually agreed to by the Parties) and (ii) after consulting with the Developer, the City shall determine the timing for the issuance of the New Facilities CFD Bonds, in consultation with its municipal advisor, the underwriter and the other financing participants. The City has informed the Developer that it intends to issue the New Facilities CFD Bonds in a manner that is consistent with sound municipal finance practices.

c. *New Facilities CFD Bonds Temporarily Excused.* The City will be authorized to temporarily suspend the issuance of any New Facilities CFD Bonds during the time in which:

   i. Developer is in default in the payment of any ad valorem tax, New Facilities CFD Special Taxes or Isabel Maintenance CFD special taxes levied on any taxable parcel it then owns in the Project;

   ii. Developer is in default under the Development Agreement;

   iii. Developer fails to cooperate reasonably with the City as necessary to implement the issuance of the New Facilities CFD Bonds in accordance with this Exhibit J;

   iv. In the judgment of the City, after consultation with Developer, and based upon the purposes set forth in this Exhibit J and advice of City staff and consultants, market conditions or conditions affecting the property in the Project (such as tax delinquencies, assessment appeals, damage or destruction of improvements, litigation or proceedings, inquiries or investigations, at law or in equity, or by or before any court, governmental agency, public board or body) make it fiscally imprudent or infeasible to incur the requested indebtedness at the time;

   v. There is an action, suit, proceeding, inquiry or investigation, at law or in equity, or by or before any court, governmental agency, public board or body, pending or threatened against the City or the New Facilities CFD: (A) wherein an unfavorable decision, ruling or finding would adversely affect the existence of the City or the New Facilities CFD or the title of any official of the City to such person's office; (B) seeking to restrain or enjoin the issuance, sale or delivery of the New Facilities CFD Bonds; (C) in any way contesting or affecting the validity or enforceability of the indenture or the New Facilities CFD Bonds; (D) contesting in any way the completeness or accuracy of the Official Statement related to the New Facilities CFD Bonds; or (E) contesting the power of the City or its authority with respect to the New Facilities CFD Bonds or the applicable indenture, or there is any basis for any such action, suit, proceeding, inquiry or investigation, wherein an unfavorable decision, ruling or finding would materially adversely affect the validity of the indenture or the authorization, execution, delivery or performance by the City of the New Facilities CFD Bonds, or the related indenture; or

vi. the underwriter for any issue of New Facilities CFD Bonds exercises any right to cancel its obligation to purchase the New Facilities CFD Bonds during the occurrence and continuation of events specified in its bond purchase agreement.

13. Joint Community Facilities Agreements. The Mello Roos Act requires that the City Council enter into one or more joint community facilities agreements with other governmental entities if any of those governmental entities will own or operate any of the Eligible Facilities to be financed by the New Facilities CFD. The Developer has informed the City that joint community facilities agreements may be required between the City and, among other agencies, the Livermore Area Recreation and Parks District, Alameda County Zone 7 Water Agency, Tri-Valley Transportation JPA, and Livermore Joint Unified School District. City and Developer agree that they will take all reasonable steps to procure the authorization and execution of any required joint community facilities agreements with other governmental entities before the issuance of any New Facilities CFD Bonds that will finance the construction or acquisition of Eligible Facilities that will be owned or operated by such other governmental entities. Developer acknowledges and agrees that the ability of City to enter into joint community facilities agreements is subject to the discretion of the other governmental entities.

14. Miscellaneous New Facilities CFD Provisions

a. *Reserve Fund Earnings.* The indenture for each issue of New Facilities CFD Bonds will provide that earnings on any reserve fund that are not then needed to replenish the reserve fund to the reserve requirement will be transferred to the debt service fund held by the Fiscal Agent under the indenture.

b. *Authorization of Reimbursements.* City will take all actions necessary to satisfy Section 53314.9 of the Government Code or any similar statute subsequently enacted to use New Facilities CFD Bond proceeds and Remainder Taxes (during the pay-as-you-go period) to reimburse Developer for: (i) New Facilities CFD formation and New Facilities CFD Bond issuance deposits and (ii) advance funding of Eligible Facilities or costs.

c. *Acquisition Agreement.* Contemporaneously with the formation of the New Facilities CFD, Developer and City will execute an acquisition and funding agreement (the "Acquisition Agreement") that will apply to the acquisition and construction of the Eligible Facilities for the New Facilities CFD. The Acquisition Agreements shall contain an acknowledgment by City and Developer as to the following:

i. Developer may construct Eligible Facilities before New Facilities CFD Bond proceeds, Remainder Taxes, and Prepaid Special Taxes (herein, "Funding Sources") that will be used to acquire them are available;

ii. City will inspect Eligible Facilities and process payment requests even if Funding Sources for the amount of pending payment requests are not then sufficient to satisfy them in full;

iii. Eligible Facilities may be conveyed to and accepted by City or other

governmental entity before the applicable payment requests are paid in full;

iv. If City or other governmental entity accepts Eligible Facilities before the applicable payment requests are paid in full, the unpaid balance will be paid when sufficient Funding Sources become available, and the Acquisition Agreement will provide that the applicable payment requests for Eligible Facilities accepted by City or other governmental entity may be paid: (A) in any number of installments as Funding Sources become available; and (B) irrespective of the length of time payment is deferred; and

v. Developer's conveyance or dedication of Eligible Facilities to City or other governmental entity before the availability of Funding Sources to acquire the Eligible Facilities is not a dedication or gift, or a waiver of Developer's right to payment of Eligible Facilities under this Development Agreement or any Acquisition Agreement or joint community facilities district executed by City and Developer.

d. *Initial and Continuing Disclosure.* In connection with each issue of New Facilities CFD Bonds, Developer shall provide customary disclosure about Developer and its development and financing plans. In addition, Developer shall comply with all of its obligations under any continuing disclosure agreement it executes in connection with the offering and sale of any New Facilities CFD Bonds. Developer acknowledges that a condition to the issuance of any Bonds may be Developer's execution of a continuing disclosure agreement.

e. *Administrative Expenses.* In determining coverage requirements for any reason (e.g., bond sizing, parity bonds, etc.), City shall prioritize the payment of administrative costs for the New Facilities CFD.

f. *Eligible Facilities.* The New Facilities CFD shall be authorized to finance all or any portion of the items described in Section 53313.5 of the Mello Roos Act that are required to be built in connection with development of the Project at the time of formation of the New Facilities CFD, including, but not limited to street and transit improvements, including grading, paving, curbs and gutters, sidewalks, street signalization and signage, street lights and landscaping related thereto, storm drain facilities, sewer facilities, electric power facilities, including transmission lines, backbone cable, conduits and transformers, school facilities and land, rights-of-way and easements necessary for any of such facilities, the Master Project Infrastructure and the Bike Lane (collectively, the "Eligible Facilities"). To the extent permitted by the Mello Roos Act, the Eligible Facilities may be financed directly or by financing Impact Fees. The City may issue any New Facilities CFD Bonds on a federally taxable basis to finance Impact Fees in its sole discretion.

15. Indemnification; Waiver. The Developer agrees to indemnify, defend, protect, and hold harmless the City, the New Facilities CFD and the City's consultants, Councilmembers, officers, employees and agents, from and against any and all claims, losses, damage, expenses and liability of every kind, nature, and description, directly or indirectly arising from the City's formation of the New Facilities CFD, the levy of the New Facilities CFD

Special Taxes, the execution of any joint community facilities agreements, the issuance of any New Facilities CFD Bonds or any other actions related to the New Facilities CFD.

D. Formation of the New Facilities CFD by a Joint Powers Authority

1. Petition for a Joint Powers Authority to Form the New Facilities CFD. At any time during the term of the Development Agreement, but only after annexation of the Property into the Isabel Maintenance CFD is complete and after the City Manager has notified Developer that the City does not wish to establish the New Facilities CFD, Developer may submit a petition to a joint powers authority acceptable to the City in accordance with the Mello Roos Act to establish the New Facilities CFD over the Property.

2. City Manager Obligations. Subsequent to the Developer's Joint Powers Authority petition, the City Manager shall recommend the City Council approve a Resolution authorizing the JPA to establish the New Facilities CFD and approving an Acquisition Agreement between the City and the Developer and shall fully support the formation of a New Facilities CFD for the Project, as described in this Exhibit.

3. City Council Approval. Concurrently with submitting the petition to the joint powers authority pursuant to the preceding subsection, the Developer shall submit a written request to the City to (a) authorize the joint powers authority to establish the New Facilities CFD, levy special taxes on taxable property in the New Facilities CFD and issue special tax bonds for the New Facilities CFD and (b) approve an Acquisition Agreement between the City and the Developer.

4. Limitations on the New Facilities CFD Formed by a Joint Powers Authority.

    a. Any New Facilities CFD formed by a joint powers authority shall be authorized to finance only Eligible Facilities and Impact Fees, and the City hereby reserves the discretion to direct the joint powers authority to finance any such Eligible Facilities or Impact Fees on a federally taxable basis.

    b. The Maximum New Facilities CFD Special Tax Rates will be set by the Developer and the joint powers authority so that the Total Tax Obligation on any residential unit within the New Facilities CFD will comply with the Tax Rate Limitation.

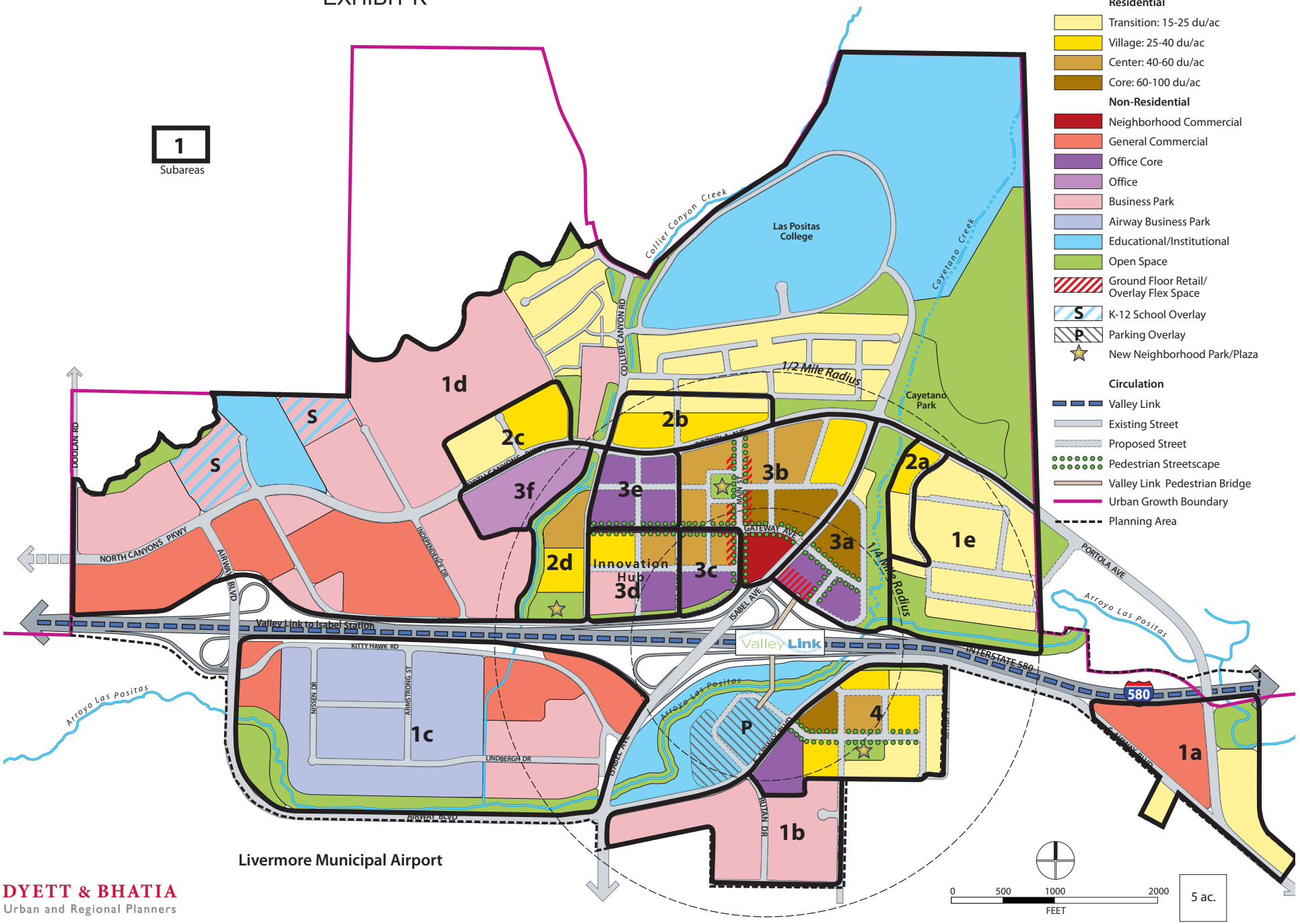
    c. The New Facilities CFD RMA adopted by the joint powers authority shall provide that Eligible Facilities may be financed directly on a pay-as-you-go basis from Remainder Taxes both before and after the issuance of New Facilities CFD Bonds, subject to the limitations on the pay-as-you-go-period set forth in Section C.

    d. The Developer agrees to indemnify, defend, protect, and hold harmless the City, the New Facilities CFD and the City's consultants, Councilmembers, officers, employees and agents, from and against any and all claims, losses, damage, expenses and liability of every kind, nature, and description, directly or indirectly arising from the New Facilities CFD formed by the joint powers authority.

EXHIBIT B

FIGURE 2-3: SUBAREA DIAGRAM

EXHIBIT K

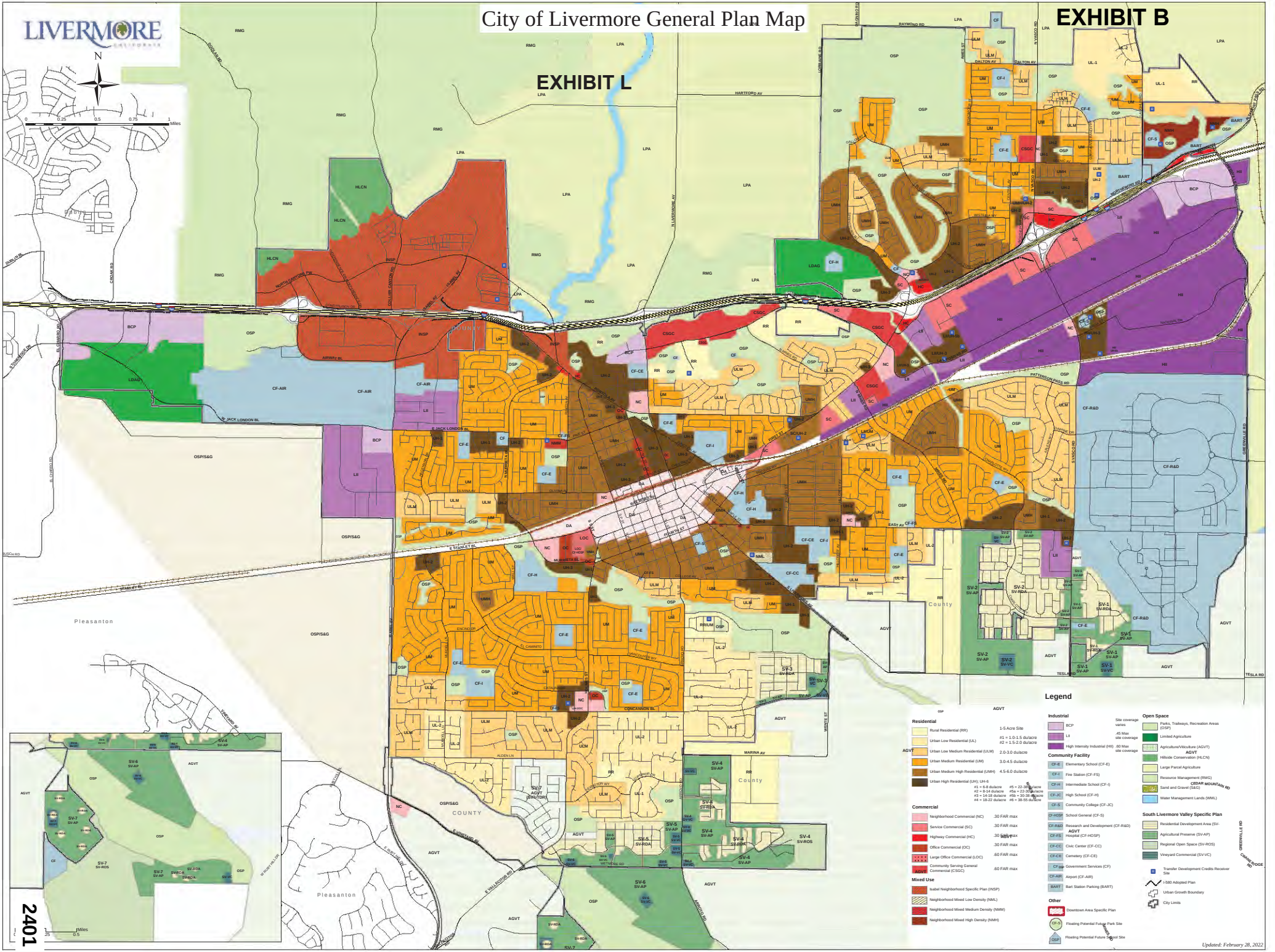


DYETT & BHATIA
Urban and Regional Planners

City of Livermore General Plan Map

EXHIBIT L

EXHIBIT B



City of Livermore Zoning Map

EXHIBIT L

EXHIBIT B

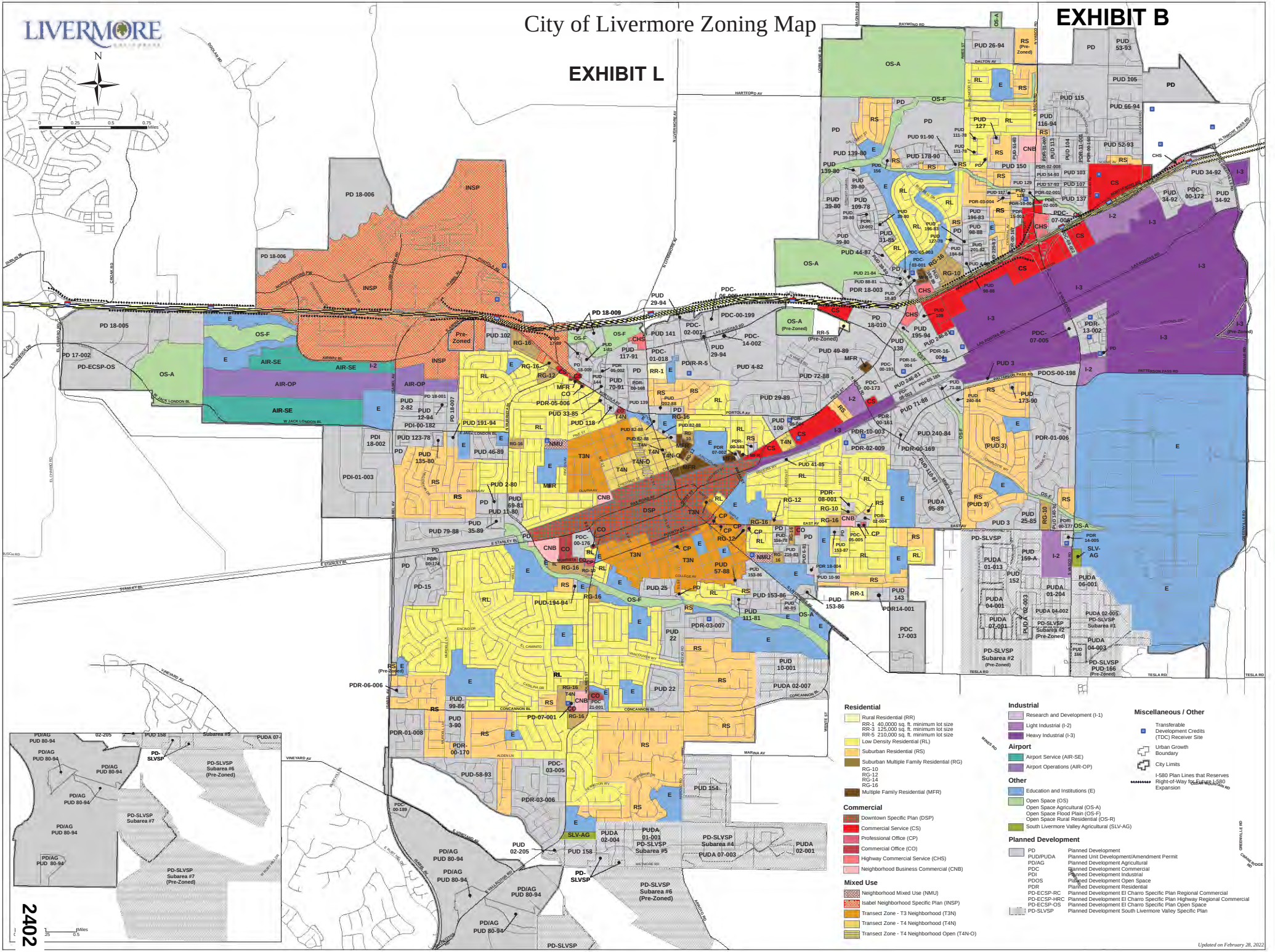
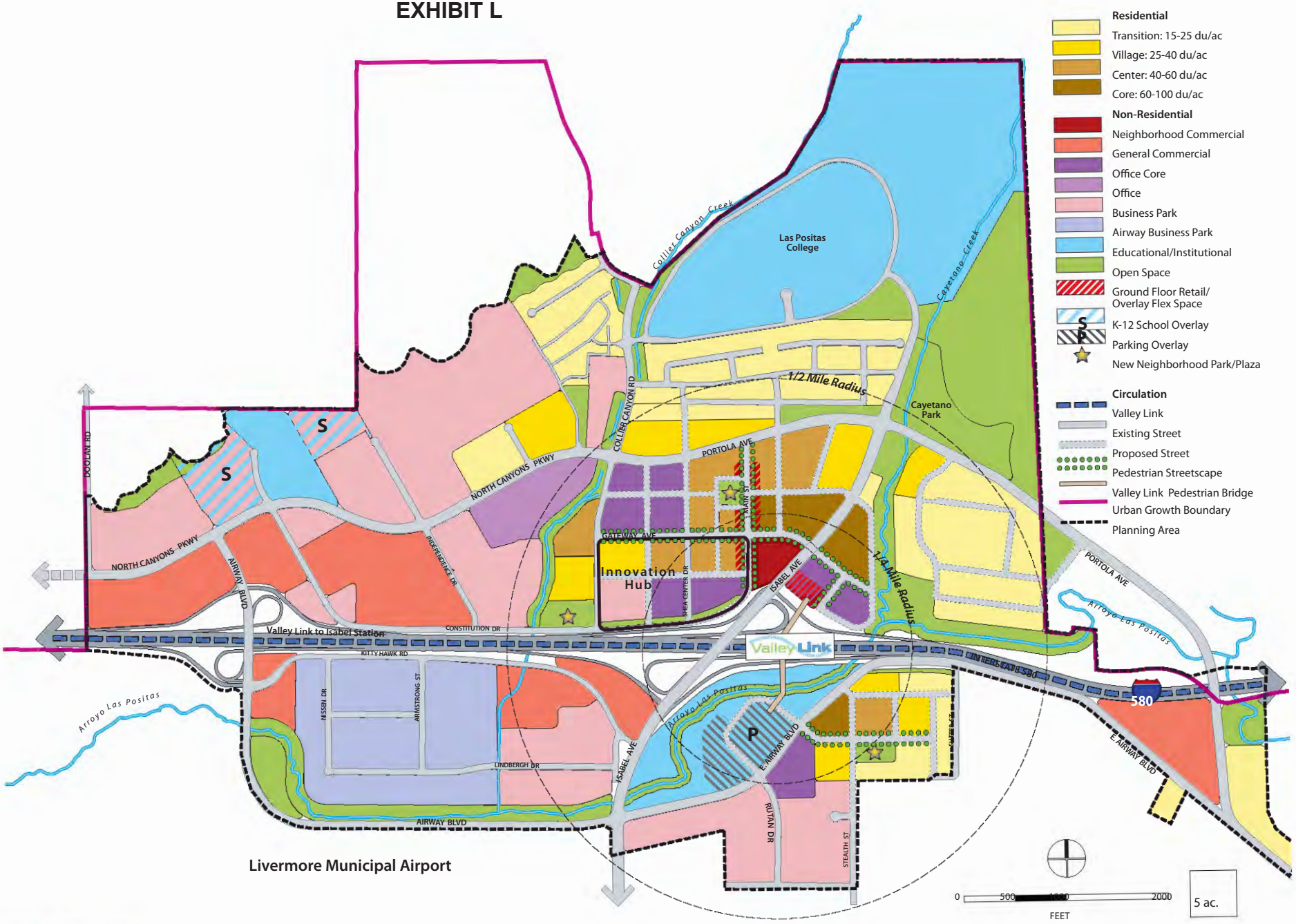


EXHIBIT B

LAND USE DIAGRAM

EXHIBIT L



DYETT & BHATIA
Urban and Regional Planners

Exhibit M

Reserved

Exhibit N

Reserved

EXHIBIT O

Recording Requested By:

CITY OF LIVERMORE

And When Recorded Mail to:

The City of Livermore
1052 S. Livermore Avenue
Livermore, CA 94550
Attention: City Clerk

Documentary Transfer Tax $ Exempt R&T Code 11922

By:
_____
City of Livermore

Recording Fee $0.00 Gov't Code 27383

APN _____

Low Income For Sale Housing Agreement between City of Livermore and [Developer]

This Low Income For Sale Housing Agreement ("Agreement") is entered into on_____, _____, 2024 by and between the City of Livermore, a municipal corporation ("City"), and _____ ("Developer"), with reference to the following facts:

RECITALS

A. A serious shortage of affordable housing exists in the City. Of particular concern is the shortage of housing for low-income and moderate-income households.

B. The impact that for-sale residential units have on the need to meet affordable housing was determined by conducting a Residential Nexus Analysis and Residential Feasibility Analysis. The analyses found that the need for affordable housing is commensurate with a 15% inclusionary requirement. The 20% inclusionary requirement for the Isabel Neighborhood Specific Plan was developed to be economically equivalent to the 15% inclusionary requirement for the General Plan Area.

C. The City's General Plan Housing Element has the goal of providing housing affordable to all economic segments of the community and requires that in the General Plan area 15% of the dwelling units be affordable, in the Downtown Specific Plan area 10% of the dwelling units be affordable, and in the Isabel Neighborhood Specific Plan Area 20% of the dwelling units be affordable. Chapter 10.06.050 of the Livermore Development Code provides that this affordability requirement may also be satisfied by alternative means including payments to the City's Housing Trust Fund for use in affordable housing projects.

D. The Developer desires to build a residential development in the Isabel Specific Plan Area of the City of Livermore, and to enter into this Agreement to satisfy its affordable housing requirement.

AGREEMENT

NOW THEREFORE, in consideration of the terms, conditions and covenants set forth herein, City and Developer agree that the recitals are true and correct and further agree as follows:

1) Development
The Developer intends to develop a subdivision consisting of ___ for sale single-family, attached housing units ("Units") as described in that certain Vesting Tentative Tract Map ____ (the "Map"), located at _____, in Livermore, California (the "Development").

2) Affordable Housing Requirement
Based on the Conditions of Approval for Vesting Tentative Tract Map ____, and Chapter 10.06.050 of the Livermore Development Code, the Developer is required to provide ____ residential units ("Units") for sale at affordable prices to median-income and moderate-income households.

3) Satisfying the Affordable Housing Requirement
In satisfaction of the affordable housing requirement described in Section 2 above, the Developer hereby agrees to: (i) construct _____ Units within the Development, ___ of which will be reserved for sale at Median Income Sales Prices, and _____ of which will be reserved for sale at Moderate Income Prices as defined in Section 7 below, (the "Affordable Units"); and, (ii) for the fractional remainder of the requirement, pay to the City's Housing Trust Fund the in lieu fee, as defined in Section 4, below.

4) Payment Schedule and Calculation
The Development is to pay the in lieu fee for 0.__ Units in the Development which totals $_____, and is calculated as described in Attachment 2. The in lieu fee shall be paid in equal installments of $_____ per Unit at the time of building permit application for each of the ____ unrestricted, market rate Units in the Development (the "Market Rate Units").
The in-lieu fee amount shall be fixed for any Market Rate Units constructed in the Development within five (5) years of the date of execution of this Agreement. Thereafter, the in-lieu fee calculation shall be subject to adjustment to the current Affordable Housing In-Lieu fee per square foot as noted in Attachment 2.

5) Location and Description of Affordable Units
   a) The Affordable Units shall be located on the base lots described below and further depicted in Attachment 1, attached hereto and incorporated herein.

EXHIBIT O

Lot Number	Model	Plan	No. of Bedrooms	No. of Baths	Square footage (+/-)	Affordable Sales Price Category

b) All Affordable Units shall be sold at the sales prices adopted by City Council that are applicable during the year the Affordable Units are sold (the "Median Income Price" and "Moderate Income Price"). For the initial year of this Agreement, the Median and Moderate Income Prices are as set forth in Attachment 3 attached hereto.

c) The Lots listed in Section 5.a and identified in Attachment 1 on which the Affordable Units are to be constructed may be changed with the mutual written consent of the City and Developer not to be unreasonably withheld provided that any change in the Lots does not materially detract from the value of the Affordable Units as determined by the City in accordance with the City's affordable housing ordinance (Dev. Code § 10.06.050).

d) Each Affordable Unit shall
   i. be built in conformance with the models and plans noted in Section 5 (a) above as such plans were approved in connection with Vesting Tentative Tract Map _____ and,
   ii. consist of the square feet of living space comprised of a family room, dining room, kitchen, laundry, bedrooms and bathrooms, as stated in Section 5 (a) above, and
   iii. contain the same standard amenities, fixtures and finishes, such as appliances, cabinets, counters, flooring, etc., as the market

rate units in the Development. Any proposed amenities, fixtures and finishes that differ from those in the Market Rate Units must be pre-approved by the City in writing prior to marketing the first Affordable Unit.

6) Selection of Purchasers

The purchasers ("Purchasers") of the Affordable Units shall be participants in the City's Affordable Homeownership Program (the "Program"). The Program requires, among other things that:

a) For those Affordable Units designated to be sold to median income households, each Purchaser's income shall not exceed one-hundred percent (100%) of the median income for Alameda County, adjusted for actual household size, as published annually by the California Department of Housing and Community Development ("Median Income Purchaser").

b) For those Affordable Units designated to be sold to moderate income households, each Purchaser's income shall not exceed one-hundred twenty percent (120%) of the median income for Alameda County, adjusted for actual household size, as published annually by the California Department of Housing and Community Development ("Moderate Income Purchaser").

c) Median and Moderate Income Purchasers must be first time homebuyers and meet credit and eligibility standards described in the City's Affordable Homeownership Program Guidelines.

d) To the extent required under the Program, Developer agrees to market the Affordable Units through specified City programs to implement applicant selection preferences in accordance with City's Affordable Homeownership Program Guidelines. The Developer may elect to have the City identify and select eligible Median and Moderate Income Purchasers for the Affordable Units.

e) If the Developer elects to utilize the services of the City:

i. The City will establish a list identifying income-eligible households based on preferences established by the Livermore City Council, provide first time homebuyers access to consumer credit counseling, identify to first time homebuyers possible financing options, assist homebuyers through the escrow process, monitor resale restriction agreements and related documents, and comply with all federal and state fair housing laws and regulations.

ii. Upon close of escrow for the sale of each Affordable Unit, the City shall be paid from escrow an administrative fee equal to one and half percent (1.5%) of the Total Purchase Price to conduct the activities described in Section 6 (d)(i) on behalf of Developer.

iii. In order to ensure timely delivery notification of eligible Purchasers, Developer shall send to the City's Housing and Human Services Division Manager, a written notice as soon as Developer, in its reasonable opinion, believes that a particular Affordable Unit is at least one hundred twenty (120) days from being ready for occupancy. At that point, the City will begin marketing and identifying eligible Median and Moderate Income Purchasers. The City shall provide to Developer the names of Median and Moderate Income Purchasers eligible under the Program.

f) If the Developer does not elect to utilize the services of the City, the Developer must meet all of requirements described in this section (6.d.i). The City will monitor the Developer to ensure compliance.

7) Sales Price Limits & Permitted Options

a) For those Affordable Units sold to Median Income Purchasers and Moderate Income Purchasers, the purchase price for each unit shall not exceed the sum of (i) the "Median Income Price" or "Moderate Income Price" plus (ii) the total cost of any Options (as that term is hereafter defined) for the particular Affordable Unit. The Median Income Price and Moderate Income Price are established annually by the City and set forth as Affordable For-Sale Prices, Rental Rates and Maximum Income Limits. The 2024 schedule is attached hereto as Attachment 3, incorporated herein as reference, and adopted by City Council Resolution 2001-204 ("Below Market Price Limits.") The Developer and the City acknowledge that the Below Market Price Limits may be adjusted from time to time and agree that in the event of such adjustment the Median Income Prices and Moderate Income Prices of the Affordable Units shall be adjusted to match the then current Below Market Price Limits at the time the Developer notices the City of an Affordable Unit(s) for sale and/or the marketing of the Affordable Unit(s) begins as mutually agreed upon.

b) The term "Options" shall mean any options, improvements, or upgrades to an Affordable Unit that Developer has made available to a Purchaser and that Purchaser has agreed to purchase at its sole cost and expense and may not be financed. Notwithstanding anything in this agreement to the contrary, the total cost of the Options that a particular Purchaser may purchase for an Affordable Unit shall not exceed five percent (5%) of the Median Income Price and Moderate Income Price for that Affordable Unit. Developer acknowledges and agrees that its sole compensation for any sale of an Affordable Unit shall be the sum of (a) the Median Income Price or Moderate Income Price and (b) the total cost of the Options. The sum total of items (a) and (b) above is hereafter referred to as the "Total Purchase Price".

c) All permitted upgrades and options for the Affordable Units must be pre-approved by the City prior to marketing the first Affordable Unit.

d) For property assessment purposes, the Total Purchase Price for each Affordable Unit shall be reported to the Alameda County Assessor's Office.

8) Affordability Restrictions

To effectuate the affordability restrictions, as a condition to the close of escrow on any Affordable Unit, the Developer shall require Purchaser to execute a promissory note in favor of the City in an amount equal to the difference between the fair market value as determined by an appraisal of the Affordable Unit and the Median Income Price or Moderate Income Price(the "Promissory Note"). In addition to the Promissory Note, the Purchaser shall execute a deed of trust and a resale restriction agreement in favor of the City that will be recorded in a second-priority position at the close of escrow. The Resale Restriction Agreement, Deed of Trust and Promissory Note shall be referred to as the "City Loan Documents" and shall be substantially in the form of Attachment 4.

9) Assignment

This Agreement shall be binding upon the successors and assigns of the parties. Where the Developer sells or otherwise transfers title to any portion of the Property, that subsequent owner and Developer are jointly and severally liable for the obligations under this Agreement as to that portion of the Property sold or transferred unless Developer is released by City, which release shall not be unreasonably withheld, so long as the subsequent owner provides City with security equivalent to any security previously provided by Developer to secure performance of its obligations hereunder. Developer acknowledges that it shall be reasonable for City to condition such release of the Developer upon Developer and its successor entering into a written assignment and assumption agreement requiring the successor to satisfy Developer's outstanding obligations under this Agreement.

10) Breach

No party shall be in material breach of this Agreement unless and until (i) the breaching party receives from the non-breaching party a written notice ("Breach Notice") stating the nature of the breach and (ii) the breaching party has failed to cure such breach within thirty (30) days of the date it receives the Breach Notice; provided, however, if the nature of the breach is of a type or nature that cannot be cured within thirty (30) days, then the breaching party shall not be in material default of this Agreement so long as it (i) commences curing of the breach within thirty (30) days of the date it receives the Breach Notice and (ii) diligently pursues curing the breach to completion.

11) Agreement Lawful and Enforceable.

The Developer acknowledges and concedes that this Agreement is lawful and enforceable and waives any and all legal challenges or other objections to this Agreement. The Developer shall not in any judicial action or proceeding, affirmatively or by way of defense, seek to invalidate or otherwise avoid the application of the terms of this Agreement.

12) Notice

Unless specified otherwise herein, any notice, tender or delivery to be given pursuant to this Agreement by either party shall be in writing and may be accomplished by delivery in person, express delivery service, or first class certified mail, return receipt requested. Any notice shall be deemed received on the date shown on the receipt as the date of delivery, refusal of delivery or the date returned as undeliverable. Notices shall be addressed as set forth below, but each party may change his or her address by written notice in accordance with this Section.

TO CITY:
City of Livermore
1052 So. Livermore Ave.
Livermore, CA 94550
Attn: City Manager

TO DEVELOPER:

With a copy to:

13) Attorneys' Fees

If any legal action is commenced to interpret or to enforce the terms of this Agreement or to collect damages as a result of any breach of this Agreement, then the party prevailing in any such action shall be entitled to recover all reasonable attorneys' fees and costs incurred.

14) Compliance

Compliance with this Agreement satisfies the affordable housing development obligations of Developer under the City's Affordable Housing Ordinance (Section 10.06.050 of the Livermore Development Code), and the Vesting Tentative Tract Map 8609 conditions of approval.

15) Modification

This Agreement shall not be modified except by written instrument executed by and between the parties.

16) Entire Agreement

This Agreement constitutes the entire understanding and agreement of the parties with respect to the sale of the Affordable Units.

17) Binding Effect
This Agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties.

18) Severability
If any term of this Agreement is held in a final disposition by a court of competent jurisdiction to be invalid, then the remaining terms shall continue in full force unless the rights and obligations of the parties have been materially altered by such holding of invalidity.

19) Governing Law
This Agreement shall be governed by the laws of the State of California.

20) Incorporation by Reference
Any exhibits referred to in this Agreement are incorporated in this Agreement by such reference.

21) Counterparts
This Agreement may be executed in counterparts, by actual or facsimile signature (with originals to be forwarded by overnight mail). Each counterpart shall be deemed an original and all, when taken together, shall constitute one agreement.

22) Termination
This Agreement and all terms and conditions contained herein and the encumbrance of this Agreement on title shall automatically terminate once all obligations under this Agreement have been satisfied by the Developer without signing or recording any instrument of release, provided City shall sign any such release to the extent requested by Developer and/or required by any title company insuring the sale or transfer of Units. Notwithstanding the foregoing this Agreement shall terminate in its entirety and be of no further force and effect with respect to, (a) any portion (or interest in) of the Property, upon dedication or conveyance to a homeowners association, public entity or public utility, and (b) any completed Unit, upon the sale of such Unit to a member of the general public. In any such event, such portion of the Property (or interest therein) shall be deemed automatically released from the encumbrance of this Declaration, without signing or recording any instrument of release, provided City shall sign any such release to the extent requested by Developer and/or required by the title company insuring such sales or transfers.

[Signatures and Attachment List on the Next Page]

IN WITNESS WHEREOF, the parties have executed this Agreement on or as of the date first written above.

DEVELOPER:

By: _____
Name:
Its:
For:
Date:_____

CITY OF LIVERMORE: **Dated:**

_____ _____
Marianna Marysheva
City Manager

APPROVED AS TO FORM:

_____
Deputy/Assistant/City Attorney

Attachments:

Attachment 1 – Location of Affordable Units
Attachment 2 – Calculation of In Lieu Fee for Fractional Unit
Attachment 3 – Affordable Homeownership Program Sales Prices
Attachment 4 - City Loan Documents

Attachment 1: Location of Affordable Units

Note: The original plan is available on file as part of Vesting Tentative Tract Map _____ at the City of Livermore Building Department, 1052 S. Livermore Avenue, Livermore CA 94550

EXHIBIT O

Attachment 2

Calculation of In Lieu Fee Payment for Fractional Unit

(See next page)

EXHIBIT O

Attachment 3

Sample Affordable For-Sale Prices, Rental Rates and Maximum Income Limits

(See next page)

EXHIBIT O

Attachment 4

City Loan Documents

(See next page)

EXHIBIT O

COMPLIMENTARY RECORDING
REQUESTED PURSUANT TO
GOVERNMENT CODE SECTION 27383

When Recorded Mail To:
City Clerk
City of Livermore
1052 So. Livermore Avenue
Livermore, CA 94550

RESALE RESTRICTION AGREEMENT

Owner: _____

Residence: _____
Livermore, CA 94551

This Resale Restriction Agreement (the "Agreement") is entered into as of this _____ day of _____, 2021 by and between the City of Livermore, a municipal corporation (the "City") and _____ (the "Owner").

RECITALS

A. There is currently a shortage of single family housing in the City of Livermore that is affordable to low income households, causing many low and moderate income households to be unable to purchase single family homes.

B. To assist low and moderate income households in purchasing single family homes, the City has granted developers certain regulatory concessions and in return developers have agreed to cooperate with the City in developing affordable single family homes.

C. In order to further its plan to assist in the purchase of homes by low and moderate income households, the City has developed a secondary financing program designed to assist qualified purchasers to purchase single family homes while preventing unfair windfall profits to the purchasers (the "Affordable Homeownership Program").

D. Without the City's Inclusionary housing requirements, which require the developers to build homes at an affordable price, the Owner would not have had the opportunity to purchase a single family residence.

E. The City's secondary financing represents the value that the owner has received as a result of the City's Inclusionary requirements.

F. The Owner desires to purchase an affordable single family home and to participate in the Affordable Homeownership Program.

G. The Owner has qualified for City financing with a combined household income which does not exceed One Hundred Twenty percent (120%) of median income of Alameda County, adjusted for actual household size, as published by the California Department of Housing and Community Development.

H. The City wishes to establish resale controls to protect its financial interest in the Residence and to provide for the continued availability of affordable housing.

I. In order to protect its financial interest and its program of providing housing for low income households, the City has required the Owner to execute, in addition to this Agreement, a promissory note in favor of the City (the "City Note").

J. This Agreement and the City Note shall be secured by a deed of trust in a lesser lien position (the "City Deed of Trust") subordinate to the lien of that deed of trust executed by the Owner in favor of the First Lender.

K. The purpose of this Agreement is to place resale controls on the Residence and establish eligibility requirements for subsequent purchasers.

L. The City intends to apply the production of this Residence, to the extent permitted by law, toward the satisfaction of the requirements of Health and Safety Code Section 33413(b)(2).

AGREEMENT

NOW, THEREFORE, in consideration of the benefits received by the Owner and the City, the Owner and the City agree, as follows:

1. DEFINITIONS

The following terms are specially defined for this Agreement:

A. "Affordable Purchase Price" shall mean the maximum purchase price for Moderate Income (120% AMI) housing, adjusted for number of bedrooms, as adopted annually by the City Council of the City.

B. “Affordable Rent” shall mean the lesser of the actual housing costs (including mortgage, homeowners’ insurance, hazard and flood insurance, homeowners’ association dues) or City affordable rental maximum plus reasonable and customary property management services fee.

C. “City Option” shall mean the City’s option to purchase Residence as defined in Section 15.A.

D. “Excess Rental Proceeds” shall mean all rental proceeds collected by the Owner that exceed the Affordable Rent.

E. “Excess Sales Proceeds” shall mean the portion of the gross sales proceeds received by the Owner from a subsequent purchaser, which exceeded the Affordable Sales Price for the Residence that is due to the City. The amount of Excess Sales Proceeds due to the City shall be no greater than the equivalent amount of 3% compounded annual interest on the principal amount of the City Note for a maximum of twenty (20) years. The actual amount of excess sales proceeds due to the City shall be calculated according to the number of years outstanding on the City’s Note.

F. "Fair Market Value" shall be determined by an appraisal of the Residence performed as provided in the Resale Restriction Agreement. Nothing in this subparagraph shall preclude the Owner and the City from establishing the Fair Market Value of the Residence by mutual agreement in lieu of an appraisal.

G. “First Lender” shall mean .

H. “First Lender Deed of Trust” shall mean the deed of trust from Owner to .

I. "First Lender's Loan" shall mean the loan to Owner made by and any loan to Owner in the name of or held by CalHFA.

J. "Median Income" shall mean the median annual income, adjusted for household size, for a household in Alameda County as published by the California Department of Housing and Community Development.

K. "Proposed Purchaser" shall mean the potential home buyer proposed by the Owner to purchase the Residence from the Owner.

L. "Sales Price" shall mean the maximum sales price that the Owner may receive for any Transfer of the Residence to an eligible Purchaser, as calculated in accordance with Section 14 below.

M. "Transfer" shall mean any sale, assignment or transfer, voluntary or involuntary, of any interest in the Residence, including, but not limited to, a fee simple interest, a joint tenancy interest, a life estate, a leasehold interest, (other than as may be permitted in Section 8 of the Resale Restriction Agreement) or an interest evidenced by a land contract by which possession of the Residence is transferred and Owner retains title, or deed of trust.

A Transfer shall not include a transfer by gift, devise or inheritance: (i) to an existing spouse, domestic partner, surviving joint tenant, or child; (ii) by an Owner to a spouse or domestic partner where the spouse or domestic partner becomes the co-owner of the Residence; (iii) between spouses as part of a marriage dissolution proceeding; (iv) to an existing spouse or domestic partner of Owner by devise or inheritance following the death of Owner; (v) by Owner into an inter vivos trust in which Owner is the beneficiary; or (vi) refinance of the First Mortgage meeting the requirements of Section 17 of this Agreement; provided, however, that Owner shall provide written notice of all such transfers to City; and Owner shall continue to occupy the Residence as his or her principal place of residence (except where the transfer occurs pursuant to subsection (iii) or (iv) above, in which event the transferee shall owner-occupy the Residence and affirmatively assume Owner's obligations under this Agreement and the City Note.

2. DESCRIPTION OF PROPERTY

This Agreement concerns the real property commonly known as, _____, Livermore, California, (the “Residence”), which is more fully described in Exhibit A attached hereto and

incorporated by reference.

3. TERM OF AGREEMENT

The term of this Agreement shall commence as of the date of this Agreement and shall expire on that date fifty-five (55) years from the date of this Agreement (the "Term").

4. OWNER CERTIFICATIONS; OWNER OCCUPANCY MONITORING

The Owner certifies that all financial and other information provided in order to qualify to purchase the Residence is true and correct as of the date first written above.

The Owner further covenants and agrees to occupy the Residence as Owner's primary residence for the duration of Owner's ownership and shall not rent or lease the property or portion thereof during the Term of this Agreement without prior written approval of City. The Owner shall be considered as occupying the Residence if the Owner is living in the Residence for at least ten months out of each calendar year. The City may grant a temporary waiver of this occupancy requirement for good cause in its sole discretion. Without limiting the generality of the foregoing, any absence from the Residence by Owner for a period 60 days or more days shall be deemed an abandonment of the Residence as the primary residence of Owner in violation of the conditions of this Section 4. On or before May 1 of each calendar year, the Owner shall provide an annual written certification to the City, in the form shown in Exhibit C, that the Owner is occupying the Residence as Owner's principal place of residence, and that Owner is not renting the Residence, or any portion thereof, to another party. Owner shall comply with all applicable laws relating to the use and maintenance of the Residence, including but not limited to the City of Livermore Municipal Code, City of Livermore Planning and Zoning Code, and all other local, state and federal laws.

5. NO CRIMINAL ACTIVITY

Owner agrees that no resident residing on the Property, their guests or persons under their control shall permit, engage in, or facilitate criminal activity on the Property, in any building on the Property, or in the streets bordering the Property. This includes, without limitation the foregoing: (i) the illegal manufacture, sale, distribution, use or possession with the intent to manufacture, sell, distribute or use a controlled substance as defined in Section 102 of the Controlled Substances Act (21 U.S.C. § 802); (ii) the unlawful discharge of firearms; and (iii) all acts or threats of violence, harming, or intending to harm a person or

property.

6. NO RENTING OR LEASING OF HOME

The Owner shall not rent or lease the Residence, or any portion thereof, to another party, unless such rental or lease is first approved in writing by the City. The City shall approve the renting or leasing of the Residence only if *all* of the following conditions are met: (1) the term of the rental or lease is not greater than twelve (12) months and cannot be extended without City approval; (2) the Owner demonstrates to the City's reasonable satisfaction that the Owner will incur substantial hardship, that would at the City's discretion not otherwise be remedied through the sale of the property, if he or she is not permitted to rent or lease the Residence to a third party; (3) the tenant qualifies as an Income Eligible Household, as certified to the City, and (4) the rent for the Residence does not exceed the Affordable Rent. Any rental or lease of the Residence in violation of this Agreement is prohibited, and shall be a default under this Agreement and the City Deed of Trust. The Owner further agrees that, in the event the Owner rents or leases the Residence to a third party in violation of this Section 6, any Excess Rental Proceeds paid to the Owner by the lessee over the Affordable Rent shall be due and payable to the City immediately upon receipt thereof by the Owner. Owner agrees that the collection of rents shall be monitored and administered through an independent, licensed property manager who shall be pre-approved by the City. Such Excess Rental Proceeds shall be considered a recourse debt of the Owner to the City, as evidenced by the Note, which the City may collect by legal action against the Owner, including by foreclosure under the City Deed of Trust. The Owner hereby agrees that City shall not be responsible for any relocation, eviction, legal or moving expenses if the lessee is required to vacate the premises.

7. MAINTENANCE AND INSURANCE REQUIREMENTS

A. Maintenance. The Owner shall maintain the Residence, including landscaping, in good repair and in a neat, clean and orderly condition (and, as to landscaping, in a healthy condition) and in accordance with all applicable laws, rules, ordinances, orders and regulations of all federal, state, county, municipal, and other governmental agencies and bodies having or claiming jurisdiction and all their respective departments, bureaus, and officials. Owner will not permit deterioration of the Residence, and shall make all repairs and replacements necessary to keep the Residence in good condition and repair. Failure by the Owner to maintain the Residence shall constitute a default under this Agreement for which

the City may exercise the City Option to purchase the Residence pursuant to Section 15 below. In case of default, funds to clean-up or repair damage to the property shall come from the Owner.

B. Insurance. The Owner shall maintain a standard all risk property insurance policy equal to the replacement value of the Residence (adjusted every five (5) years by appraisal, if requested by City), naming the City as an additional insured. Additional insurance requirements are set forth in Section 2 of the City Deed of Trust. The Owner shall provide the City with evidence of required insurance coverage upon request of the City.

8. SALE AND TRANSFER RESTRICTIONS

A. Prohibition on Transfer. Any Transfer without satisfaction of the provisions of this Agreement is prohibited and shall constitute a default by Owner for which the City may exercise the City Option pursuant to Section 15 below.

B. Inheritance. In the event a Transfer occurs by devise or inheritance due to death of the Owner, the administrator of the Owner's estate or the person inheriting the Residence shall provide written notice to the City of the Owner's death within thirty (30) days of the date of death and the following procedures shall apply:

1. If the person inheriting the Residence (the "Inheriting Owner") is a qualified inheritor under the City's definition of eligible parties not subject to Transfer (an "Inheriting Party"), that person shall provide the City documentation of his or her qualifications as an Inheriting Party, to be verified by the City. If the Inheriting Party fails to provide required documentation demonstrating the his or her relationship to the Owner within 60 days of the date of the Owner's death, the party shall be deemed not to qualify as an Inheriting Party. The Inheriting Party shall succeed to the Owner's interest and obligations under this Agreement, the City Note, and the City Deed of Trust and shall execute an assumption agreement containing the terms of the Agreement, City Note and Deed of Trust between the Inheriting Owner and the City and recorded against the Residence.

2. If the Inheriting Owner is not a qualified Inheriting Party, he or she shall Transfer the Residence to an Eligible Purchaser at a price not exceeding the Affordable Purchase Price, pursuant to the procedures set forth in Sections 9 through 14 below and the City may exercise the City Option pursuant to Section 15 below. Prior to initiating a Transfer pursuant to this section, the Inheriting Owner shall provide the City with an Owner's

Notice of Intent to Sell within sixty (60) days of the date of death of the Owner.

3. Failure of an Inheriting Owner to follow the procedures and file the notices described in this Section 8 shall constitute a Default under this Agreement and the City may then exercise any of the remedies set forth in Section 18 below, including, without limitation, exercise of the City Option upon Default.

9. NOTICE OF INTENDED TRANSFER

In the event the Owner intends to Transfer or vacate the Residence, the Owner shall promptly notify the City in writing of such intent. The written notice shall be given in accordance with Section 26 of this Agreement at least one hundred twenty (120) days prior to the actual date of the Transfer or vacation of the Residence, or such other time period as may be mutually agreed upon by the Owner and the City. Said notice from the Owner shall be sent by certified mail, return receipt requested. Following receipt of such notice, the City may notify the Owner within thirty (30) days regarding exercise of the City Option. If the City chooses not to exercise the City Option, City will notify prospective Eligible Purchasers of the Residence that the Residence is available for purchase and shall further provide a Response Notice to Owner that will include the following information: (1) the maximum qualifying income for an Eligible Purchaser; (2) the certifications required of an Eligible Purchaser; and (3) the Sales Price the Owner may receive for the Residence, calculated by the City pursuant to Section 14 below. The Owner may receive referrals for Eligible Purchasers by the City and or its approved homeownership counseling provider for a reasonable administrative fee.

10. REPAYMENT OF CITY NOTE UPON TRANSFER BY OWNER

If a Transfer of the Residence occurs to other than an Eligible Purchaser, the Owner shall pay all amounts due under the City Note (Exhibit B). Thereafter, this Agreement shall terminate and have no further effect.

11. ASSUMPTION OF THE CITY NOTE

If the Owner transfers the Residence to an Eligible Purchaser in a transaction that meets the Eligible Transfer requirements of Section 13 of this Agreement, the City will allow the Eligible Purchaser to assume the obligations under the City Note and the City Deed of Trust, subject to the Eligible Purchaser executing a new promissory note in the amount of

the difference between the Fair Market Value and the Affordable Sales Price at the time of Transfer and a new deed of trust in favor of the City and a new resale restriction agreement. Upon the approval of an Eligible Purchaser's assumption of the Owner's obligations under the City Note and the City Deed of Trust and the execution of a new promissory note, deed of trust and resale restriction agreement by the Eligible Purchaser, the City shall release the Owner from any obligations under this Agreement, the City Note, and City Deed of Trust. The Eligible Purchaser's assumption of the Owner's obligations under the City Note and City Deed of Trust shall be credited by Owner to the Eligible Purchaser as a partial payment of the purchase price for the Residence in the amount of the City Note.

12. TRANSFER BY OWNER

The Owner may sell the Residence to a person of the Owner's choosing (the "Proposed Purchaser") on the terms set forth in this Section.

A. Transfer to Ineligible Purchasers. If the Owner Transfers the Residence in a transaction that does not meet the Eligible Transfer requirements of Section 13 below, the Owner shall first pay (i) all of the principal and interest due to the First Lender, and (ii) all principal and amounts owed on the City Note. Thereafter this Agreement shall terminate and have no further effect.

B. Transfer to Eligible Purchaser. If the Owner Transfers the Residence in a transaction that meets the Eligible Transfer requirements of Section 13 below, the City shall allow the obligations under the City Note to be assumed by the Eligible Purchaser pursuant to Section 13. A. (5) and (6) of this Agreement. The maximum amount that the Owner may receive for the Transfer after the payment of customary and reasonable closing costs for the sale of the Residence shall be lesser of: 1) the Fair Market Value of the Residence; or 2) the Affordable Purchase Price in effect at the date of sale as established by Council, subject to any adjustments due to Advances by the City or as described further in Section 14.

13. ELIGIBLE TRANSFER

A transfer that meets the requirements set forth in this Section shall qualify as an approved Transfer to an Eligible Purchaser ("Eligible Transfer").

A. Disclosures and Submittals. The Owner and the Proposed Purchaser shall provide the following information to City:

EXHIBIT O

1. The name, address and telephone number in writing of the Proposed Purchaser.

2. A signed financial statement of the Proposed Purchaser in a form acceptable to the City and any other supporting documentation requested by the City. The financial information shall be used by the City to determine the income eligibility and credit worthiness of the Proposed Purchaser.

3. The proposed sales contract and all other related documents, which shall set forth the terms of the sale of the Residence, including the following terms:

   a. The sales price, setting out the amount of the first loan and the amount of the City Note which is to be assumed; and

   b. The price to be paid by the Proposed Purchaser for the Owner's personal property, if any, and for the services of the owner, if any.

4. A written certification, from the Owner and the Proposed Purchaser, in a form acceptable to the City that the sale shall be closed in accordance with the terms of the sales contract and other documents submitted to and approved by the City. The certification shall also provide that the Proposed Purchaser or any other party has not paid and will not pay to the Owner, and the Owner has not received and will not receive from Proposed Purchaser or any other party, money or other consideration in addition to what is set forth in the sales contract and documents submitted to the City, including personal property. The written certification shall also include a provision that in the event a Transfer is made in violation of the terms of this Agreement or false or misleading statements are made in any documents or certification submitted to the City, the City shall have the right to file an action at law or in equity to make the parties terminate and/or rescind the sales contract and/or declare the sale void, notwithstanding the fact that the sale may have closed and become final as between the Owner and the Proposed Purchaser. In any event, any costs, liabilities or obligations incurred by Owner and/or the Proposed Purchaser for the return of any moneys paid or received in violation hereunder or for any costs and legal expenses, shall be borne by Owner and/or the Proposed Purchaser and they shall hold the City harmless and reimburse their expenses, legal fees and costs for any action they reasonably take in good faith in enforcing the terms of this Agreement. An executed resale restriction agreement by the Proposed Purchaser with substantially the same provisions as this Agreement and subject to City approval. The recordation of the resale restriction agreement shall be a condition of the City's approval of the proposed sale. The City may require the Proposed Purchaser to pay a reasonable fee to the City and reimburse it for out of pocket costs to cover the costs of administering its rights and obligations under this Agreement.

5. An executed deed of trust and a promissory note from the Proposed Purchaser

in favor of the City except that the principal amount of the new promissory note shall equal the difference between the Fair Market Value and the Affordable Purchase Price at the time of Transfer. The new promissory note shall be subject to the Affordable Homeownership Program terms at the time of Transfer.

6. Upon the close of the proposed sale, certified copies of the recorded deed of trust, a copy of the recorded resale restriction agreement, a copy of the final sales contract, settlement statement, escrow instructions, and any other document which the City may reasonably request.

B. Eligibility Of Purchaser. A purchaser who meets the following requirements shall be an Eligible Purchaser ("Eligible Purchaser"):

1. Each purchaser shall certify that he or she will occupy the Residence as his or her principal residence. The Residence shall be considered the principal residence of the purchaser if the purchaser lives in the Residence for at least ten (10) months out of each calendar year.

2. The combined income for all household members of the purchaser does not exceed One Hundred Twenty percent (120%) of median income of Alameda County, adjusted for actual household size, as published by the California Department of Housing and Community Development.

14. DETERMINATION OF SALES PRICE

A. To Eligible Purchaser. The maximum sales price (the "Sales Price") that the Owner may charge for a Transfer of the Residence to an Eligible Purchaser shall be lesser of: (i) the Fair Market Value of the Residence; or (ii) the Affordable Purchase Price, plus the amount of the Excess Sales Proceeds. In the event that the sum of the Affordable Purchase Price plus the amount of the Excess Sales Proceeds under the City Note exceeds the Fair Market Value of the Residence, the amount of the City Note shall be reduced until the sum of the Affordable Purchase Price plus the amount of the City Note equals the Fair Market Value. No adjustments to the Affordable Purchase Price shall be made for any improvements or upgrades to the unit.

B. Adjustments to Owner’s Net Proceeds Sales Price. The owner’s net proceeds may be decrease by the amount necessary to repair damage to the Residence, if any, and to place the Residence into saleable condition as reasonably determined by the City

including, without limitation, amounts attributed to cleaning; painting; replacing worn carpeting and window coverings; making necessary structural, mechanical, electrical and plumbing repairs; addressing damage noted in the pest report, and repairing or replacing built-in appliances and fixtures. Owner hereby covenants to, at Owner's expense, maintain the Residence in the same condition as in existence on the date of City's Notice of Exercise, reasonable wear and tear excepted to cover any advances made by the City.

C. To Ineligible Purchaser. The sales price that the owner may charge for a Transfer of the Residence to an Ineligible Purchaser shall be reached by mutual consent between the owner and buyer of the residence. If the residence is sold to an ineligible purchaser the owner will be subject to conditions set forth in Section 12. A. of this Agreement.

D. Payment to City of Excess Sales Proceeds. If the Owner Transfers the Residence at an unrestricted price pursuant to this Section 14, or if the Owner makes a Transfer in violation of this Agreement, the Owner shall pay the principal balance of the City Note plus any Excess Sales Proceeds to the City.

15. OPTION TO PURCHASE

A. City Option to Purchase. Owner hereby grants to the City an option to purchase all of Owner's right, title and interest in and to the Residence ("City Option") upon the occurrence of an Option Event as defined in Section 15. C. below, subject to the terms and conditions contained herein.

B. Assignment of the City Option. The City may assign the City Option to another government entity, a nonprofit affordable housing or service provider, or a person or family that qualifies as an Eligible Purchaser. The City's assignment of the City Option shall not extend any time limits contained herein with respect to the exercise period of the City Option or the period within which the Residence must be purchased.

C. Events Giving Rise to Right to Exercise Option. The City shall have the right to exercise the City Option upon the occurrence of any of the following events (each an "Option Event"):

1. Receipt of a Notice of Intent to Transfer (as defined in Section 9);
2. Any actual, attempted or pending sale, conveyance, transfer, lease or other attempted disposition of the Residence or of any estate or interest therein,

except as defined as Events not constituting a Transfer in Section 1.M.;

3. Any actual, attempted or pending encumbrance of the Residence, including without limitation by way of mortgage or deed of trust, or by judgment, mechanics, tax or other lien, except as provided in Section 17 below;
4. Recordation of a notice of default and/or notice of sale pursuant to California Civil code section 2924 (or successor provisions) under any deed of trust or mortgage with a power of sale encumbering the Residence;
5. Commencement of a judicial foreclosure proceeding regarding the Residence;
6. Commencement of a proceeding or action in bankruptcy, whether voluntary or involuntary, pursuant to Title 11 of the United States Code or other bankruptcy statute, or any other insolvency, reorganization, arrangement, assignment for the benefit of creditors, receivership or trusteeship, concerning the Owner; or
7. Any violation by Owner of any provision of this Agreement including, without limitation, the conditions set forth in Sections 4, 5, 6, and 7 above.

16. FAIR MARKET VALUE

If it is necessary to determine the Fair Market Value of the Residence, the Fair Market Value shall be determined by a real estate appraiser approved by the Owner and the City. The cost of the Appraisal shall be borne equally by the Owner and the City. Nothing in this section shall preclude the Owner and the City from establishing the fair market value of the Residence by mutual agreement in lieu of an appraisal pursuant to this section.

17. REFINANCING OF THE RESIDENCE

If authorized by a First Lender, Owner may refinance the First Lender's loan provided the loan amount of such refinancing does not exceed the then outstanding balance of the First Lender's loan plus 2% non-recurring closing costs. However, Owner may not refinance a First Lender's loan with a loan that contains any provisions for negative amortization or balloon payments. Upon Owner's request, the City shall subordinate the City Deed of Trust to a deed of trust or mortgage made by or held by an institutional lender or investor which is given in connection with any refinancing of the First Lender's Loan which meets the criteria set out in this Section 17 of this Agreement.

18. DEFAULTS AND REMEDIES / DEFAULT BY OWNER

Upon a violation of any of the provisions of this Agreement by the Owner, the City shall give written notice to the owner specifying the nature of the violation. If the violation is not corrected to the satisfaction of the City within thirty (30) days after the date the notice is mailed, or within such further time as the City determines is necessary to correct the violation, the City may declare a default under this Agreement. Upon the declaration of a default or if the Owner makes any misrepresentation in connection with receiving any benefits under this Agreement, the City may: (a) declare all amounts due under the City Note immediately due and payable without further demand and may invoke the Power of Sale under the Deed of Trust; and/or (b) exercise the City Option; and/or (c) apply to a court of competent jurisdiction for specific performance of this Agreement, for an injunction prohibiting a proposed sale or transfer in violation of this Agreement, for a declaration that a transfer in violation of this Agreement is void, or for any such other relief at law or in equity as may be appropriate.

19. NOTICE OF DEFAULT AND FORECLOSURE

A request for notice of default and any notice of sale under any deed of trust or mortgage with power of sale encumbering the Residence shall be recorded by the City in the Office of the Recorder of Alameda County for the benefit of the City. The City may declare a default under this Agreement upon receipt of any notice given to the City pursuant to Civil Code Section 2924b, and may exercise its rights as provided in Section 15 of this Agreement.

In the event of default and foreclosure, the City shall have the same right as the Owner to cure defaults and redeem the Residence prior to the foreclosure sale. Nothing herein shall be construed as creating any obligation of the City to cure any such default, nor shall this right to cure and redeem operate to extend any time limitations in the default provisions of the underlying deed of trust or mortgage.

If the City failed to file the request for notice of default, the City Option shall commence from the date the notice of default is given by the City to the Owner.

20. BINDING EFFECT

This Agreement shall bind, and the benefit hereof shall inure to, the Owner, his or her heirs, legal representatives, executors, successors in interest and assigns, and to the City and its successors, until the earlier of (a) the date the City Note is repaid, or (b) the date of

a Transfer of the Residence to an Eligible Purchaser in accordance with Section 12. B. above, or (c) at least 55 years from the date of this Agreement.

21. SUPERIORITY OF AGREEMENT

The Owner covenants that he or she has not, and will not, execute any other agreement with provisions contradictory to or in opposition to the provisions hereof, and that, in any event, this Agreement is controlling as to the rights and obligations between and among the owner, the City and their respective successors.

22. RIGHTS OF BENEFICIARIES UNDER DEEDS OF TRUSTS

Notwithstanding any other provision hereof, this Agreement shall not diminish or affect the rights of a First Lender under the First Lender's Deed of Trust or any subsequent First Lender deeds of trust hereafter recorded against the Residence and the provisions of this Agreement shall be subordinate to the lien of a First Lender Deed of Trust and shall not impair the rights of a First Lender, or such lender's assignee or successor-in-interest (including but not limited to the United States Department of Housing and Urban Development (HUD), Federal National Mortgage Association (FNMA), or the Veterans Administration, if applicable), to exercise its remedies under the First Lender Deed of Trust in the event of default under the First Lender Deed of Trust by the Owner. Such remedies under a First Lender Deed of Trust include the right of foreclosure or acceptance of a deed or assignment in lieu of foreclosure. After such foreclosure or acceptance of a deed in lieu of foreclosure, this Agreement shall be forever terminated and shall have no further effect as to the Residence or any transferee thereafter; provided, however, if the holder of such First Lender Deed of Trust acquired title to the Residence pursuant to a deed or assignment in lieu of foreclosure this Agreement shall automatically terminate upon such acquisition of title, provided that (i) the City has been given written notice of default under such First Lender Deed of Trust, which requirement shall be satisfied by recordation of a notice of default under California Civil Code Section 2924, and (ii) the City shall not have cured the default under the First Lender Deed of Trust within ninety (90) days of such notice.

23. AMENDMENTS AND MODIFICATIONS

This Agreement, and any provisions hereof, may not be modified, amended, waived, extended, changed, discharged or terminated orally or by any act or failure to act on the part of any party hereto, but only by an agreement in writing signed by the party against whom enforcement of any modification, amendment, waiver, extension, change, discharge or

termination is sought.

24. SEVERABILITY

If any term, covenant or condition of this Agreement is held to be invalid, illegal or unenforceable in any respect, this Agreement shall be construed without such term, covenant or condition and the validity or enforceability of the remaining terms, covenants or conditions shall not in any way be affected.

25. CONTROLLING LAW

The terms of this Agreement shall be interpreted under the laws of the State of California.

26. NOTICES

Notices under this Agreement must be delivered to the addresses below by deposit in the United States mail or by overnight delivery service, with postage prepaid and delivery confirmation and shall be deemed to be effective as of the date received or the date delivery was refused as indicated on the return receipt as follows:

To the Owner:

To the City: City of Livermore
1052 S. Livermore Ave.
Livermore, CA 94550
Attn: City Manager

27. INTERPRETATION OF AGREEMENT

The terms of this Agreement shall be interpreted so as to avoid speculation on the Residence and to insure to the extent possible that its sales price and mortgage payment remain affordable to persons and families of low income.

EXHIBIT O

28. EXHIBITS

Any exhibits referred to in this Agreement are incorporated in this Agreement by such reference.

29. COUNTERPARTS

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which when taken together shall constitute one and the same Agreement.

EXHIBIT O

IN WITNESS WHEREOF, the parties have executed this Agreement on or as of the date first written above.

CITY OF LIVERMORE:

By:_____
Marianna Marysheva, City Manager

OWNER:

_____

Approved as to form:

_____
Name:
Title: (Deputy/Assistant) City Attorney for
City of Livermore

CO-OWNER:

_____

Exhibits

A Residence Description
B City Note
C Sample Owner Occupancy Certification Form

EXHIBIT O

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certification is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
}
County of Alameda }

On _____,_____ who before me, _____Notary Public, personally appeared proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (Seal)
Signature of Notary Public

EXHIBIT O

EXHIBIT ‘A’

Legal Description

EXHIBIT O

EXHIBIT ‘B’

Promissory Note

EXHIBIT O

NOTICE TO BORROWER: **Loan No.**

THIS DOCUMENT CONTAINS PROVISIONS
RESTRICTING RESALES AND ASSUMPTIONS

PROMISSORY NOTE

Secured by a Deed of Trust

$ Dated:

Livermore, California

FOR VALUE RECEIVED, the undersigned (the "Borrower") promises to pay to the order of the City of Livermore, a municipal corporation (the "City") at 1052 South Livermore Ave., Livermore, California, or such other place as the City may designate in writing, the principal sum of $ plus any amounts due the City as Excess Sales Proceeds.

1. Definitions. Unless otherwise defined herein, all capitalized terms shall have the meanings ascribed to them in the Resale Restriction Agreement, executed by the parties and of even date herewith.

2. Purpose of City Note. Borrower is purchasing the Residence pursuant to the City's Affordable Homeownership Program, which makes homes available at a price affordable to low or moderate income households. Pursuant to the City's Affordable Housing Ordinance, Livermore Development Code Section 10.06.050, the purchase price of the Residence is substantially below the market value to ensure the Residence will be affordable for purchase by low or moderate income households. Because the purchase price has been set below the market value, the Borrower is required and has agreed to execute a Resale Restriction Agreement that restricts the price of the Residence upon resale and requires the Borrower to pay any Excess Sales Proceeds to City upon resale . In addition, the Resale Restriction Agreement prohibits the renting or leasing of the Residence except with prior written approval of the City.

EXHIBIT O

3. Borrower's Obligation. This Note evidences the Borrower's obligation to pay the City the principal amount of Dollars ($) plus Excess Sales Proceeds for the repayment of the financial assistance provided to the Borrower by the City in connection with the purchase of the Residence as defined in Paragraph 4, below.

4. Security. This Note is secured by a Deed of Trust (the "Deed of Trust") dated the same date as this Note recorded against the property located at , Livermore, California (the "Residence").

5. Repayment. The total amount of the principal and any Excess Sales Proceeds owed under this Note shall immediately become due and payable (i) in the event of an uncured default by Borrower under this Note, the Deed of Trust, or the Resale Restriction Agreement between the City and Borrower, or (ii) on the date a Transfer is made to other than an Eligible Purchaser whether voluntarily, involuntarily, or by operation of law and whether by deed, contract of sale, gift, devise, bequest or otherwise

There shall be no payments due on amounts owed under this Note so long as the Borrower owns the Residence and is not in violation of any provisions of this Note, the Resale Restriction Agreement, or the Deed of Trust. This Note is due and payable upon sale or transfer of title.

At the request of the Borrower, the City shall relieve Borrower of all obligations under this Note, provided that the Residence is sold to an Eligible Purchaser pursuant to the Resale Restriction Agreement, and the Eligible Purchaser executes a new resale restriction agreement, deed of trust, and a new promissory note pursuant to provisions of the Resale Restriction Agreement.

The City shall forgive the principal due under this Note at the time of a Transfer or repayment of this Note to the extent necessary to ensure that the Borrower's obligations to repay the principal due on this Note and on all promissory notes secured by deeds of trust superior to the Deed of Trust do not exceed the Fair Market Value of the Residence.

6. Assumption of Note is Restricted. Borrower acknowledges that this Note is given in connection with the purchase of the Residence as part of a program of the City to assist in the purchase of homes by low or moderate-income persons. Consequently, this Note is not automatically assumable, but is subject to Section 711.5 of the California Civil Code, which allows the City to accelerate all amounts due under this Note if any subsequent sale or transfer of the Residence of any kind does not comply with the provisions of the Resale Restriction Agreement executed between the Borrower and the City and dated the same date as this Note.

7. Prepayments. Borrower may prepay all or any amount of the principal balance due under this Note.

EXHIBIT O

8. Default and Acceleration. Upon the occurrence of an uncured default under this Note, the Resale Restriction Agreement or the Deed of Trust, the City shall have the right to declare the full amount of the principal along with any Excess Sales Proceeds under this Note immediately due and payable. Any failure by the City to pursue its legal and equitable remedies upon default shall not constitute a waiver of the City's right to declare a default and exercise all of its rights under this Note, the Deed of Trust, and the Resale Restriction Agreement. Nor shall acceptance by the City of any payment provided for herein constitute a waiver of the City's right to require prompt payment of any remaining principal and interest owed.

9. No Offset. Borrower hereby waives any rights of offset it now has or may hereafter have against the City, its successors and assigns, and agrees to make the payments called for herein in accordance with the terms of this Note.

10. Waiver; Attorneys' Fees. Borrower and any endorsers or guarantors of this Note, for themselves, their heirs, legal representatives, successors and assigns, respectively, severally waive diligence, presentment, protest, and demand, and notice of protest, dishonor and non-payment of this Note, and expressly waive any rights to be released by reason of any extension of time or change in terms of payment, or change, alteration or release of any security given for the payments hereof, and expressly waive the right to plead any and all statutes of limitations as a defense to any demand on this Note or agreement to pay the same, and jointly and severally agree to pay all costs of collection when incurred, including reasonable attorneys fees. If an action is instituted on this Note, the undersigned promises to pay, in addition to the costs and disbursements allowed by law, such sum as a court may adjudge reasonable as attorneys' fees in such action.

11. Severability. If any provision of this Note shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

12. No Waiver by the City. No waiver of any breach, default or failure of condition under the terms of this Note shall be implied from any failure of the City to take, or any delay by the City in taking, action with respect to such breach, default or failure or from any previous waiver of any similar or unrelated breach, default or failure; and a waiver of any term of the Note must be made in writing and shall be limited to the express written terms of such waiver.

13. Joint and Several Obligations. This Note is the joint and several obligation of all makers, sureties, guarantors and endorsers, and shall be binding upon them and their successors and assigns.

14. Governing Law. This Note shall be construed in accordance with and be governed by the laws of the State of California.

EXHIBIT O

15. Non-recourse; Assignment by City. This Note constitutes a portion of the unpaid balance of the purchase price of the Residence. Borrower shall have no personal liability for any deficiency on this Note and the only remedy available to the City or any holder in due course shall be foreclosure pursuant to law as provided in the Deed of Trust. The City may assign its right to receive the proceeds under this Note to any person and upon notice to Borrower by the City all payments shall be made to the assignee.

DATE: BORROWER:

_____

DATE: CO-BORROWER:

_____

EXHIBIT B

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO
City of Livermore
1052 S. Livermore Avenue
Livermore, Ca. 94550-4899

Complimentary Recording Request Pursuant To Government Code Section 27383

EXHIBIT O

Loan No.:

Space Above This Line for Recorder's Use Only

A.P.N.: File No.:

DEED OF TRUST AND ASSIGNMENT OF RENTS
(Short Form)

THIS DEED OF TRUST, made this between

TRUSTOR: whose address is

TRUSTEE:
and BENEFICIARY: City of Livermore, a Municipal Corporation

Witnesseth: That Trustor IRREVOCABLY GRANTS, TRANSFERS AND ASSIGNS to TRUSTEE IN TRUST, WITH POWER OF SALE, that property in the City of Livermore, Alameda County, State of California, described as:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

The lien of this Deed of Trust is inferior and subordinate to the lien of that certain Trust Deed executed by Trustors named above for the benefit of dated securing an original amount of $, which is recorded concurrently herewith.

If the Trustor/Grantor shall sell, convey or alienate said property, or any part thereof, or any interest therein, or shall be divested of his title or any interest therein in any manner or way, whether voluntarily or involuntarily, without the written consent of the Beneficiary being first had and obtained, Beneficiary shall have the right, at its option, except as prohibited by law, to declare any indebtedness or obligations secured hereby, irrespective of the maturity date specified in any Note evidencing the same, immediately due and payable.

TOGETHER WITH the rents, issues, and profits thereof, SUBJECT, HOWEVER, to the right, power and authority given to and conferred upon Beneficiary by paragraph 10 of the provisions, incorporated by reference, to collect and apply such rents, issues and profits.
FOR THE PURPOSE OF SECURING: 1. Performance of each agreement of Trustor, incorporated by reference or contained herein. 2. Payment of the indebtedness evidenced by one Promissory Note of even date herewith, and any extension or renewal thereof, in the principal sum of $, executed by Trustor in favor of Beneficiary or order. 3. Payment of such further sums as the then record Owner of said property hereafter may borrow from Beneficiary, when evidenced by another Note (or Notes) reciting it is so secured
TO PROTECT THE SECURITY OF THIS DEED OF TRUST, TRUSTOR AGREES: By the execution and delivery of this Deed of Trust and the Note secured hereby, that provisions (1) to (14), inclusive, of the fictitious deed of trust recorded in Santa Barbara County and Sonoma County on October 18, 1961, and in all other counties on October 23, 1961, in the book and page of the Official Records in the office of the county recorder of the county where said property is located, noted below and opposite the name of such county, viz:

County	Book	Page	County	Book	Page	County	Book	Page	County	Book	Page	County	Book	Page
Alameda	435	684	Imperial	1091	501	Merced	1547	538	San Benito	271	383	Siskiyou	468	181
Alpine	1	250	Inyo	147	598	Modoc	184	851	San Bernadino	5567	61	Solano	1105	182
Amador	104	348	Kern	3427	60	Mono	52	429	San Francisco	A332	905	Sonoma	1851	689
Butte	1145	1	Kings	792	833	Monterey	2194	538	San Joaquin	2470	311	Stanislaus	1715	456
Calaveras	145	152	Lake	362	39	Napa	639	86	San Luis Obispo	1151	12	Sutter	572	297
Colusa	296	617	Lassen	171	471	Nevada	305	320	San Mateo	4078	420	Tehama	401	289
Contra Costa	3978	47	Los Angeles	T2055	899	Orange	5889	611	Santa Barbara	1878	860	Trinity	93	366
Del Norte	78	414	Madera	810	170	Placer	895	301	Santa Clara	5336	01	Tulare	2294	275
El Dorado	568	456	Marin	1508	339	Plumas	151	5	Santa Cruz	1431	494	Tuolumne	135	47
Fresno	4626	572	Mariposa	77	292	Riverside	3005	523	Shasta	684	528	Venutra	2062	386
Glenn	422	184	Mendocino	579	530	Sacramento	4331	62	Sierra	29	335	Yolo	653	245
Humboldt	657	527				San Diego Series 2 Book 1961, Page 183887						Yuba	334	486

which provisions, identical in all counties, are printed below) hereby are adopted and incorporated herein and made a part hereof as fully as though set forth herein at length; that he will observe and perform said provisions; and that the references to property, obligations, and parties in said provisions shall be construed to refer to the property, obligations, and parties set forth in this Deed of Trust.

In accordance with Section 2924b, Civil Code, request is hereby made that a copy of any Notice of Default and a copy of any Notice of Sale be mailed to Trustor at Trustor's address hereinbefore set forth, or if none shown, to Trustor at property address.

FURTHERMORE, in the event of foreclosure or deed in lieu of foreclosure, any provisions herein or any provisions in any other collateral agreement restricting the use of the Property to low or moderate-income households or otherwise restricting the Trustor's ability to sell the Property shall have no further force or effect. Any person (including successors or assigns thereto) receiving title to the Property through a foreclosure or deed in lieu of foreclosure shall receive title to the Property free and clear from such restrictions.

NOTICE: A COPY OF ANY NOTICE OF DEFAULT AND OF ANY NOTICE OF SALE WILL BE SENT TO THE ADDRESS CONTAINED IN THIS RECORDED REQUEST. IF YOUR ADDRESS CHANGES, A NEW REQUEST MUST BE RECORDED.

•

Signature of Trustor(s)

_____

Dated: _____ _____

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF California }

}ss.

COUNTY OF Alameda }

On _____, before me, , Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (Seal)

Signature of Notary Public

DO NOT RECORD

The following is a copy of provisions (1) to (14), inclusive, of the fictitious Deed of Trust, recorded in each county In California, as stated in the foregoing Deed of Trust and incorporated by reference In said Deed of Trust as being a part thereof as if set forth at length therein.

TO PROTECT THE SECURITY OF THIS DEED OF TRUST, TRUSTOR AGREES:

(1) To keep said property in good condition and repair; not to remove or demolish any building thereon; to complete or restore promptly and in good and workmanlike manner any building which may be constructed, damaged or destroyed thereon, and to pay when due all claims for labor performed and materials furnished therefore; to comply with all laws affecting said property or requiring any alterations or improvements to be made thereon; not to commit or permit waste thereof; not to commit, suffer or permit any act upon said property in violation of law; to cultivate, irrigate, fertilize, fumigate, prune and do all other acts which from the character or use of said property may be reasonably necessary, the specific enumerations herein not excluding the general.

(2) To provide, maintain and deliver to Beneficiary fire Insurance satisfactory to and with loss payable to Beneficiary. The amount collected under any fire or other insurance policy may be applied by Beneficiary upon indebtedness secured hereby and in such order as Beneficiary may determine, or at option of Beneficiary the entire amount so collected or any part thereof may be released to Trustor. Such application or release shall not cure or waive any default or notice of default hereunder or invalidate any act done pursuant to such notice.

(3) To appear in and defend any action or proceeding purporting to affect the security hereof or the rights or powers of Beneficiary or Trustee; and to pay all costs and expenses, including cost of evidence of title and attorneys' fees in a reasonable sum, in any such action or proceeding in which Beneficiary or Trustee may appear, and in any suit brought by Beneficiary to foreclose this Deed.

(4) To pay: at least ten days before delinquency, all taxes and assessments affecting said property, including assessments on appurtenant water stock; when due, all encumbrances, charges and liens, with interest, on said property or any part thereof, which appear to be prior or superior hereto; all costs, fees and expenses of this Trust. Should Trustor fail to make any payment or to do any act as herein provided, then Beneficiary or Trustee, but without obligation so to do and without notice to or demand upon Trustor and without releasing Trustor from any obligation hereof, may: make or do the same in such manner and to such extent as either may deem necessary to protect the security hereof, Beneficiary or Trustee being authorized to enter upon said property for such purposes; appear in and defend any action or proceeding purporting to affect the security hereof or the rights or powers of Beneficiary or Trustee; pay, purchase, contest or compromise any encumbrance, charge or lien which in the judgment of either appears to be prior or superior hereto; and, in exercising any such powers, pay necessary expenses, employ counsel and pay his reasonable fees.

(5) To pay Immediately and without demand all sums so expended by Beneficiary or Trustee, with interest from date of expenditure at the rate called for in the note secured hereby, or at the amount allowed by law at date of expenditure, whichever is greater, and to pay for any statement provided for by law in effect at the date hereof regarding the obligation secured hereby any amount demanded by the Beneficiary not to exceed the maximum allowed by law at the time when said statement is demanded.

(6) That any award of damages in connection with any condemnation for public use of or injury to said property or any part thereof is hereby assigned and shall be paid to Beneficiary who may apply or release such moneys received by him in this same manner and with the same effect as above provided for disposition of proceeds of fire or other insurance.

(7) That by accepting payment of any sum secured hereby after its due date, Beneficiary does not waive his right either to require prompt payment when due of all other sums so secured or to declare default for failure so to pay.

(8) That at any time or from time to time, without liability therefore and without notice, upon written request of Beneficiary and presentation of this Deed of Trust and said note for endorsement, and without affecting the personal liability of any person for payment of the indebtedness secured hereby, Trustee may: reconvey any part of said property; consent to the making of any map or plat thereof; join in granting any easement thereon; or join in any extension agreement or any agreement subordinating the lien or charge hereof.

(9) That upon written request of Beneficiary stating that all sums secured hereby have been paid, and upon surrender of this Deed of Trust and said Note to Trustee for cancellation and retention and upon payment of its fees, Trustee shall reconvey, without warranty, the property then held hereunder. The recitals in such reconveyance of any matters or facts shall be conclusive proof of the truthfulness thereof. The Grantee is such reconveyance may be described as "the person or persons legally entitled thereto.· Five years after issuance of such full reconveyance, Trustee may destroy said Note and this Deed of Trust (unless directed in such request to retain them.)

(10) That as additional security, Trustor here6y gives to and confers upon Beneficiary the right, power and authority, during the continuance of these Trusts, to collect the rents, issues and profits of said property, reserving unto Trustor the right, prior to any default by Trustor in payment of any indebtedness secured hereby or in performance of any agreement hereunder, to collect and retain such rents, issues and profits as they become due and payable. Upon any such default, Beneficiary may at any time without notice, either in person, by agent, or by a receiver to be appointed by a court, and without regard to the adequacy of any security for the indebtedness hereby secured, enter upon and take possession of said property or any part thereof, in his own name sue for or otherwise collect such rents, issues and profits, including those past due and unpaid, and apply the same, less costs and expenses of operation and collection, including reasonable attorneys' fees, upon any indebtedness secured hereby, and in such order as Beneficiary may determine. The entering upon and taking possession of said property, the collection of such rents, Issues and profits and the application thereof as aforesaid, shall not cure or waive any default or notice of default hereunder or invalidate any act pursuant to such notice.

(11) That upon default by Trustor in payment of any indebtedness secured hereby or in performance of any agreement hereunder, Beneficiary may declare all sums secured hereby immediately due and payable by delivery to Trustee of written declaration of default and demand for sale and of written notice of default and of election to cause to be sold said property, which notice Trustee shall cause to be filed for record. Beneficiary also shall deposit with Trustee this Deed of Trust, said Note(s) and all documents evidencing expenditures secured hereby.

After the lapse of such time as may then be required by law following the recordation of said notice of default, and notice of sale having been given as then required by law, Trustee, without demand on Trustor, shall sell said property at the time and place fixed by it in said notice of sale, either as a whole or in separate parcels, and In such order as it may determine, at public auction to the highest bidder for cash in lawful money of the United States, payable at time of sale. Trustee may postpone sale of all or any portion of said property by public announcement at such time and place of sale, and from time to time thereafter may postpone such sale by public announcement at the time fixed by the preceding postponement. Trustee shall deliver to such purchaser its deed conveying the property so sold, but without any covenant or warranty, express or implied. The recitals in such deed of matters or facts shall be conclusive proof of the truthfulness thereof. Any person, including Trustor, Trustee, or Beneficiary as hereinafter defined, may purchase at such sale.

After deducting all costs, fees and expenses of Trustee and of this Trust, including cost of evidence of title in connection with sale, Trustee shall apply the proceeds of sale to payment of: all sums expended under the terms hereof, not then repaid, with accrued interest at the amount allowed by law in effect at the date hereof; all other sums then secured hereby; and the remainder, if any, to the persons or persons legally entitled thereto .. -

(12) Beneficiary, or any successor in ownership of any Indebtedness secured hereby may, from time to time, by instrument in writing, substitute a successor or successors to any Trustee named herein or acting hereunder, which instrument, executed by the Beneficiary and duly acknowledged and recorded in the office of the recorder of the county or counties where said property is situated, shall be conclusive proof of proper substitution of such successor Trustee or Trustees, who shall, without conveyance from the Trustee predecessor, succeed to all its titJe, estate, rights, powers and duties, must contain the name of the original Trustor, Trustee and Beneficiary hereunder, the book and page where this Deed of Trust Is recorded and the name and address of the new Trustee.

(13) That this Deed of Trust applies to, insures to the benefit of, and binds all parties hereto, their heirs, legatees, devisees, administrators, executors, successors and assigns. The term Beneficiary shall mean the owner and holder, Including pledgees, of the Note secured hereby, whether or not named as Beneficiary herein. In this Deed of Trust, whenever the context so required, the masculine gender includes the feminine and/or neuter, and the singular number includes the plural.

(14) That Trustee accepts this Trust when this Deed of Trust, duly executed and acknowledged, is made a public record as provided by law. Trustee is not obligated to notify any party hereto of pending sale under any other Deed of Trust or of any action or proceeding in which Trustor, Beneficiary or Trustee shall be party unless brought by Trustee.

----------DO NOT RECORD----------

REQUEST FOR FULL RECONVEYANCE

To be used only when note has been paid.

To: , a Corporation, **Trustee**

Dated: _____

The undersigned is the legal owner and holder of all indebtedness secured by the within Deed of Trust. All sums secured by said Deed of Trust have been fully paid and satisfied; and you are hereby requested and directed, on payment to you of any sums owing to you under the terms of said Deed of Trust, to cancel all evidences of indebtedness, secured by said Deed of Trust, delivered to you herewith together with said Deed of Trust, to reconvey, without warranty, to the parties designated by the terms of said Deed of Trust, the estate now held by you under the same.

Mail Reconveyance to: _____

_____

_____

_____

_____ By _____

_____ By _____

Do not lose or destroy this Deed of Trust OR THE NOTE which it secures.
Both must be delivered to the Trustee for cancellation before reconveyance will be made.

Short Form
DEED OF TRUST
WITH POWER OF SALE
INDIVIDUAL

EXHIBIT 'C'

Annual Compliance Report

Certificate of Owner Occupancy

Due by May 1st Annually

Address: _____Livermore CA

I/We hereby certify that I/we have continuously occupied the unit located at the above named address as our Primary Residence as defined according to the City's loan documents. I/We understand that failure to occupy the unit as our Primary Residence shall be cause for default under the City's loan agreements.

Signature(s): Date:

_____ _____

_____

☐ Copy of the most current (April) PG&E statement/bill included (first page only).

Changes to phone or email contact? Please update here:

_____

For concerns about providing this information, changes in property owner status or other questions, please contact the City's Housing and Human Services Division at (925)960-4580.

Mail or deliver completed form and documents to:

City of Livermore
Housing and Human Services Division
1052 S. Livermore Avenue
Livermore, CA 94550

Exhibit P

Public Art Contribution

Introduction

This Exhibit P describes the Developer obligations for the public art contribution for the Project.

Public Art

The City established an Art in Public Places Program (Art Program) (LMC Chapter 12.51) to promote cultural and artistic assets on private development, to improve the City's aesthetic and visual quality, to revitalize the City, and to promote the public's understanding and enjoyment of cultural diversity. To these ends, the Art Program requires the following:

1. Private Development projects are required to contribute to the City's Art Program in an amount no less than 1/3 of one percent of the total Project construction costs.

2. The Art Program allows contributions to consist of public artwork or in-lieu fees.

3. Public artwork means works of art created by artists as unique and original works, in any medium including but not limited to painting, drawing, printmaking, photography, calligraphy, ceramic, sculpture, glass, liquid, water features, murals, light earthworks, conceptual and temporal pieces, functional elements if designed by a professional artist, and art that is integrated into a project's architecture. It may include space for exhibitions, displays or demonstrations and public performances. The artwork may be created through collaboration between the Commission for the Arts, the artist and the community.

The Project's art contributions shall implement the City's Art Program, as follows:

1. Art Master Plan. To ensure a cohesive art design throughout the Project site, the Developer shall prepare a comprehensive Art Master Plan that covers the entire project site and includes a variety of art installations and programs. The requirements of the Master Plan are outlined below:

    a. *Timing and Review*. Within twelve (12) months of Development Agreement approval, Developer shall submit an Art Master Plan to the Director for review. The Developer shall obtain Art Master Plan approval from the Director and the Commission for the Arts within twenty-four (24) months of Development Agreement approval, subject to the Force Majeure provisions of the Agreement.

    b. *Content.* The Arts Master Plan shall include required art as identified in paragraph b(i), below, and a series of art options listed in paragraphs b(ii) – b(iv), below, developer or developer's representative may choose from any of the items listed in paragraphs b(ii) – b(iv), below, to meet the City's art requirements, subject to the

final approval of the Director.

i. Iconic Art. The Art Master Plan shall include the "Iconic Sculpture Installations" in the locations shown on Sheet L1-4 of the Development Plans (Exhibit B). The Iconic Sculptures shall be the largest, most prominent art pieces in the Project and shall be visible from the public right-of-way.

1. The Art Master Plan shall include the sizes, conceptual designs, locations (including Project Planning Areas), and value of all proposed art pieces.

ii. Small Art Installations: The remaining Murals, Small Sculptures, and Decorative Arts shown on Sheet L1-4 of the Development Plans (Exhibit B) and any other art installations may be included in the Art Master Plan, subject to the requirements of this section. The Art Master Plan shall include conceptual locations and reference imagery of proposed small art installations.

iii. Art Space. At the discretion of Director, consistent with Exhibit E (Commercial Exhibit) of this Agreement, the Art Master Plan may include dedication of commercial tenant square footage or Temporary Commercial Activation areas as an art gallery, public art space, or other space for exhibitions, displays or demonstrations and public performances.

1. Consistent with Exhibit E (Commercial Exhibit) of this Agreement, the Master Art Plan shall include the value of the dedicated commercial tenant square footage.

iv. Arts and Cultural Programming. The Art Master Plan may include Arts and Cultural Programming to be held within the Project site.

1. The Art Master Plan shall include a description of the proposed programming and quantity of events.

2. The Art Master Plan shall include the value of the Arts and Cultural Programming.

c. *Commission for the Arts.* The Developer recognizes that the Commission for the Arts is a public body and may require modifications to the proposed Art Master Plan. The Developer further recognizes that Commission for the Arts review may take up to six (6) months. At the discretion of the Director, the timeframes of section 1.a., above, may be extended upon the reasonable request of the Developer for the purposes of accomplishing the purposes of this Exhibit.

2. Contributions. Consistent with the Art Program and prior to the first Building Permit issuance for each Planning Area, the Developer or Successor(s) shall pay, and the City shall accept, an Art fee in an amount equivalent to 1/3 of one percent of the such Planning Area's total construction costs, subject to the following:

Exhibit P
Public Art Contribution

a. The Administrative Services Director shall place such funds in an art account dedicated to the Project (the "Project Art Account").

b. The funds shall only be used within the Project site.

c. The funds shall be used to implement the approved Art Master Plan.

3. Implementation. Developer shall work with a master Art Consultant as follows:

a. The Art Consultant shall construct or oversee the construction of all art pieces and coordinate any Arts and Cultural Programming identified in the approved Art Master Plan.

b. Each Art Piece and the Arts and Cultural Programming shall be consistent with that shown in the Art Master Plan, including with respect to size, quantity, location, design, operating characteristics, etc.

c. The Art Consultant shall utilize, and the Administrative Services Director shall disperse, funds from the Project Art Account to pay for installation of the required artwork and Arts and Cultural Programming.

d. Prior to installation of public art or execution of an arts program, the Art Consultant shall propose projects to the Commission for the Arts, which will make a finding of consistency with the Art Master Plan or identify necessary changes to achieve consistency with the Plan.

e. The Art Consultant shall construct the art pieces and host the Arts and Cultural Programming subject to the timelines described in this Exhibit.

4. Art Easement. Prior to small lot Final Map approval for each Planning Area identified in Exhibit B, Developer or any Successor(s) shall provide an Art Piece Easement on the small lot Final Map in the "Iconic Sculpture Installation" locations and the locations of any small art piece installations specified in the Art Master Plan, as approved by the Director.

5. Art Installation. Prior to the first Certificate of Occupancy of the last building within each Planning Area, the Art Consultant shall install, or cause to install, the art pieces, as described in the Art Master Plan, unless otherwise approved through an art installation plan by the Director.

a. *Other Permits.* The Developer and Art Consultant shall obtain all required permits (e.g. Building Permits, Encroachment Permits, etc.) prior to installation.

6. Unused Funds. If any funds remain in the Project Art Account after implementation of the Art Master Plan is complete, the remaining account balance shall be used for Arts and Cultural Programming, additional art pieces within the Project site, or paid to the City as an in-lieu arts fee for use citywide, as determined by the Director.

Exhibit P
Public Art Contribution

7. Failure to Perform. The Developer and Art Consultant shall adhere to the Art Master Plan, the incorporated schedule, and the requirements of this Exhibit. If the Developer and Art Consultant fail to perform in accordance with the requirements of this Exhibit, subject to the Force Majeure and default and cure provisions under Sections 18, 20 and 21 of this Agreement, the City may use any and all funds in the Project Art Account for public art purposes citywide. Further, if the Developer fails to perform, nothing in this Exhibit precludes the City from utilizing any other remedy described in this Agreement.

8. Amendment. The City and/or Developer may amend the approved Master Art Program subject to further approval by the Commission of the Arts.

EXHIBIT Q

Financial Contribution Exhibit

Introduction

This Exhibit Q describes the Developer obligations for financial contributions for the Development Agreement and the Project.

Social Opportunity Endowment (SOE) Fund

1. Developer shall make a $800,000 funding contribution to the Livermore SOE Fund pursuant to the following payment structure:

    a. Prior to recordation of the first Final Map, Developer shall pay $300,000 to the City.

    b. Prior to tract acceptance, Developer shall pay $500,000 to the City.

Community Benefit Fund

1. Developer shall make a $1.2 million funding contribution to the Livermore Community Benefit Fund, subject to the following:

    a. Prior to recordation of the first Final Map, Developer shall pay $300,000 to the City.

    b. Prior to tract acceptance, Developer shall pay $300,000 to the City.

    c. Prior to the first Certificate of Occupancy of the first Commercial Block, Developer shall pay $600,000 to the City.

    d. Half of the total funds ($600,000) shall be utilized to facilitate tenancy or temporary commercial occupancy within the Project to support and enhance the vitality of the neighborhood serving commercial district.

Early Park Contribution

1. Developer shall make an early $2,000,000 funding contribution to the City for Park Improvements concurrently with the formation of the Infrastructure Financing CFD (Exhibit J). This early park improvement funding contribution shall be credited against the Developer's overall required Park Fee contribution.


KEY
Perimeter Assets
7 VLP controllers
21 LPR cameras
7 Multisensor CCTV
6 PTZ CCTV
Interior Assets
9 Multisensor CCTV
4 PTZ CCTV
VLP 2 Cam
VLP 2 Cam
VLP 4 Cam
VLP 6 Cam
VLP 3 Cam
VLP 2 Cam
VLP 2 Cam
1.5 AC Neighborhood Park
.45 AC Private Rec Facility
Portola Avenue
Existing Office
Pedestrian Connection To Business Park
Amenity Space on Podium Level
Gateway Avenue
Main Street
Main Street with Retail o
Amenity Space on Podiu
Urban Plaza consistin and two Pocket Plaza
Grocery back of house
Trail
EVA/ Trail
Paseos
Front doo street edg
Mid Blo
N1
N2
N3-A
N3-B
N3-C
C1-A
C1-B
C1-C
C2-A
C2-B
C2-C
C3
C5
S1
S2
S3-A
S3-B
S4
Note: For Conceptual Illustrat Subject to Chan

EXHIBIT S

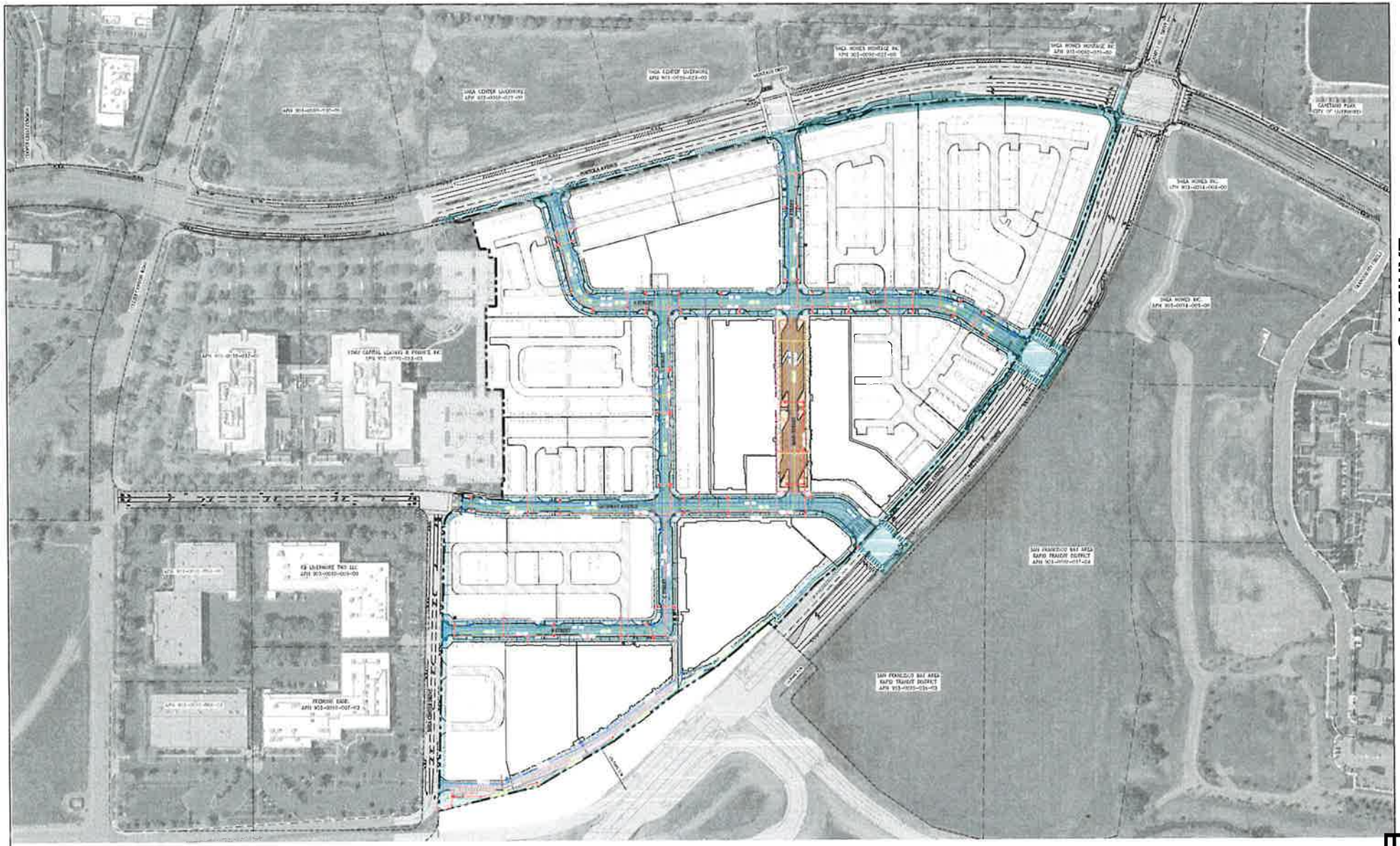


EXHIBIT B

LEGEND

PROJECT BOUNDARY

CFD ELIGIBLE IMPROVEMENTS SUMMARY		
	DESCRIPTION	INFRASTRUCTURE
	GATEWAY AVENUE & MAIN STREET	UTILITY IMPROVEMENTS
	PORTOLA AVENUE / ISABEL AVENUE / SHEA CENTER DRIVE / GATEWAY AVENUE/ MAIN STREET/ A STREET / B STREET / C STREET / EVA & TRAIL CORRIDOR	UTILITY & STREET IMPROVEMENTS

PROPOSED CFD ELIGIBLE INFRASTRUCTURE

ISABEL CROSSING

CITY OF LIVERMORE ALAMEDA COUNTY CALIFORNIA

SCALE: 1" = 60' DATE: JUNE 27, 2024

0 60 120 180

cbg CIVIL ENGINEERS • SURVEYORS • PLANNERS

SAN RAMON • (925) 866-0322
ROSEVILLE • (916) 788-4456
www.cbgcivil.com

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROVING VESTING TENTATIVE TRACT MAP (VTTM) 8659 - SUBDIVISION (SUB) 22-008, SITE PLAN DESIGN REVIEW (SPDR) 24-003, CONDITIONAL USE PERMIT (CUP) 24-002, AND MASTER SIGN PROGRAM AMENDMENT (MSP) 24-001; THE DENSITY BONUS REQUEST; THE NO NET LOSS ANALYSIS; THE PROPOSED MASTER PLAN; AND THE PROPOSED ALTERNATIVE AFFORDABLE PLAN FOR THE ISABEL CROSSING PROJECT

On September 22, 2022, the City of Livermore ("City") received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On March 13, 2023, the City Council adopted the 2023 to 2031 Livermore Housing Element, providing adequate sites to support CA's Regional Housing Needs Allocation (RHNA) requirements.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA 22-001), Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

The Applicant provided all the necessary information to qualify for relief under State Density Bonus Law (CA Government Code Sections 65915 - 65918), upon amended application submittal on May 10, 2024. The Applicant qualifies for unlimited Waivers and two Incentives/ Concessions. The Applicant has requested nine Waivers and one Incentive/Concession.

The Project provides fewer Lower Income units than anticipated in the Livermore Housing Element's Sites Inventory and is required to undergo a No Net Loss Review, as required by Government Code Section 65863.

The Project seeks a Master Plan and an Alternative Affordable Plan, pursuant to the Isabel Neighborhood Specific Plan and the Livermore Development Code, as amended.

On July 2, 2024, at a duly noticed public hearing, the Planning Commission considered the Project, heard public testimony, made the necessary findings, and adopted: 1) Planning Commission resolution No. 16-24, attached hereto as Exhibit A, recommending the City Council approve the Project; and 2) Planning Commission resolution No. 20-24, attached hereto as Exhibit B, finding the Project's easement vacation to be consistent with the General Plan.

On July 22, 2024, the City Council held a duly noticed public hearing to consider the Project, Planning Commission and staff recommendations, all public comments and testimony, and findings.

Together with this resolution, the City Council concurrently considered a resolution for the Project's Specific Plan Amendment (SPPA) 24-001 application; and ordinances for 1) the Project's Development Agreement (DA) 22-001 application; and 2) the Project's Development Code Amendment (DCA) 24-001 application.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the City Council reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The City Council's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore has considered the Record Evidence and adopted a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED that the City Council of the City of Livermore has considered the findings made in Planning Commission Resolution No. 16-24, attached hereto as Exhibit A, and the City Council hereby adopts the same findings by this reference and incorporates them as their own findings as part of this resolution, and as described below:

Vesting Tentative Tract Map 8659 – Subdivision 22-008:

1. The proposed map is consistent with the General Plan and any applicable specific plan, any policy or guideline implementing the General Plan (including the City's Design Standards and Guidelines), or other applicable provisions of this Development Code;

   Findings: The Project is consistent with the intent of the General Plan designation of Isabel Neighborhood Specific Plan given that it provides higher density housing adjacent to transit service and job centers and provides a mix of unit types, sizes, and affordability levels. The Project also implements the Land Use, Housing, Community Character, and Climate Change elements by providing affordable housing near transit that is of a high-quality architectural design and that provides sustainable features like photovoltaic arrays and EV chargers. The Project is consistent with the density range, open space, and design standards and guidelines of the Isabel Neighborhood Specific Plan. With the use of State density bonus Waivers, the Project is consistent with the development standards related to setbacks and height.

2. The site is physically suitable for the proposed type of development;

   Findings: The site is located within the Isabel Neighborhood, which is identified as one of the densest areas in the City. The site is entirely within the City limits and is surrounded by street rights of way and urbanized residential uses. The site is approximately 45 acres. The size of the developable land is large enough to accommodate the proposed apartment buildings, mixed-use buildings, and three-story townhouse buildings, two pocket plazas, town square, recreation center, neighborhood park, and private open spaces. The applicant prepared Phase I, geologic, and biological, studies that found the site contains no hazards, is suitable for residential development, and contains no special-status species. Therefore, the site is physically suitable for the proposed type of development.

3. The site is physically suitable for the proposed density of development;

   Findings: As currently zoned on the project site, the lsabel Neighborhood Specific Plan establishes density ranges of 25-40 units per acre for the Village zoning district, 40-60 units for the Center zoning district, and 60-100 units for the Core zoning district. The developable acreage of the site is approximately 45 acres with a proposed 1,299 units. The Specific Plan Amendment will include the re-designation of zones on the project site to remove the Core zoning designation and average the uses and densities across the project site. Given the existing urbanized nature of surrounding parcels, all required public utilities are located adjacent to the site in the street right-of-way, including: water, sewer, storm drain, telecommunications, and electricity. Services including police, fire, and medical already serve the neighborhood area, including the parcel. The Project is within the Specific Plan's and EIR's anticipated density range even with the proposed

Specific Plan amendment. The Isabel Neighborhood Specific Plan Final EIR and Supplemental Final EIR concluded that existing utilities and services have sufficient capacity to accommodate buildout of the Specific Plan, including the incremental increase in demand from the Project. In addition, an Addendum to the Specific Plan EIR has been prepared for the proposed Project and found that no significant impacts would occur as a result of the change in zoning, use, and density. Therefore, the site is physically suitable for the proposed density of development.

4. The design of the subdivision or the proposed improvements will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat. Notwithstanding the foregoing, the Commission or Council may approve a tentative map if an Environmental Impact Report was prepared with respect to the Project and a statement of overriding considerations was made to the effect that specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR;

   Findings: The Isabel Neighborhood Specific Plan Final EIR and Supplemental Final EIR analyzed all potential environmental impacts of development in the Isabel Neighborhood. The EIR was prepared at a "zoning action" level, for purposes of Public Resources Code section 21083.3 and CEQA Guidelines section 15183, in that it includes enough specificity for future Specific Plan projects to rely on its analysis and limits the need for CEQA review for future Specific Plan projects. The City Council adopted a Statement of Overriding Considerations with the EIR and found that the plan would have significant and unavoidable impacts with respect to traffic, air quality, aesthetics, noise, cultural/ tribal resources, and agricultural resources, but that the City's transit, housing, and economic goals outweighed the impacts, as allowed under CEQA.

   The Council found that the mitigation measures identified in the EIR would reduce all other impacts to a less than significant level. Given that the Project is within the density and intensity levels contemplated by the EIR, no environmental impacts beyond those identified in the EIR would occur. Although the proposed Project proposes a change in zoning and the implementation of Master Planning, an Addendum to the Specific Plan EIR has been prepared for the proposed Project and found that no significant impacts would occur as a result of the change in zoning, use, and density. Further, the applicant prepared geologic, biological, and noise studies and found no impacts peculiar to the Project would occur beyond those identified in the EIR. The Project is also conditioned to conform with the Mitigation, Monitoring, and Reporting Program (MMRP) adopted with the certified EIR, ensuring all other environmental impacts remain less than significant.

5. The design of the subdivision or the type of improvements will not cause serious public health problems;

Findings: The Project will not be detrimental to the public health, safety, or general welfare, and not cause serious health problems. The Project provides adequate emergency vehicle access throughout the site and necessary ladder pads for fire access to upper floors. The Project complies with the County Airport Land Use Compatibility Plan with respect to height, density, or noise and complies with FAA height standards. Water and sewer service will be provided to all units and stormwater will be appropriately managed on site. The site layout is suitable for trash truck pickup and adequate space will be provided in each unit garage, including those units in the apartments and mixed-use buildings, for all waste streams. The applicant prepared, geologic, biological, and noise studies that found no significant impacts would occur beyond those identified in the EIR. Interior noise levels would not exceed 45 dBA, as required by CA Building Code. In addition, no surficial or subsurface hazardous materials were discovered onsite, and the residential use would not produce any hazardous materials, nor substantial noise, odor or vibration during regular operations. The Project will work with the Alameda County Vector Control to minimize vermin spread to adjacent properties during construction. For these reasons, the design of the subdivision or the type of improvements will not cause serious public health problems.

6. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. (The Commission or Council may approve a tentative map if it finds that alternative easements for access will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This Subparagraph shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted to the Commission to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.); and

   Findings: The Project Site contains existing easements for utilities, emergency vehicle access, and pedestrian access. All of the public easements would remain in place or, if it becomes necessary, would be modified with the agreement of all public easement right holders in manner that preserves any required public services associated with any such easements. Additionally, an avigation easement is on record for the property that would remain in place. The easements will not conflict with the Project's proposed building footprints. Accordingly, the design of the subdivision and the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision.

7. Any proposed phases and their proposed sequence of construction are identified on the submitted tentative map. The City may impose reasonable conditions relating to the filing of multiple final maps in conjunction with the approval of the tentative map (Section 66456.1).

Findings: The Project proposes a master, large lot VTTM proposed to be implemented in a single-phase. The VTTM includes appropriate conditions of approval that ensure that required improvements needed to serve the Project and otherwise improve the Project Site and surrounding streets for the benefit of the City and the public. Future Planning Area-specific subdivision maps would be proposed for the City's approval as the Project's Planning Areas are built out on a Planning Area-basis in accordance with the sequence of construction set forth in the Project approvals and consistent with the sale of Planning Areas to builders, market conditions and demand.

Site Plan Design Review 24-003:

1. The proposed development will be permitted within the subject zone.

   Findings: The Project Site is zoned INSP, which generally permits multi-family housing, office, business park, and commercial uses. Within the INSP zone, the Project Site includes INSP zoning designations Village, Center, Core, Neighborhood Commercial, Office Core and Open Space, in addition to the Ground Floor Retail/Flex Space Overlay. The Project proposes a mix of development that includes multi-family housing, retail, restaurant and commercial development, a community serving grocery store or food hall, and a variety of public open space areas and amenities, including a new neighborhood park, public plazas, public trails, and bike lanes. All of the Project's proposed uses are permitted by the Project Site's applicable zoning designations, inclusive of the proposed approval of the Project as a master planned development pursuant to INSP Policy P-LU-8, as amended by the Specific Plan Amendment.

2. The proposed development will be designed such that:

   a. The project will not be detrimental to the public health, safety, or general welfare, and not detrimental to adjacent property;
   b. Architectural design and functional plan of the structure(s) and related improvements are of reasonable aesthetic quality and compatible with adjacent developments;
   c. Structure(s) and related improvements are suitable for the proposed use of the property and provide adequate consideration of the existing and contemplated uses of land and orderly development in the general area of the subject site; and
   d. The project's site plan and design are consistent with the City's Design Standards and Guidelines.

      Findings: The proposed Project will not be detrimental to the commercial, residential and institutional uses of adjacent properties. The Project provides adequate emergency vehicle access throughout the site and necessary ladder pads for fire access on upper floors. The Project does not conflict with the County Airport Land Use Compatibility Plan with respect to height, density, or

noise and complies with FAA height standards. Water and sewer service will be provided to all units and stormwater will be appropriately managed on site. The site layout is suitable for trash pickup and adequate space will be provided in each residential unit garage and each apartment and mixed-use buildings for all waste streams.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials. The design will feature contemporary and traditional architectural styles. A total of 10 residential product types are proposed, which include apartments, flats, townhomes, duplexes, and triplexes, and three of the proposed apartments and flat buildings are mixed-use buildings designed with ground floor commercial uses.

The proposed contemporary and traditional architectural styles incorporate design features and materials that will be compatible with existing and future developments in the surrounding areas. Additionally, the Project utilizes varied building materials, neutral colors, and varied building facades to reduce massing, distinguish each building, and provide a high degree of visual interest, variation and articulation. The proposed color palette and design are compatible with the existing earth tones used in neighboring residential developments.

The Project site is vacant. The proposed structures and improvements to be developed would be suitable for the Project's proposed mix of uses. The Project's Master Plan is configured into 19 different planning areas with varying development types that include townhomes, apartments, condominiums, duplexes, triplexes, open space areas and amenities, and commercial uses oriented around the proposed new commercial Main Street. The structures and improvements would be compatible with the business park and commercial uses to the west of the Project site and residential uses to north of the Project site across Portola Avenue and to the east of the Project site across Isabel Avenue. Additionally, the arrangement of structures and improvements provides for appropriately scaled and orderly development and circulation throughout the Project Site.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials that are consistent with the Specific Plan and the City's design standards and guidelines. The townhomes, duplexes, and triplexes feature slanted roofs, board and batten, gable trim, awnings and canopies, box windows, and columns. The condominiums and apartments feature flat roofs and articulated building facades. The building's fenestration promotes order and variety. Massing is generally repeated at regular intervals, establishing a rhythm throughout the Project. Additionally, the proposed color palette is compatible with existing earth tones used in neighboring residential developments. The project

proposes a richly detailed and varied blend of contemporary, traditional, and modern style and complies with the design requirements of the City's Design Standards and Guidelines.

The Project is also conditioned to conform with the Mitigation, Monitoring, and Reporting Program (MMRP) adopted with the certified 2020 Supplemental EIR. The Project is not detrimental to adjacent properties and considers adjacent uses in the general area. All project frontages contain substantial landscaping and trees to appropriately screen the proposed buildings. The Project meets applicable parking standards. The residential use promotes synergy with surrounding uses, locating residents close to job centers, and will not produce any dust, odor, noise, or glare during regular operations. The structures are suitable for the site and the site plan is consistent with the City's Design Standards and Guidelines.

3. The proposed development is designed to include the following criteria, as applicable:

   a. Compliance with Chapter 9.07 of the Development Code (Site Plan and Design Review), Municipal Code Title 15 (Buildings and Construction), and any other applicable City regulations and policies;
   b. Efficient site layout and design;
   c. Compatible and appropriate in scale to neighboring properties and developments.
   d. Efficient and safe public access (both pedestrian and vehicular) and parking;
   e. Appropriate and harmonious arrangement and relationship of proposed structures and signs to one another and to other development in the vicinity, based on good standards of design;
   f. Appropriate relationship to land use and development of adjacent properties, including topographic and other physical characteristics of the land;
   g. Proper site utilization and the establishment of a physical and architectural relationship to existing and proposed structures on the site;
   h. Compatible architectural style with the character of the surrounding area, both to avoid repetition of identical design where not desired, and to ensure compatibility in design where desired;
   i. Harmonious relationship with existing and proposed developments and the avoidance of both excessive variety and monotonous repetition;
   j. Compatible in color, material, and composition of the exterior elevations to neighboring visible structures;
   k. Appropriate exterior lighting which provides for public safety and is not of a nature that will constitute a hazard or nuisance to adjacent properties;
   l. Compatible in scale and aesthetic treatment of proposed structures with public areas;
   m. Appropriate open space and use of water efficient landscaping; and
   n. Consistent with the General Plan and any applicable Specific Plan.

Findings: The proposed mixed-use development is compliant with the Project site's zoning and would comply with all building code requirements and any additional applicable City regulations pertaining to the development and operation of the Project.

The design, location, size, and operating characteristics of the Project makes the Project Site suitable for the type, density, and intensity of use being proposed. The Project, much like the neighboring residential developments located north of Portola Avenue and east of Isabel Avenue, will feature a variety of residential unit types with community amenities and gathering spaces. Non-residential spaces such as the neighborhood park, recreation center, and pocket plaza, will provide residents and guests with areas for leisure, exercise, and gathering.

The Project is of compatible and appropriate scale to neighboring properties and development. Directly adjacent to the property to the east is the Lam Research facility and a business park. North of the Project Site across Portola Avenue is an existing residential development of similar scale that features various unit types, including townhomes. East of the Project Site across Isabel Avenue is vacant land and beyond that is another existing residential development that also features a variety of residential unit mixes and residential amenities. Southwest of the Project Site across I-580 are office, commercial, and industrial uses. Accordingly, the Project would be compatible with existing neighboring developments.

The existing street network will serve the project. Vehicular access would be provided via four access points. Two points of vehicular ingress and egress would be located along Portola Avenue and two points of vehicular ingress and egress would be located along Isabel Avenue. The project proposes four new public streets and several new private alleys that would be internal to the development. Four community entries are proposed throughout the Project Site. The community entries would be located at the ends of the private streets and would also include pedestrian pathways to ensure pedestrian safety.

The Project Site's proximity to major roadways and highways and the internal roadways within the Project provide sufficient public and emergency vehicle access. The Project would provide 2,167 parking spaces within private garages, above-grade parking garages, on the proposed streets. A bus stop would be located along Isabel Avenue and another along Portola Avenue. Accordingly, the Project would provide efficient and safe public access.

The structures are strategically arranged and designed to be visually appealing, functional, and to facilitate pedestrian and vehicular traffic throughout the Project site. A neighborhood sign element is proposed at one of the access points along Isabel Avenue.

The adjacent properties to the east and west consist of similar, mostly flat, topographic conditions. The proposed land use and development would be compatible with adjacent properties. The mixed-use development would be carefully configured within existing city streets and proposed internal streets, allowing for efficient circulation and access. Additionally, the Project would feature a pedestrian connection to the neighboring business park along the proposed Gateway Avenue which would run perpendicular to the existing Shea Center Drive.

The Project site does not contain any existing structures. The Project's configuration is harmonious with neighboring developments, creating a gradual increase in density generally from the north where there are existing residential units to the south where densities are higher in the proposed Project.

The proposed residential and mixed-use buildings and recreation facility would be properly configured with respect to existing Project Site conditions. There are a total of 10 different product types. The townhomes, duplexes, and triplexes will feature contemporary and traditional architectural styles. The apartments and condos will feature modern architectural styles. The combination of product types and architectural styles vary the building massing. Additionally, courtyards and podiums break up the massing in the apartment and condominium unit types. Massing is generally repeated at regular intervals, which would establish an effortless rhythm throughout the Project.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials. As discussed previously, the architectural styles include contemporary and traditional architectural styles that are compatible with the existing residential development in the vicinity. However, variations are incorporated so that the residential developments in different portions of the Project site are uniquely identifiable. The residential development will consist of a mix of flats, townhomes, triplexes, and duplexes, so that they are not repetitious and contribute to a desirable walkable environment.

The Project is designed such that it will be well integrated with the adjacent Business Park and features a pedestrian connection to the Business Park along Gateway Avenue. The Project, like neighboring residential Projects, features a variety of unit mixes and types and community open space and amenity spaces. The architectural styles and color palette is compatible with the contemporary styles and earth tone colors used in neighboring developments, avoiding excessive variety. At the same time, the Project maintains its own unique character to avoid monotonous repetition.

The composition of buildings and exterior elevations are compatible with neighboring business park and residential uses. The proposed contemporary, modern, and traditional architectural styles incorporate design features and

materials that distinguish the Project from surrounding developments, while complementing other styles within the Specific Plan and surrounding areas. The proposed color palette is compatible with existing earth tones used in neighboring residential developments. The proposed materials are appropriate, standard materials like those used in adjacent developments.

The Project provides appropriate exterior lighting that promotes public safety and is not of the nature that will constitute a hazard or nuisance to adjacent properties. Streetlights consistent with City standards are proposed throughout the Project's internal roads to provide internal lighting for pedestrian and vehicular travel. Pedestrian-scale lighting is concentrated primarily along Main Street, with additional lighting on the eastern end of Gateway Avenue and along the Project Site's other internal streets. Roadway lights are proposed along Isabel Avenue. All lighting would all comply with the City's lighting standards and will be down shielded to avoid impacts to aircraft.

Proposed structures in public areas will be compatible with the surrounding structures within the development in terms of scale, design and materiality. Additionally, any aesthetic and architectural treatment ensure consistency with the development and with surrounding properties.

The Project proposes to provide 447,259 square feet of open space. The Project would feature water-efficient landscaping throughout, resulting in 203,020 square feet of water efficient landscaping. The Project Site would be Maximum Allowed Water Allowance (MAWA) compliant. In addition, the Project would utilize recycled water for non-potable purposes including irrigation throughout the Project Site.

The Project is consistent with the General Plan in that the Project is located so as to create a consolidated pattern of urbanization, maximizing the use of existing public services and facilities (Objective LU-1.1); it creates neighborhoods that include a mix of uses and a range of housing types to meet the needs of all residents (Objective LU-1.2); it create neighborhoods near transit that include a mix of uses and a range of housing types to meet the needs of all residents (Objective LU-3.1). It maintains and enhances Livermore's urban design quality and encourage high quality design in all new development and redevelopment (Objective CC-2.1); it implements policies and actions that will encourage existing businesses to remain and grow in Livermore and attract a range of new businesses to locate in Livermore (Objective ED-1.1). It encourages and provides greater support for infill, mixed use, and higher density development in order to reduce Greenhouse Gas (GHG) emissions associated with vehicle travel (Objective CLI-1.2); it supports measures that encourage alternative modes of transportation and alternative fuels in order to reduce emissions associated with vehicle travel (Objective CLI-1.3); it enhances existing water efficiency and conservation measures and uses recycled water use and water efficiency in order to reduce energy and GHGs

associated with water use (Objective CLI-1.4); and, it expands the number of trees in Livermore in order to provide a larger carbon sink or area containing natural sources that retain more carbon than what those sources emit (Objective CLI-1.6).

The Specific Plan Goals and Policies are outlined in the Land Use, Transportation, Parks, Public Facilities, and Infrastructure, Urban Design, and Environmental Resources and Conservation chapters. A matrix of the Specific Plan Goals and Policies, and how the Project is consistent with them, is referred to and included in the City Council report as Attachment 36.

Conditional Use Permit (CUP) 24-002:

1. The proposed use is consistent with the General Plan and any applicable Specific Plan;

   Findings: The Development is consistent with the existing General Plan land use designation of Isabel Neighborhood Specific plan and is consistent with Specific Plan requirements as proposed in the Specific Plan Amendment, and meets the Specific Plan goals and intention for subareas 3b and 3c to create a vibrant, walkable mixed-use community with higher density residential uses, public open space amenities that promote recreation and alternative forms of transportation, and job-producing commercial uses within close, walkable proximity of one another. The Project would create a vibrant, safe, and complete neighborhood with a wide range of housing options, commercial spaces, and new job opportunities, as well as support transit ridership and citywide goals for increased transit options. The Project would also be compatible with and would not adversely affect surrounding uses.

2. The proposed use is allowed within the subject zone and complies with all other applicable provisions of this Development Code and the Municipal Code;

   Findings: The Isabel Neighborhood Specific Plan zone generally permits multi-family housing and commercial development uses proposed by the Project. The Project site is within subareas 3b and 3c and uses are further regulated by the Specific Plan designations including Village, Center, Core, Neighborhood Commercial, Office Core and Open Space, in addition to the Ground Floor Retail/Flex Space Overlay. All proposed uses within the mixed-use Project are permitted by the Project site's zoning, as allowed by the Specific Plan Amendment herein and the Specific Plan Master Planning provisions implemented for the Project. The Project otherwise complies with applicable provisions of the Development Code, as proposed to be amended by this project, and the Municipal Code.

3. The design, location, size, and operating characteristics of the proposed activity will be compatible with the existing and future land uses in the vicinity;

Findings: The Project Site is surrounded by office and industrial uses to the west, residential uses and a community college campus to the north; vacant land, open space, and residential uses to the east, and commercial, industrial, and residential uses and an airport to the south, across the I-580 Freeway. The mixed-use development would therefore be consistent and compatible with surrounding uses. The Project would include residential developments that are compatible with the residential uses to the north across Portola Avenue and to the east across Isabel Avenue, and the Project would include public open space amenities including offsite bike lanes and other transportation improvements and community-serving commercial uses that will serve and complement the surrounding commercial, educational and residential uses in a manner consistent with the Master Planning for the Project site under the Specific Plan. The Project would also help to integrate existing surrounding commercial, office, industrial, and residential uses with future uses on vacant adjacent parcels, including a proposed future Valley Link station.

4. The subject site is:

    a. Physically suitable in terms of design, location, size, and operating characteristics, shape, size, topography, and the provision of public and emergency vehicle (e.g., fire and medical) access and public services and utilities; and

    b. Served by highways and streets adequate in width and improvement to carry the kind and quantity of traffic the proposed use would likely generate.

Findings: The 45.38-acre Project site has gently sloping grades that can accommodate the 1,299-unit mixed-use residential and commercial development that is proposed without substantial grading or excavation. While the Project Site is vacant and has not been developed, it is in an area that is surrounded by urban development and is adequately served by public and emergency vehicle access via the City's existing network of public roads and is fully served by existing public services and utilities. Additionally, as a part of the development, the Project will construct a new internal street network that will service the Project site and provide internal vehicular access and utility connections throughout the Project to ensure that the development is adequately served by utilities and public services, including the provision of emergency access through compliance with applicable Development, Municipal, Building, and Fire code standards.

The Project site is located at the southwestern corner of the intersection of Isabel Avenue and Portola Avenue and is located northwest of State Route 84 and north of Interstate 580. As determined by prior environmental analysis of the Specific Plan and for the Project, the kind and quantity of traffic the Project would generate will be adequately served by the Project site's internal streets and the existing network of external roadways and highways in proximity to the Project. Vehicular access would be provided via five proposed vehicular access points. Two points

of vehicular ingress and egress would be located along Portola Avenue, two points of vehicular ingress and egress would be located along Isabel Avenue, and one point along Shea Center Drive. The Project would also add two new traffic signals at the intersection of Isabel Avenue and Gateway Avenue, and at Isabel Avenue and A Street, and improve the existing traffic signal at Main Street and Portola Avenue.

5. The site's suitability ensures that the type, density, and intensity of use being proposed will not endanger, jeopardize, or otherwise constitute a hazard to the public interest, health, safety, convenience, or welfare, or be materially detrimental to the improvements, persons, property, or uses in the vicinity and zone in which the property is located; and

   Findings: The Project proposes to develop 1,299 dwelling units, grocery store, retail, restaurant, and other commercial space, a public park and plazas, other open space, and other residential amenities. The Project is designed to create a harmonious environment where homes and job opportunities are created, and residents and employees have access to regional and local transit. The Project density does not exceed the overall density permitted by the Specific Plan, and the uses proposed would not endanger, jeopardize, or otherwise constitute a hazard to public interest, health, safety, or become a nuisance in the vicinity.

6. The applicant agrees in writing to comply with any and all of the conditions imposed by the review authority in the approval of the Conditional Use Permit or Zoning Use Permit.

   Findings: The Applicant has agreed to comply with any and all of the conditions imposed by the reviewing authority in the approval of the Conditional Use Permit, subject to Development Agreement 22-001.

7. That any other findings prerequisite to approval of a Conditional Use Permit or Zoning Use Permit stated elsewhere in the Development Code can be made. (Ord. 1927 § 3 (Exh. C), 2011.)

   Findings: The Project is not subject to any additional findings prerequisite to approval of a Conditional Use Permit.

Master Sign Program Amendment (MSP) 24-001:

1. The Program is consistent with the regulations in Chapter 4.06 of the Development Code.

   Findings: The current Master Sign Program will no longer encumber the Project's parcels but will remain in effect for all other parcels that it applies to as described in the Planning Commission staff report dated July 2, 2024.

2. The Program conforms to City's Design Standards and Guidelines.

   Findings: The conformance to the City's Design Standards and Guidelines will continue for the affected Master Sign Program area and is no longer applicable in the areas of the Project site. Any project signs will be subject to the applicable INSP and citywide Design Standards and Guidelines.

Density Bonus Request (CA Government Code Sections 65915 – 65918):

Waivers

The Developer has requested the following waivers: The reduction of the porch separation in Parcel N-1, private open space dimensions in Parcel N-2 and N3-A, front setback and floor to ceiling height requirement in Parcel C1-B, front setback, height limit, and floor to ceiling height requirement in Parcel C2-A, minimum commercial FAR and height limit requirement in Parcel S1, private open space in S2 and S4, height limit in Parcel S3-A, and height limit in Parcel S3-B. Pursuant to Government Code Section 65915 – 65918, a local jurisdiction may deny any and all Waivers if the following findings can be made:

1. The waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact.

   Findings: The proposed Waivers are primarily for development standards that impact the Project's internal areas. Porch separation, private open space dimensions, and front setback primarily impact the building massing and usable open space. Although these standards would be reduced, the Waivers are focused to specific buildings within each Planning Area, and not all buildings. Further, each unit would still provide the required open space area, just in a different configuration than required, and with dimensions of one foot less than required, ensuring each unit still contains private outdoor open space for residents to utilize. Further, in no case will any porch be less than 7.5 feet from any other porch along paseos, ensuring adequate accessible, fire, and utility access, and ensuring light and air between buildings. The proposed commercial space ceiling height would still meet all requirements of the CA Building Code. All buildings would be required to undergo FAA review prior to Building Permit issuance, to ensure their heights do not present a hazard to nearby aircraft. For these reasons, the waivers would not result in a specific adverse impact upon public health and safety.

2. The waiver or reduction would have an adverse impact on any real property that is listed in the California Register of Historical Resources.

Findings: The property is not listed on the National Register of Historical Resources, the California Register of Historical Resources, nor on the City of Livermore's Historical Resources Inventory. No historic resources would be materially impaired.

3. The waiver or reduction would be contrary to state or federal law.

   Findings: The above listed standards for which the Project is seeking waivers, are established by local ordinance and would not violate any State or Federal law. In addition, requested waivers would not cause the project to encroach on any sensitive habitat, riparian areas, wetland areas, or state or federal property. The Specific Plan has found no sensitive habitat, riparian areas, wetland areas, state property, or federal property on or adjacent to the project site. All buildings will be required to undergo FAA review prior to Building Permit, ensuring they are consistent with all federal aviation standards. For these reasons, the requested Waivers are consistent with all state and federal laws.

Given that none of the findings above can be made, State Density Bonus Law requires the City to grant the requested Waivers.

Incentive/ Concession

The Developer has requested one Incentive/ Concession to reduce the required office FAR within the Office Core designation. Pursuant to Government Code Section 65915 – 65918, a local jurisdiction may deny any and all Incentives/Concessions if the following findings can be made:

1. The Concession or Incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

   Findings: Although not required by state law, the applicant has provided an economic analysis of the current office market, as shown in the *Commercial and Office Economic Feasibility* study by *Kosmont*. The study notes that Livermore's office market has experienced negative absorption, meaning more vacant commercial spaces over time, large vacancy rates, and asking rents that cannot support construction prices. Therefore, office spaces in Livermore currently have a net negative residual land value and new office construction is financially infeasible or would result in a loss. Therefore, reducing the required amount of office onsite would reduce the Project's economic losses, reducing overall Project costs, and ensuring additional for-sale and for-rent housing can be built. For this reason, the finding that the Incentive/ Concession would not result in cost reductions cannot be made.

2. The developer incentives would have a specific adverse impact, as defined in paragraph (2) of Subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or an any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households.

   Findings: The requested Incentive/ Concession would ensure a reduced quantity of office space in the Project. The office space would be replaced with residential uses, which are compatible with other proposed uses within the Project site. Further, the net reduction in office would allow for an increased quantity of affordable units, providing more housing opportunities for individuals and families of Lower Incomes. The reduction of office would not alter the Project boundaries, and the proposed residential that is replacing the office would not produce any hazardous operating impacts. The property is not listed on the National Register of Historical Resources, the California Register of Historical Resources, nor on the City of Livermore's Historical Resources Inventory. For these reasons, the reduction in the required quantity of onsite office space would not adversely impact public health, safety, the environment, or any historic resource.

3. The developer incentives would be contrary to State or Federal law.

   Findings: Office FAR requirements are established by local ordinance. The Incentive/ Concession to eliminate the office FAR would not violate any State or Federal law.

Given that none of the findings above can be made, State Density Bonus Law requires the City to grant the requested Incentive/ Concession.

No Net Loss Analysis (CA Government Code Section 65863):

The Project provides more Median and Moderate units than anticipated in the Housing Element Sites Inventory, but less Lower Income units, producing a net deficit of 612 units. As a result of the net loss in Lower Income units, the Project proposes to upzone Isabel Neighborhood Specific Plan Subarea 3a from office uses to residential uses. With this change in land use, the Project would provide a net surplus of 120 Lower Income units. As required by Government Code Section 65863, the following No Net Loss findings must be made:

1. Remaining sites identified in the Housing Element are adequate to meet the jurisdiction's remaining RHNA for the planning period by income category.

Findings: There are no remaining sites in the Housing Element Sites Inventory that are adequate to meet Livermore's remaining RHNA for the Lower Income category, necessitating rezoning.

2. Include a quantification of the remaining unmet need for the jurisdiction's RHNA at each income level and the remaining capacity of sites identified in the Housing Element, to accommodate that need by income level.

   Findings: The Project's Lower-Income-unit net deficit before any rezoning action is 612 units, including the Housing Element buffer. There are no remaining sites beyond the buffer that can accommodate the remaining need, necessitating rezoning.

3. If the approval of a development at a lower residential density results in the remaining sites capacity becoming inadequate to accommodate the RHNA by income category, a jurisdiction has up to 180 days from the approval to identify, or rezone, "sufficient additional, adequate, and available sites" to accommodate the remaining RHNA for each income category. Sites identified or rezoned must meet the following criteria:

   a. Must be considered an adequate site pursuant to the requirements of Government Code section 65583.2.
   b. If the capacity to be replaced was on a site that was zoned by-right pursuant to Government Code section 65863.2 (h) and (i), then the replacement site must also satisfy those requirements.

   Findings: Given the Lower Income deficit, the project proposes to concurrently amend Specific Plan Subarea 3a's land use designation from Office Core, to Residential Core (APNs 903-10-37-4 and 903-10-36-3). This would result in an increase of 732 residential units. The change in land use designation would accommodate the remaining Lower Income RHNA and would result in a Lower Income surplus of 120 units. The proposed sites are adequate since they are: 1) currently vacant; 2) are located within a land use designation that allows for a density of 30 units per acre or more; and 3) can realistically accommodate the density, allocating 80 percent of the site to residential uses and 20 percent of the site to ancillary uses like open space, street networks, parking, etc. Given that the proposed land use changes will occur concurrently with Project approval, and given that the changes will result in a new surplus of Lower Income units, there is No Net Loss in RHNA units, as required by Government Code Section 65863.

Proposed Master Plan:

The Project proposes to Master Plan Specific Plan Subareas 3b and 3c, in accordance with Isabel Neighborhood Specific Plan and Master Planning Policy P-LU-8, as amended. As described in the staff report, residential densities would

be averaged across the site and office uses, main street commercial uses, open space uses, and the circulation network have been distributed across the site. The City Council may authorize Master Planning if all of the findings below are met:

1. The Master Plan must comply with the target subarea unit count and the performance measures identified in Table 2-6.
    a. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.

    Findings: The 1,299-unit Project exceeds the Specific Plan's required minimum density but does not meet the target density of 1,477 units. However, the Developer has submitted the Housing Density Economic Hardship and Commercial and Office Economic Feasibility economic studies from Kosmont.

    The studies note that: 1) There is not currently sufficient demand for the quantity of Project commercial space envisioned by the Specific Plan; 2) That new office development is financially infeasible given that construction costs are higher than anticipated net operating incomes; and 3) That in order to increase residential Project density to that proposed to meet the target density, the Project would have to reduce its contributions margin by approximately $15 million. Ultimately, taken together, the studies demonstrate that the required non-residential land uses and target density of Subareas 3b and 3c present a significant financial constraint for the Project. For these reasons, there are significant constraints within the Subarea, allowing for Master Planning to occur with a unit count lower than the Specific Plan's target (average) unit count.

2. Development within each Master Plan shall comply with the development standards identified in Tables 2-2 through 2-5.

    a. Each non-residential use shall comply with the development standards of the non-residential designation that matches the use.
    b. Each residential use shall comply with the development standards of the residential designation that most closely aligns with the product density.

    Findings: As described in the Staff Report, the Project meets all required Development Standards, with the exception of the requested Density Bonus Waivers and Incentive/ Concession, as allowed by state law. Each nonresidential use within the Master Plan complies with its respective Development Standards within the Specific Plan (i.e. commercial uses comply with the commercial development standards) and each residential use complies with the residential Development Standards that most closely match its proposed density (i.e. denser residential product types use Residential Core Development Standards, while less dense product types use Village).

3. Land uses may only be Master Planned within the Specific Plan Core area (Subareas 3a, 3b, and 3c).

   Findings: The Project proposes to Master Plan Subareas 3b and 3c, which are located within the Specific Plan Core.

4. If Master Planning more than one subarea, the densities may be averaged, and the permitted land uses may be distributed across those subareas.

   Findings: The Project proposes to Master Plan Subareas 3b and 3c together, averaging densities and distributing land uses across the subareas, as permitted.

5. The City Council shall approve a Master Plan pursuant to this policy.

   Findings: The City Council is the ultimate review authority on this Project.

Proposed Alternative Affordable Plan:

In accordance with Isabel Neighborhood Specific Plan, Affordable Policy P-LU-34, as amended, and the Inclusionary Ordinance, as amended, all new residential development shall either:

1. Comply with the INSP inclusionary affordable housing requirements and the City's Inclusionary Ordinance (Section 10.06.050 of the Livermore Development Code); or
2. Comply with an Alternative Affordable Plan approved by the City Council through a Development Agreement. The Alternative Affordable Plan shall meet the following requirements:

   a. May only be considered within the Specific Plan Core area (Subareas 3a, 3b, and 3c); and
   b. Shall be, at a minimum, economically equivalent to the requirements of the Inclusionary Ordinance. The applicant shall demonstrate economic equivalence through reports, studies, or other analysis as determined by the Director.

   Findings: The Project proposes an Alternative Affordable Plan (Affordable Plan). The Affordable Plan is proposed together with the Development Agreement application, as required. The Affordable Plan is proposed within Subarea 3b and 3c, as required. The City Council is the final review authority for the Project, as required. The Project proposes to designate 28% of the residential units as affordable, including 13.7% as Lower Income, exceeding the required quantity and depth of affordability, in exchange for concentrating the units primarily into the mixed-use commercial and high-density residential blocks. As required, the Developer has submitted the Affordable Housing Economic Equivalency Analysis,

by Kosmont. The analysis finds that the proposed Affordable Plan, with 104 extra affordable units and close to triple the required number of Low-Income units, represents an increased Developer investment of approximately $15 million over the costs of strictly meeting Inclusionary Ordinance/ Specific Plan requirements. Therefore, the proposed Affordable Plan exceeds the economic value of the Specific Plan's required affordable, satisfying the economic equivalence requirement. The proposed Affordable Plan will provide for a higher quantity of overall affordable units than required, even exceeding the Specific Plan's aspirational goal of 25% affordability for the entire INSP area. In addition, the Affordable Plan will provide nearly triple the required quantity of Lower Income units, helping the City towards satisfying the 6th Cycle RHNA Lower Income requirements, and provide for more units affordable to individuals and families in the service sector, students, and other underserved communities.

BE IT FURTHER RESOLVED that based upon the City Council's own independent review of the Record Evidence and considerations, in accordance with the State Density Bonus Law and the Housing Crisis Act of 2019 (SB 330), the City Council hereby approves Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Master Sign Program Amendment (MSP) 24-001, Density Bonus Request, No Net Loss analysis, proposed Master Plan, and proposed Alternative Affordable Plan, as shown in the proposed plans, attached hereto as Exhibits C, D, E, and F, and subject to the Conditions of Approval, attached hereto as Exhibit G, for the Isabel Crossing Development.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore directs the Planning Manager to file a Notice of Determination with the Alameda County Clerk.

BE IT FURTHER RESOLVED that the City Council of the City of Livermore finds that the effective date of this resolution shall be the effective date of Development Agreement (DA) 22-001 and Development Code Amendment (DCA) 24-001.

The documents that constitute the record of proceedings upon which this decision is based can be found in the City Clerk's Office, 1052 S. Livermore Avenue, in Livermore California.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Katherine Mirassou
Katherine Mirassou
Deputy City Attorney

Exhibit A – Planning Commission Resolution No. 16-24
Exhibit B – Planning Commission Resolution No. 20-24
Exhibit C – Architectural Plans
Exhibit D – Landscape Plans
Exhibit E – Civil Plans
Exhibit F – Proposed Master Plan
Exhibit G – Conditions of Approval

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL APPROVE VESTING TENTATIVE TRACT MAP (VTTM) 8659 - SUBDIVISION (SUB) 22-008, SITE PLAN DESIGN REVIEW (SPDR) 24-003, CONDITIONAL USE PERMIT (CUP) 24-002, AND MASTER SIGN PROGRAM AMENDMENT (MSP) 24-001; ACCEPT THE DENSITY BONUS REQUEST; FIND NO NET LOSS; APPROVE A MASTER PLAN; AND APPROVE AN ALTERNATIVE AFFORDABLE PLAN FOR THE ISABEL CROSSING PROJECT

On September 22, 2022, the City received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On March 13, 2023, the City Council adopted the 2023 to 2031 Livermore Housing Element, providing adequate sites to support CA's Regional Housing Needs Allocation (RHNA) requirements.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA 22-001), Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new tax district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

The Applicant provided all the necessary information to qualify for relief under State Density Bonus Law (CA Government Code Sections 65915 - 65918), upon amended application submittal on May 10, 2024. The Applicant qualifies for unlimited Waivers and two Incentives/ Concessions. The Applicant has requested 12 Waivers and one Incentive/Concession.

The Project provides fewer Lower Income units than anticipated in the Livermore Housing Element's Sites Inventory and is required to undergo a No Net Loss Review, as required by Government Code Section 65863.

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Project, staff recommendations, all public comments and testimony, and findings.

Together with this Resolution, the Planning Commission concurrently considered resolutions for: 1) the Project's Development Agreement (DA) 22-001 application; 2) the Project's Specific Plan Amendment (SPPA) 24-001 application; 3) the Project's Development Code Amendment (DCA) 24-001 application; and 4) the Project's Consistency Determination (CD) 24-004 application.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Livermore has considered the Record Evidence and recommends the City Council adopt a resolution adopting an Addendum to the 2020 Isabel Neighborhood Specific Plan Supplemental Environmental Impact Report (SCH #2016042039), consistent with the requirements of the California Environmental Quality Act ("CEQA").

BE IT FURTHER RESOLVED, with respect to Vesting Tentative Tract Map 8659 – Subdivision 22-008, the Planning Commission finds based upon the information presented that:

1. The proposed map is consistent with the General Plan and any applicable specific plan, any policy or guideline implementing the General Plan (including the City's Design Standards and Guidelines), or other applicable provisions of this Development Code;

   Findings: The Project is consistent with the intent of the General Plan designation of Isabel Neighborhood Specific Plan given that it provides higher density housing adjacent to transit service and job centers and provides a mix of unit types, sizes, and affordability levels. The Project also implements the Land Use, Housing, Community Character, and Climate Change elements by providing affordable housing near transit that is of a high-quality architectural design and that provides sustainable features like photovoltaic arrays and EV chargers. The Project is consistent with the density range, open space, and design standards and guidelines of the Isabel Neighborhood Specific Plan. With the use of State density bonus Waivers, the Project is consistent with the development standards related to setbacks and height.

2. The site is physically suitable for the proposed type of development;

   Findings: The site is located within the Isabel Neighborhood, which is identified as one of the densest areas in the City. The site is entirely within the City limits and is surrounded by street rights of way and urbanized residential uses. The site is approximately 45 acres. The size of the developable land is large enough to accommodate the proposed apartment buildings, mixed-use buildings, and three-story townhouse buildings, two pocket plazas, town square, recreation center, neighborhood park, and private open spaces. The applicant prepared Phase I, geologic, and

biological, studies that found the site contains no hazards, is suitable for residential development, and contains no special-status species. Therefore, the site is physically suitable for the proposed type of development.

3. The site is physically suitable for the proposed density of development;

   Findings: As currently zoned on the project site, the Isabel Neighborhood Specific Plan establishes density ranges of 25-40 units per acre for the Village zoning district, 40-60 units for the Center zoning district, and 60-100 units for the Core zoning district. The developable acreage of the site is approximately 45 acres with a proposed 1,299 units. The Specific Plan Amendment will include the re-designation of zones on the project site to remove the Core zoning designation and average the uses and densities across the project site. Given the existing urbanized nature of surrounding parcels, all required public utilities are located adjacent to the site in the street right-of-way, including: water, sewer, storm drain, telecommunications, and electricity. Services including police, fire, and medical already serve the neighborhood area, including the parcel. The Project is within the Specific Plan's and EIR's anticipated density range even with the proposed Specific Plan amendment. The Isabel Neighborhood Specific Plan Final EIR and Supplemental Final EIR concluded that existing utilities and services have sufficient capacity to accommodate buildout of the Specific Plan, including the incremental increase in demand from the Project. In addition, an Addendum to the Specific Plan EIR has been prepared for the proposed Project and found that no significant impacts would occur as a result of the change in zoning, use, and density. Therefore, the site is physically suitable for the proposed density of development.

4. The design of the subdivision or the proposed improvements will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat. Notwithstanding the foregoing, the Commission or Council may approve a tentative map if an Environmental Impact Report was prepared with respect to the Project and a statement of overriding considerations was made to the effect that specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR;

   Findings: The Isabel Neighborhood Specific Plan Final EIR and Supplemental Final EIR analyzed all potential environmental impacts of development in the Isabel Neighborhood. The EIR was prepared at a "zoning action" level, for purposes of Public Resources Code section 21083.3 and CEQA Guidelines section 15183, in that it includes enough specificity for future Specific Plan projects to rely on its analysis and limits the need for CEQA review for future Specific Plan projects. The City Council adopted a Statement of Overriding Considerations with the EIR and found that the plan would have significant and unavoidable impacts with respect to traffic, air quality, aesthetics, noise, cultural/ tribal resources, and agricultural resources, but that the City's transit, housing, and economic goals outweighed the impacts, as allowed under CEQA.

   The Council found that the mitigation measures identified in the EIR would reduce all other impacts to a less than significant level. Given that the Project is within the density and intensity levels contemplated by the EIR, no environmental impacts beyond those identified in the EIR would occur. Although the proposed Project proposes a change in

zoning and the implementation of Master Planning, an Addendum to the Specific Plan EIR has been prepared for the proposed Project and found that no significant impacts would occur as a result of the change in zoning, use, and density. Further, the applicant prepared geologic, biological, and noise studies and found no impacts peculiar to the Project would occur beyond those identified in the EIR. The Project is also conditioned to conform with the Mitigation, Monitoring, and Reporting Program (MMRP) adopted with the certified EIR, ensuring all other environmental impacts remain less than significant.

5. The design of the subdivision or the type of improvements will not cause serious public health problems;

   Findings: The Project will not be detrimental to the public health, safety, or general welfare, and not cause serious health problems. The Project provides adequate emergency vehicle access throughout the site and necessary ladder pads for fire access to upper floors. The Project complies with the County Airport Land Use Compatibility Plan with respect to height, density, or noise and complies with FAA height standards. Water and sewer service will be provided to all units and stormwater will be appropriately managed on site. The site layout is suitable for trash truck pickup and adequate space will be provided in each unit garage, including those units in the apartments and mixed-use buildings, for all waste streams. The applicant prepared, geologic, biological, and noise studies that found no significant impacts would occur beyond those identified in the EIR. Interior noise levels would not exceed 45 dBA, as required by CA Building Code. In addition, no surficial or subsurface hazardous materials were discovered onsite and the residential use would not produce any hazardous materials, nor substantial noise, odor or vibration during regular operations. The Project will work with the Alameda County Vector Control to minimize vermin spread to adjacent properties during construction. For these reasons, the design of the subdivision or the type of improvements will not cause serious public health problems.

6. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. (The Commission or Council may approve a tentative map if it finds that alternative easements for access will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This Subparagraph shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted to the Commission to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.); and

   Findings: The Project Site contains existing easements for utilities, emergency vehicle access, and pedestrian access. All of the public easements would remain in place or, if it becomes necessary, would be modified with the agreement of all public easement right holders in manner that preserves any required public services associated with any such easements. Additionally, an avigation easement is on record for the property that would remain in place. The easements will not conflict with the Project's proposed building footprints. Accordingly, the design of the subdivision and the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision.

7. Any proposed phases and their proposed sequence of construction are identified on the submitted tentative map. The City may impose reasonable conditions relating to the filing of multiple final maps in conjunction with the approval of the tentative map (Section 66456.1).

   Findings:

   The Project proposes a master, large lot VTTM proposed to be implemented in a single-phase. The VTTM includes appropriate conditions of approval that ensure that required improvements needed to serve the Project and otherwise improve the Project Site and surrounding streets for the benefit of the City and the public. Future Planning Area-specific subdivision maps would be proposed for the City's approval as the Project's Planning Areas are built out on a Planning Area-basis in accordance with the sequence of construction set forth in the Project approvals and consistent with the sale of Planning Areas to builders, market conditions and demand.

BE IT FURTHER RESOLVED, with respect to Site Plan Design Review 24-003, the Planning Commission finds based upon the information presented that:

1. The proposed development will be permitted within the subject zone.

   Findings: The Project Site is zoned INSP, which generally permits multi-family housing, office, business park, and commercial uses. Within the INSP zone, the Project Site includes INSP zoning designations Village, Center, Core, Neighborhood Commercial, Office Core and Open Space, in addition to the Ground Floor Retail/Flex Space Overlay. The Project proposes a mix of development that includes multi-family housing, retail, restaurant and commercial development, a community serving grocery store or food hall, and a variety of public open space areas and amenities, including a new neighborhood park, public plazas, public trails, and bike lanes. All of the Project's proposed uses are permitted by the Project Site's applicable zoning designations, inclusive of the proposed approval of the Project as a master planned development pursuant to INSP Policy P-LU-8, as amended by the Specific Plan Amendment.

2. The proposed development will be designed such that:

   a. The project will not be detrimental to the public health, safety, or general welfare, and not detrimental to adjacent property;
   b. Architectural design and functional plan of the structure(s) and related improvements are of reasonable aesthetic quality and compatible with adjacent developments;
   c. Structure(s) and related improvements are suitable for the proposed use of the property and provide adequate consideration of the existing and contemplated uses of land and orderly development in the general area of the subject site; and
   d. The project's site plan and design is consistent with the City's Design Standards and Guidelines.

   Findings:

The proposed Project will not be detrimental to the commercial, residential and institutional uses of adjacent properties. The Project provides adequate emergency vehicle access throughout the site and necessary ladder pads for fire access on upper floors. The Project does not conflict with the County Airport Land Use Compatibility Plan with respect to height, density, or noise and complies with FAA height standards. Water and sewer service will be provided to all units and stormwater will be appropriately managed on site. The site layout is suitable for trash pickup and adequate space will be provided in each residential unit garage and each apartment and mixed-use buildings for all waste streams.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials. The design will feature contemporary and traditional architectural styles. A total of 10 residential product types are proposed, which include apartments, flats, townhomes, duplexes, and triplexes, and three of the proposed apartment and flat buildings are mixed-use buildings designed with ground floor commercial uses.

The proposed contemporary and traditional architectural styles incorporate design features and materials that will be compatible with existing and future developments in the surrounding areas. Additionally, the Project utilizes varied building materials, neutral colors, and varied building facades to reduce massing, distinguish each building, and provide a high degree of visual interest, variation and articulation. The proposed color palette and design are compatible with the existing earth tones used in neighboring residential developments.

The Project site is vacant. The proposed structures and improvements to be developed would be suitable for the Project's proposed mix of uses. The Project's Master Plan is configured into 19 different planning areas with varying development types that include townhomes, apartments, condominiums, duplexes, triplexes, open space areas and amenities, and commercial uses oriented around the proposed new commercial Main Street. The structures and improvements would be compatible with the business park and commercial uses to the west of the Project site and residential uses to north of the Project site across Portola Avenue and to the east of the Project site across Isabel Avenue. Additionally, the arrangement of structures and improvements provides for appropriately scaled and orderly development and circulation throughout the Project Site.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials that are consistent with the Specific Plan and the City's design standards and guidelines. The townhomes, duplexes, and triplexes feature slanted roofs, board and batten, gable trim, awnings and canopies, box windows, and columns. The condominiums and apartments feature flat roofs and articulated building facades. The building's fenestration promotes order and variety. Massing is generally repeated at regular intervals, establishing a rhythm throughout the Project. Additionally, the proposed color palette is compatible with existing earth tones used in neighboring residential developments. The project proposes a richly detailed and varied blend of contemporary, traditional, and modern style and complies with the design requirements of the City's Design Standards and

Guidelines.

The Project is also conditioned to conform with the Mitigation, Monitoring, and Reporting Program (MMRP) adopted with the certified 2020 Supplemental EIR. The Project is not detrimental to adjacent properties and considers adjacent uses in the general area. All project frontages contain substantial landscaping and trees to appropriately screen the proposed buildings. The Project meets applicable parking standards. The residential use promotes synergy with surrounding uses, locating residents close to job centers, and will not produce any dust, odor, noise, or glare during regular operations. The structures are suitable for the site and the site plan is consistent with the City's Design Standards and Guidelines.

3. The proposed development is designed to include the following criteria, as applicable:

   a. Compliance with Chapter 9.07 of the Development Code (Site Plan and Design Review), Municipal Code Title 15 (Buildings and Construction), and any other applicable City regulations and policies;
   b. Efficient site layout and design;
   c. Compatible and appropriate in scale to neighboring properties and developments.
   d. Efficient and safe public access (both pedestrian and vehicular) and parking;
   e. Appropriate and harmonious arrangement and relationship of proposed structures and signs to one another and to other development in the vicinity, based on good standards of design;
   f. Appropriate relationship to land use and development of adjacent properties, including topographic and other physical characteristics of the land;
   g. Proper site utilization and the establishment of a physical and architectural relationship to existing and proposed structures on the site;
   h. Compatible architectural style with the character of the surrounding area, both to avoid repetition of identical design where not desired, and to ensure compatibility in design where desired;
   i. Harmonious relationship with existing and proposed developments and the avoidance of both excessive variety and monotonous repetition;
   j. Compatible in color, material, and composition of the exterior elevations to neighboring visible structures;
   k. Appropriate exterior lighting which provides for public safety and is not of a nature that will constitute a hazard or nuisance to adjacent properties;
   l. Compatible in scale and aesthetic treatment of proposed structures with public areas;
   m. Appropriate open space and use of water efficient landscaping; and
   n. Consistent with the General Plan and any applicable Specific Plan.

Findings:

The proposed mixed-use development is compliant with the Project site's zoning and would comply with all building code requirements and any additional applicable City regulations pertaining to the development and operation of the Project.

The design, location, size, and operating characteristics of the Project makes the Project Site suitable for the type, density, and intensity of use being proposed. The

Project, much like the neighboring residential developments located north of Portola Avenue and east of Isabel Avenue, will feature a variety of residential unit types with community amenities and gathering spaces. Non-residential spaces such as the neighborhood park, recreation center, and pocket plaza, will provide residents and guests with areas for leisure, exercise, and gathering.

The Project is of compatible and appropriate scale to neighboring properties and development. Directly adjacent to the property to the east is the Lam Research facility and a business park. North of the Project Site across Portola Avenue is an existing residential development of similar scale that features various unit types, including townhomes. East of the Project Site across Isabel Avenue is vacant land and beyond that is another existing residential development that also features a variety of residential unit mixes and residential amenities. Southwest of the Project Site across I-580 are office, commercial, and industrial uses. Accordingly, the Project would be compatible with existing neighboring developments.

The existing street network will serve the project. Vehicular access would be provided via four access points. Two points of vehicular ingress and egress would be located along Portola Avenue and two points of vehicular ingress and egress would be located along Isabel Avenue. The project proposes four new public streets and several new private alleys that would be internal to the development. Four community entries are proposed throughout the Project Site. The community entries would be located at the ends of the private streets and would also include pedestrian pathways to ensure pedestrian safety.

The Project Site's proximity to major roadways and highways and the internal roadways within the Project provide sufficient public and emergency vehicle access. The Project would provide 2,167 parking spaces within private garages, above-grade parking garages, on the proposed streets. A bus stop would be located along Isabel Avenue and another along Portola Avenue. Accordingly, the Project would provide efficient and safe public access.

The structures are strategically arranged and designed to be visually appealing, functional, and to facilitate pedestrian and vehicular traffic throughout the Project site. A neighborhood sign element is proposed at one of the access points along Isabel Avenue.

The adjacent properties to the east and west consist of similar, mostly flat, topographic conditions. The proposed land use and development would be compatible with adjacent properties. The mixed-use development would be carefully configured within existing city streets and proposed internal streets, allowing for efficient circulation and access. Additionally, the Project would feature a pedestrian connection to the neighboring business park along the proposed Gateway Avenue which would run perpendicular to the existing Shea Center Drive.

The Project site does not contain any existing structures. The Project's configuration is harmonious with neighboring developments, creating a gradual increase in density generally from the north were there are existing residential units to the south were densities are higher in the proposed Project.

The proposed residential and mixed-use buildings and recreation facility would be properly configured with respect to existing Project Site conditions. There are a total of 10 different product types. The townhomes, duplexes, and triplexes will feature contemporary and traditional architectural styles. The apartments and condos will feature modern architectural styles. The combination of product types and architectural styles vary the building massing. Additionally, courtyards and podiums break up the massing in the apartment and condominium unit types. Massing is generally repeated at regular intervals, which would establish an effortless rhythm throughout the Project.

The Project proposes a variety of architectural styles that vary by building type, emphasizing contemporary designs and building materials. As discussed previously, the architectural styles include contemporary and traditional architectural styles that are compatible with the existing residential development in the vicinity. However, variations are incorporated so that the residential developments in different portions of the Project site are uniquely identifiable. The residential development will consist of a mix of flats, townhomes, triplexes, and duplexes, so that they are not repetitious and contribute to a desirable walkable environment.

The Project is designed such that it will be well integrated with the adjacent Business Park and features a pedestrian connection to the Business Park along Gateway Avenue. The Project, like neighboring residential Projects, features a variety of unit mixes and types and community open space and amenity spaces. The architectural styles and color palette is compatible with the contemporary styles and earth tone colors used in neighboring developments, avoiding excessive variety. At the same time, the Project maintains its own unique character to avoid monotonous repetition.

The composition of buildings and exterior elevations are compatible with neighboring business park and residential uses. The proposed contemporary, modern, and traditional architectural styles incorporate design features and materials that distinguish the Project from surrounding developments, while complementing other styles within the Specific Plan and surrounding areas. The proposed color palette is compatible with existing earth tones used in neighboring residential developments. The proposed materials are appropriate, standard materials like those used in adjacent developments.

The Project provides appropriate exterior lighting that promotes public safety and is not of the nature that will constitute a hazard or nuisance to adjacent properties. Streetlights consistent with City standards are proposed throughout the Project's internal roads to provide internal lighting for pedestrian and vehicular travel. Pedestrian-scale lighting is concentrated primarily along Main Street, with additional lighting on the eastern end of Gateway Avenue and along the Project Site's other internal streets. Roadway lights are proposed along Isabel Avenue. All lighting would all comply with the City's lighting standards and will be down shielded to avoid impacts to aircraft.

Proposed structures in public areas will be compatible with the surrounding structures within the development in terms of scale, design and materiality. Additionally, any

aesthetic and architectural treatment ensure consistency with the development and with surrounding properties.

The Project proposes to provide 447,259 square feet of open space. The Project would feature water-efficient landscaping throughout, resulting in 203,020 square feet of water efficient landscaping. The Project Site would be Maximum Allowed Water Allowance (MAWA) compliant. In addition, the Project would utilize recycled water for non-potable purposes including irrigation throughout the Project Site.

The Project is consistent with the General Plan in that the Project is located so as to create a consolidated pattern of urbanization, maximizing the use of existing public services and facilities (Objective LU-1.1); it creates neighborhoods that include a mix of uses and a range of housing types to meet the needs of all residents (Objective LU-1.2); it create neighborhoods near transit that include a mix of uses and a range of housing types to meet the needs of all residents (Objective LU-3.1). It maintains and enhances Livermore's urban design quality and encourage high quality design in all new development and redevelopment (Objective CC-2.1); it implements policies and actions that will encourage existing businesses to remain and grow in Livermore and attract a range of new businesses to locate in Livermore (Objective ED-1.1). It encourages and provides greater support for infill, mixed use, and higher density development in order to reduce Greenhouse Gas (GHG) emissions associated with vehicle travel (Objective CLI-1.2); it supports measures that encourage alternative modes of transportation and alternative fuels in order to reduce emissions associated with vehicle travel (Objective CLI-1.3); it enhances existing water efficiency and conservation measures and uses recycled water use and water efficiency in order to reduce energy and GHGs associated with water use (Objective CLI-1.4); and, it expands the number of trees in Livermore in order to provide a larger carbon sink or area containing natural sources that retain more carbon than what those sources emit (Objective CLI-1.6).

The Specific Plan Goals and Policies are outlined in the Land Use, Transportation, Parks, Public Facilities, and Infrastructure, Urban Design, and Environmental Resources and Conservation chapters. A matrix of the Specific Plan Goals and Policies, and how the Project is consistent with them, is referred to and included as Attachment 11 in the Description, Context, and Staff Analysis Memo.

BE IT FURTHER RESOLVED, with respect to Conditional Use Permit (CUP) 24-002, the Planning Commission finds based upon the information presented that:

1. The proposed use is consistent with the General Plan and any applicable Specific Plan;

Response: The Development is consistent with the existing General Plan land use designation of Isabel Neighborhood Specific plan and is consistent with Specific Plan requirements as proposed in the Specific Plan Amendment, and meets the Specific Plan goals and intention for subareas 3b and 3c to create a vibrant, walkable mixed-use community with higher density residential uses, public open space amenities that promote recreation and alternative forms of transportation, and job-producing commercial uses within close, walkable proximity of one another. The Project would

create a vibrant, safe, and complete neighborhood with a wide range of housing options, commercial spaces, and new job opportunities, as well as support transit ridership and citywide goals for increased transit options. The Project would also be compatible with and would not adversely affect surrounding uses.

2. The proposed use is allowed within the subject zone and complies with all other applicable provisions of this Development Code and the Municipal Code;

   Response: The Isabel Neighborhood Specific Plan zone generally permits multi-family housing and commercial development uses proposed by the Project. The Project site is within subareas 3b and 3c and uses are further regulated by the Specific Plan designations including Village, Center, Core, Neighborhood Commercial, Office Core and Open Space, in addition to the Ground Floor Retail/Flex Space Overlay. All proposed uses within the mixed-use Project are permitted by the Project site's zoning, as allowed by the Specific Plan Amendment herein and the Specific Plan Master Planning provisions implemented for the Project. The Project otherwise complies with applicable provisions of the Development Code, as proposed to be amended by this project, and the Municipal Code.

3. The design, location, size, and operating characteristics of the proposed activity will be compatible with the existing and future land uses in the vicinity;

   Response: The Project Site is surrounded by office and industrial uses to the west, residential uses and a community college campus to the north; vacant land, open space, and residential uses to the east, and commercial, industrial, and residential uses and an airport to the south, across the I-580 Freeway. The mixed-use development would therefore be consistent and compatible with surrounding uses. The Project would include residential developments that are compatible with the residential uses to the north across Portola Avenue and to the east across Isabel Avenue, and the Project would include public open space amenities including offsite bike lanes and other transportation improvements and community-serving commercial uses that will serve and complement the surrounding commercial, educational and residential uses in a manner consistent with the Master Planning for the Project site under the Specific Plan. The Project would also help to integrate existing surrounding commercial, office, industrial, and residential uses with future uses on vacant adjacent parcels, including a proposed future Valley Link station.

4. The subject site is:

   a. Physically suitable in terms of design, location, size, and operating characteristics, shape, size, topography, and the provision of public and emergency vehicle (e.g., fire and medical) access and public services and utilities; and

   b. Served by highways and streets adequate in width and improvement to carry the kind and quantity of traffic the proposed use would likely generate.

   Response: The 45.38-acre Project site has gently sloping grades that can accommodate the 1,299-unit mixed-use residential and commercial development that

is proposed without substantial grading or excavation. While the Project Site is vacant and has not been developed, it is in an area that is surrounded by urban development and is adequately served by public and emergency vehicle access via the City's existing network of public roads and is fully served by existing public services and utilities. Additionally, as a part of the development, the Project will construct a new internal street network that will service the Project site and provide internal vehicular access and utility connections throughout the Project to ensure that the development is adequately served by utilities and public services, including the provision of emergency access through compliance with applicable Development, Municipal, Building, and Fire code standards.

The Project site is located at the southwestern corner of the intersection of Isabel Avenue and Portola Avenue and is located northwest of State Route 84 and north of Interstate 580. As determined by prior environmental analysis of the Specific Plan and for the Project, the kind and quantity of traffic the Project would generate will be adequately served by the Project site's internal streets and the existing network of external roadways and highways in proximity to the Project. Vehicular access would be provided via five proposed vehicular access points. Two points of vehicular ingress and egress would be located along Portola Avenue, two points of vehicular ingress and egress would be located along Isabel Avenue, and one point along Shea Center Drive. The Project would also add two new traffic signals at the intersection of Isabel Avenue and Gateway Avenue, and at Isabel Avenue and A Street, and improve the existing traffic signal at Main Street and Portola Avenue.

5. The site's suitability ensures that the type, density, and intensity of use being proposed will not endanger, jeopardize, or otherwise constitute a hazard to the public interest, health, safety, convenience, or welfare, or be materially detrimental to the improvements, persons, property, or uses in the vicinity and zone in which the property is located; and

   Response: The Project proposes to develop 1,299 dwelling units, grocery store, retail, restaurant, and other commercial space, a public park and plazas, other open space, and other residential amenities. The Project is designed to create a harmonious environment where homes and job opportunities are created and residents and employees have access to regional and local transit. The Project density does not exceed the overall density permitted by the Specific Plan, and the uses proposed would not endanger, jeopardize, or otherwise constitute a hazard to public interest, health, safety, or become a nuisance in the vicinity.

6. The applicant agrees in writing to comply with any and all of the conditions imposed by the review authority in the approval of the Conditional Use Permit or Zoning Use Permit.

   Response: The Applicant has agreed to comply with any and all of the conditions imposed by the reviewing authority in the approval of the Conditional Use Permit, subject to Development Agreement 22-001.

7. That any other findings prerequisite to approval of a Conditional Use Permit or Zoning Use Permit stated elsewhere in the Development Code can be made. (Ord. 1927 § 3 (Exh. C), 2011.)

   Response: The Project is not subject to any additional findings prerequisite to approval of a Conditional Use Permit.

BE IT FURTHER RESOLVED, with respect to Master Sign Program Amendment (MSP) 24-001 the Planning Commission finds based upon the information presented that:

1. The Program is consistent with the regulations in Chapter 4.06 of the Development Code.

   Response: The current Master Sign Program will no longer encumber the Project's parcels but will remain in effect for all other parcels that it applies to as described in the Planning Commission staff report dated July 2, 2024.

2. The Program conforms to City's Design Standards and Guidelines.

   Response: The conformance to the City's Design Standards and Guidelines will continue for the affected Master Sign Program area and is no longer applicable in the areas of the Project site. Any project signs will be subject to the applicable INSP and citywide Design Standards and Guidelines.

BE IT FUTHER RESOLVED, with respect to the Density Bonus request, in accordance with Government Code Section 65915 - 65918, the Planning Commission finds based upon the information presented that:

Waivers

The Developer has requested the following waivers: The reduction of the porch separation in Parcel N-1, private open space dimensions in Parcel N-2 and N3-A, front setback and floor to ceiling height requirement in Parcel C1-B, front setback, height limit, and floor to ceiling height requirement in Parcel C2-A, minimum commercial FAR and height limit requirement in Parcel S1, private open space in S2 and S4, height limit in Parcel S3-A, and height limit in Parcel S3-B. Pursuant to Government Code Section 65915 – 65918, a local jurisdiction may deny any and all Waivers if the following findings can be made:

1. The waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact.

   Findings: The proposed Waivers are primarily for development standards that impact the Project's internal areas. Porch separation, private open space dimensions, and front setback primarily impact the building massing and usable open space. Although these standards would be reduced, the Waivers are focused to specific buildings within each Planning Area, and not all buildings. Further, each

unit would still provide the required open space area, just in a different configuration than required, and with dimensions of one foot less than required, ensuring each unit still contains private outdoor open space for residents to utilize. Further, in no case will any porch be less than 7.5 feet from any other porch along paseos, ensuring adequate accessible, fire, and utility access, and ensuring light and air between buildings. The proposed commercial space ceiling height would still meet all requirements of the CA Building Code. All buildings would be required to undergo FAA review prior to Building Permit issuance, to ensure their heights do not present a hazard to nearby aircraft. For these reasons, the waivers would not result in a specific adverse impact upon public health and safety.

2. The waiver or reduction would have an adverse impact on any real property that is listed in the California Register of Historical Resources.

   Findings: The property is not listed on the National Register of Historical Resources, the California Register of Historical Resources, nor on the City of Livermore's Historical Resources Inventory. No historic resources would be materially impaired.

3. The waiver or reduction would be contrary to state or federal law.

   Findings: The above listed standards for which the Project is seeking waivers, are established by local ordinance and would not violate any State or Federal law. In addition, requested waivers would not cause the project to encroach on any sensitive habitat, riparian areas, wetland areas, or state or federal property. The Specific Plan has found no sensitive habitat, riparian areas, wetland areas, state property, or federal property on or adjacent to the project site. All buildings will be required to undergo FAA review prior to Building Permit, ensuring they are consistent with all federal aviation standards. For these reasons, the requested Waivers are consistent with all state and federal laws.

Given that none of the findings above can be made, State Density Bonus Law requires the City to grant the requested Waivers.

Incentive/ Concession

The Developer has requested one Incentive/ Concession to reduce the required office FAR within the Office Core designation. Pursuant to Government Code Section 65915 – 65918, a local jurisdiction may deny any and all Incentives/Concessions if the following findings can be made:

1. The Concession or Incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

   Findings: Although not required by state law, the applicant has provided an economic analysis of the current office market, as shown in the *Commercial and Office Economic Feasibility* study by *Kosmont*. The study notes that Livermore's office market has experienced negative absorption, meaning more vacant

commercial spaces over time, large vacancy rates, and asking rents that cannot support construction prices. Therefore, office spaces in Livermore currently have a net negative residual land value and new office construction is financially infeasible or would result in a loss. Therefore, reducing the required amount of office onsite would reduce the Project's economic losses, reducing overall Project costs, and ensuring additional for-sale and for-rent housing can be built. For this reason, the finding that the Incentive/ Concession would not result in cost reductions cannot be made.

2. The developer incentives would have a specific adverse impact, as defined in paragraph (2) of Subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or an any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households.

   Findings: The requested Incentive/ Concession would ensure a reduced quantity of office space in the Project. The office space would be replaced with residential uses, which are compatible with other proposed uses within the Project site. Further, the net reduction in office would allow for an increased quantity of affordable units, providing more housing opportunities for individuals and families of Lower Incomes. The reduction of office would not alter the Project boundaries, and the proposed residential that is replacing the office would not produce any hazardous operating impacts. The property is not listed on the National Register of Historical Resources, the California Register of Historical Resources, nor on the City of Livermore's Historical Resources Inventory. For these reasons, the reduction in the required quantity of onsite office space would not adversely impact public health, safety, the environment, or any historic resource.

3. The developer incentives would be contrary to State or Federal law.

   Findings: Office FAR requirements are established by local ordinance. The Incentive/ Concession to eliminate the office FAR would not violate any State or Federal law.

Given that none of the findings above can be made, State Density Bonus Law requires the City to grant the requested Incentive/ Concession.

BE IT FURTHER RESOLVED, with respect to state RHNA requirements, the City's Housing Element Sites Inventory, and No Net Loss Law (Government Code Section 65863), the Planning Commission finds based upon the information presented that:

The Project provides more Median and Moderate units than anticipated in the Housing Element Sites Inventory, but less Lower Income units, producing a net deficit of 612 units. As a result of the net loss in Lower Income units, the Project proposes to upzone Isabel Neighborhood Specific Plan Subarea 3a from office uses to residential uses. With this change in land use, the Project would provide a net surplus of 120 Lower Income units. As required by Government Code Section 65863, the following No Net Loss findings must be made:

1. Remaining sites identified in the Housing Element are adequate to meet the jurisdiction's remaining RHNA for the planning period by income category.

   Findings: There are no remaining sites in the Housing Element Sites Inventory that are adequate to meet Livermore's remaining RHNA for the Lower Income category, necessitating rezoning.

2. Include a quantification of the remaining unmet need for the jurisdiction's RHNA at each income level and the remaining capacity of sites identified in the Housing Element, to accommodate that need by income level.

   Findings: The Project's Lower-Income-unit net deficit before any rezoning action is 612 units, including the Housing Element buffer. There are no remaining sites beyond the buffer that can accommodate the remaining need, necessitating rezoning.

3. If the approval of a development at a lower residential density results in the remaining sites capacity becoming inadequate to accommodate the RHNA by income category, a jurisdiction has up to 180 days from the approval to identify, or rezone, "sufficient additional, adequate, and available sites" to accommodate the remaining RHNA for each income category. Sites identified or rezoned must meet the following criteria:

   a. Must be considered an adequate site pursuant to the requirements of Government Code section 65583.2.
   b. If the capacity to be replaced was on a site that was zoned by-right pursuant to Government Code section 65863.2 (h) and (i), then the replacement site must also satisfy those requirements.

   Findings: Given the Lower Income deficit, the project proposes to concurrently amend Specific Plan Subarea 3a's land use designation from Office Core, to Residential Core (APNs 903-10-37-4 and 903-10-36-3). This would result in an increase of 732 residential units. The change in land use designation would accommodate the remaining Lower Income RHNA and would result in a Lower Income surplus of 120 units. The proposed sites are adequate since they are: 1) currently vacant; 2) are located within a land use designation that allows for a density of 30 units per acre or more; and 3) can realistically accommodate the density, allocating 80 percent of the site to residential uses and 20 percent of the site to ancillary uses like open space, street networks, parking, etc. Given that the proposed land use changes will occur concurrently with Project approval, and given that the changes will result in a new surplus of Lower Income units, there is No Net Loss in RHNA units, as required by Government Code Section 65863.

BE IT FURTHER RESOLVED, with respect to the Isabel Neighborhood Specific Plan and Master Planning Policy P-LU-8, as amended, the Planning Commission finds based upon the information presented that:

The Project proposes to Master Plan Specific Plan Subareas 3b and 3c. As described

in the staff report, residential densities would be averaged across the site and office uses, main street commercial uses, open space uses, and the circulation network have been distributed across the site. The City Council may authorize Master Planning if all of the findings below are met:

1. The Master Plan must comply with the target subarea unit count and the performance measures identified in Table 2-6.

    a. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.

    Findings: The 1,299-unit Project exceeds the Specific Plan's required minimum density but does not meet the target density of 1,477 units. However, the Developer has submitted the Housing Density Economic Hardship and Commercial and Office Economic Feasibility economic studies from Kosmont.

    The studies note that: 1) There is not currently sufficient demand for the quantity of Project commercial space envisioned by the Specific Plan; 2) That new office development is financially infeasible given that construction costs are higher than anticipated net operating incomes; and 3) That in order to increase residential Project density to that proposed to meet the target density, the Project would have to reduce its contributions margin by approximately $15 million. Ultimately, taken together, the studies demonstrate that the required non-residential land uses and target density of Subareas 3b and 3c present a significant financial constraint for the Project. For these reasons, there are significant constraints within the Subarea, allowing for Master Planning to occur with a unit count lower than the Specific Plan's target (average) unit count.

2. Development within each Master Plan shall comply with the development standards identified in Tables 2-2 through 2-5.

    a. Each non-residential use shall comply with the development standards of the non-residential designation that matches the use.

    b. Each residential use shall comply with the development standards of the residential designation that most closely aligns with the product density.

    Findings: As described in the Staff Report, the Project meets all required Development Standards, with the exception of the requested Density Bonus Waivers and Incentive/ Concession, as allowed by state law. Each nonresidential use within the Master Plan complies with its respective Development Standards within the Specific Plan (i.e. commercial uses comply with the commercial development standards) and each residential use complies with the residential Development Standards that most closely match its proposed density (i.e. denser residential product types use Residential Core Development Standards, while less dense product types use Village).

3. Land uses may only be Master Planned within the Specific Plan Core area (Subareas 3a, 3b, and 3c).

   Findings: The Project proposes to Master Plan Subareas 3b and 3c, which are located within the Specific Plan Core.

4. If Master Planning more than one subarea, the densities may be averaged, and the permitted land uses may be distributed across those subareas.

   Findings: The Project proposes to Master Plan Subareas 3b and 3c together, averaging densities and distributing land uses across the subareas, as permitted.

5. The City Council shall approve a Master Plan pursuant to this policy.

   Findings: The City Council is the ultimate review authority on this Project.

BE IT FURTHER RESOLVED, with respect to the Isabel Neighborhood Specific Plan, Affordable Policy P-LU-34, as amended, and the Inclusionary Ordinance, the Planning Commission finds based upon the information presented that:

All new residential development shall either:

1. Comply with the INSP inclusionary affordable housing requirements and the City's Inclusionary Ordinance (Section 10.06.050 of the Livermore Development Code); or
2. Comply with an Alternative Affordable Plan approved by the City Council through a Development Agreement. The Alternative Affordable Plan shall meet the following requirements:
   a. May only be considered within the Specific Plan Core area (Subareas 3a, 3b, and 3c); and
   b. Shall be, at a minimum, economically equivalent to the requirements of the Inclusionary Ordinance. The applicant shall demonstrate economic equivalence through reports, studies, or other analysis as determined by the Director.

Findings: The Project proposes an Alternative Affordable Plan (Affordable Plan). The Affordable Plan is proposed together with the Development Agreement application, as required. The Affordable Plan is proposed within Subarea 3b and 3c, as required. The City Council is the final review authority for the Project, as required. The Project proposes to designate 28% of the residential units as affordable, including 13.7% as Lower Income, exceeding the required quantity and depth of affordability, in exchange for concentrating the units primarily into the mixed-use commercial and high-density residential blocks. As required, the Developer has submitted the Affordable Housing Economic Equivalency Analysis, by Kosmont. The analysis finds that the proposed Affordable Plan, with 104 extra affordable units and close to triple the required number of Low-Income units, represents an increased Developer

investment of approximately $15 million over the costs of strictly meeting Inclusionary Ordinance/ Specific Plan requirements. Therefore, the proposed Affordable Plan exceeds the economic value of the Specific Plan's required affordable, satisfying the economic equivalence requirement. The proposed Affordable Plan will provide for a higher quantity of overall affordable units than required, even exceeding the Specific Plan's aspirational goal of 25% affordability for the entire INSP area. In addition, the Affordable Plan will provide nearly triple the required quantity of Lower Income units, helping the City towards satisfying the 6th Cycle RHNA Lower Income requirements, and provide for more units affordable to individuals and families in the service sector, students, and other underserved communities.

BE IT FURTHER RESOLVED that the Livermore Planning Commission, based upon its own independent review of the Record Evidence and considerations, and based on the above findings which are necessary to protect the public health, safety, and general welfare, hereby recommends the City Council approve Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, and Master Sign Program Amendment (MSP) 24-001; Accept the Density Bonus Request; Find No Net Loss; Approve a Master Plan; and Approve an Alternative Affordable Plan for the Isabel Crossing Development, together with the following friendly amendments:

1. To the extent practicable, the pedestrian trail located on the east side of Planning Area S1 should be designed to accommodate bicyclists and should connect directly to Isabel Avenue.
2. In all locations where feasible, pedestrian curb ramps shall be directional.
3. To the extent practicable, the pedestrian bulb outs along Isabel Avenue shall be extended to shorten crossing distance.
4. Project bike racks shall be evenly distributed across the site and shall be located within 50 feet commercial entries.
5. Community Development Department staff shall coordinate with Livermore Amador Valley Transit Authority staff to explore bus stops within the Project site, where feasible.
6. To the extent practicable, A Street and Gateway Avenue should be modified to ensure dedicated bicycle lanes are located along the curb face and separated from the travel lane with automobile parking.

BE IT FURTHER RESOLVED that the Livermore Planning Commission recommends the City Council direct the Planning Manager to file a Notice of Determination for the Isabel Crossing Project with the Alameda County Clerk if the Project is approved.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Dunbar, seconded by Commissioner Kronzak, the foregoing Resolution was adopted at the Planning Commission meeting of July 2, 2024 by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

Jacob Anderson, Chairperson

Stephen Riley

by Stephen Riley, Planning Manager
Secretary to the Planning Commission

IN THE PLANNING COMMISSION OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROVING CONSISTENCY DETERMINATION (CD) 24-004, FOR THE ISABEL CROSSING PROJECT

On September 22, 2022, the City received an application from Isabel Portola Owner, LLC (Harridge Development Group) ("Applicant") to develop the approximately 45-acre vacant parcel located at the southwest corner of the Portola Avenue and Isabel Avenue intersection with a mixed-use residential/ commercial development project.

On May 10, 2024, the City received an amended application from the Applicant for Vesting Tentative Tract Map (VTTM) 8659 – Subdivision (SUB) 22-008, Site Plan Design Review (SPDR) 24-003, Conditional Use Permit (CUP) 24-002, Consistency Determination (CD) 24-004, Master Sign Program Amendment (MSP) 24-001, Development Agreement (DA 22-001), Development Code Amendment (DCA) 24-001, and Specific Plan Amendment (SPPA) 24-001 (collectively, the "Project"). The Project would develop vacant land located southwest of the Isabel Avenue and Portola Avenue intersection, implementing the Isabel Neighborhood Specific Plan ("Project"). The Project includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, approximately 90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional approximately 0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new tax district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

The Planning Commission, as the City's planning agency, is required by Government Code Section 65402(a) to determine that the abandonment and re-acquisition of easements for public purposes is consistent with the City's General Plan.

A Consistency Determination for the abandonment and re-dedication of easements does not constitute a project for the purposes of the California Environmental Quality Act (CEQA) per section 21065 of the California Environmental Quality Act and CEQA Guidelines. Therefore, no environmental review under CEQA is required for CD 24-004.

On July 2, 2024, the Planning Commission held a duly noticed public hearing to consider the Project, staff recommendations, all public comments and testimony, and findings.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Livermore that prior to taking action on the Project, and at a properly noticed public hearing, the Planning Commission reviewed written and oral staff reports, conducted a public hearing on the Project and took testimony, and received into the record all pertinent documents related to the Project (collectively, the "Record Evidence"). The Planning Commission's determination is based on the Record Evidence, which is incorporated into this Resolution by reference.

BE IT FURTHER RESOLVED, with respect to the Consistency Determination application, the Planning Commission finds based upon the information presented that:

1. Acquisition and disposition of real property is determined to be consistent with the City of Livermore General Plan.

2. The subject parcels to be acquired and disposed are unnecessary for present or prospective public use.

   Findings: The Project Site contains various utility, access, and other public use easements in favor of the City, as described and depicted on Page TM 2.0 of Vesting Tentative Tract Map No. 8659, and as discussed in the Planning Commission staff report dated July 2, 2024. Vacation of the easements does not conflict with any General Plan policies and does not detrimentally affect the implementation of the General Plan or Specific Plan. The proposed vacation is consistent with the policies of the Infrastructure and Public Services Element and the Specific Plan land use designation of the General Plan.

   The above easements are proposed to be abandoned, as they are not necessary for any public purpose and are inconsistent with the Project, as proposed. New easements necessary to provide public services to the Project Site and any surrounding areas or that are otherwise necessary to serve any other legitimate public purpose will be dedicated by the Project in a manner that is consistent with its proposed design, which easements would be created and dedicated consistent with the requirements of the Specific Plan, the Development Code, City codes, and State law. Because the vacated easements are no longer necessary due to the Project and conflict with its design, the Project would be conditioned to provide required public easements, and the Project is consistent with and promotes key policies and objectives of the General Plan, as set forth above.

BE IT FURTHER RESOLVED that the Livermore Planning Commission, based upon its own independent review of the Record Evidence and considerations, and based on the above findings which are necessary to protect the public health, safety, and general welfare, hereby approves Consistency Determination (CD) 24-004.

BE IT FURTHER RESOLVED that the Livermore Planning Commission finds that a Consistency Determination for the acquisition of real property and abandonment of an easement does not constitute a project for the purposes of the California Environmental Quality Act (CEQA) per section 21065 of the California Environmental Quality Act and CEQA Guidelines. Therefore, no environmental review under CEQA is required for CD 24-004.

The documents that constitute the record of proceedings upon which this decision is based can be found in the Community Development Department 1052 S. Livermore Avenue, in Livermore, California.

On the motion by Commissioner Leary, seconded by Commissioner Kronzak, the foregoing Resolution was adopted at the Planning Commission meeting of July 2, 2024 by the following vote:

AYES: DUNBAR, FINTSCHENKO, KRONZAK, LEARY.
NOES: NONE.
ABSENT: ANDERSON.

Jacob Anderson, Chairperson

Stephen Riley

by Stephen Riley, Planning Manager
Secretary to the Planning Commission



VTTM SUBMITTAL
WITH CONCEPTUAL DESIGN
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

JUNE 07, 2024 - V3





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VTTM SUBMITTAL
WITH CONCEPTUAL DESIGN | **JUNE 07, 2024 V3**

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CIVIL

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NORTHBOUND ISABEL AVE APPROACHING GATEWAY AVENUE

AR-1

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TOWN SQUARE
LOOKING NORTHWEST FROM ISABEL AVENUE

AR-2

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TOWN SQUARE
LOOKING NORTHWEST FROM ISABEL AVENUE

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GATEWAY VIEW
LOOKING NORTHWEST FROM ISABEL AVENUE

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POCKET PLAZA
LOOKING NORTHWEST FROM TOWN SQUARE

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POCKET PLAZA
LOOKING NORTHWEST AT GATEWAY AVENUE AND MAIN STREET

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POCKET PLAZA
LOOKING SOUTHWEST TOWARD GROCERY STORE

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MAIN STREET WITH FARMER'S MARKET
LOOKING NORTH FROM TOWN SQUARE

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MAIN STREET WITH FARMER'S MARKET LOOKING NORTH

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MAIN STREET LOOKING NORTH

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PORTOLA AVENUE AND ISABEL AVE
LOOKING WEST TOWARD INTERSECTION

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PORTOLA AVENUE AND ISABEL AVENUE
LOOKING SOUTHWEST TOWARD INTERSECTION

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PORTOLA AVENUE AND ISABEL AVENUE
LOOKING WEST TOWARD INTERSECTION

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PORTOLA AVENUE
LOOKING WEST

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PORTOLA AVENUE
LOOKING WEST TOWARD MAIN STREET ENTRANCE

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VIEW SOUTH FROM MONTAGE
APPROXIMATELY FROM SECOND FLOOR

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PORTOLA AVENUE AND MAIN STREET
LOOKING SOUTH

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AERIAL PARK VIEW
LOOKING NORTHWEST FROM MAIN STREET

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AERIAL PARK VIEW
LOOKING WEST FROM MAIN STREET

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PARK PLAYGROUND

LOOKING NORTH AT INTERSECTION OF 'A' STREET AND 'C' STREET

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PRIVATE RECREATION BUILDING
LOOKING NORTHWEST AT INTERSECTION OF 'A' STREET AND 'C' STREET

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PRIVATE RECREATION BUILDING
LOOKING SOUTHWEST AT POOL DECK

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VIEW SIMULATION
LOOKING NORTHWEST ON FREEWAY NEAR WB 580 ONRAMP

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CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHEAST ON FREEWAY NEAR WB 580 ONRAMP WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

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VIEW SIMULATION
LOOKING NORTHWEST

AR-25

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VIEW SIMULATION

LOOKING NORTHWEST UNDER PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

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VIEW SIMULATION
LOOKING NORTHEAST ON FREEWAY

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VIEW SIMULATION

LOOKING NORTHWEST ON FREEWAY WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

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CONCEPT DESIGN

VIEW SIMULATION
LOOKING NORTHEAST ON FREEWAY

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CONCEPT DESIGN

VIEW SIMULATION

LOOKING NORTHWEST ON FREEWAY AT BEGINING OF ISABEL AVE. OFFRAMP WITH PROPOSED VALLEY LINK PEDESTRIAN BRIDGE

AR-30

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CONCEPT DESIGN

MASTER PLAN
ILLUSTRATIVE MASTER PLAN

SP-1

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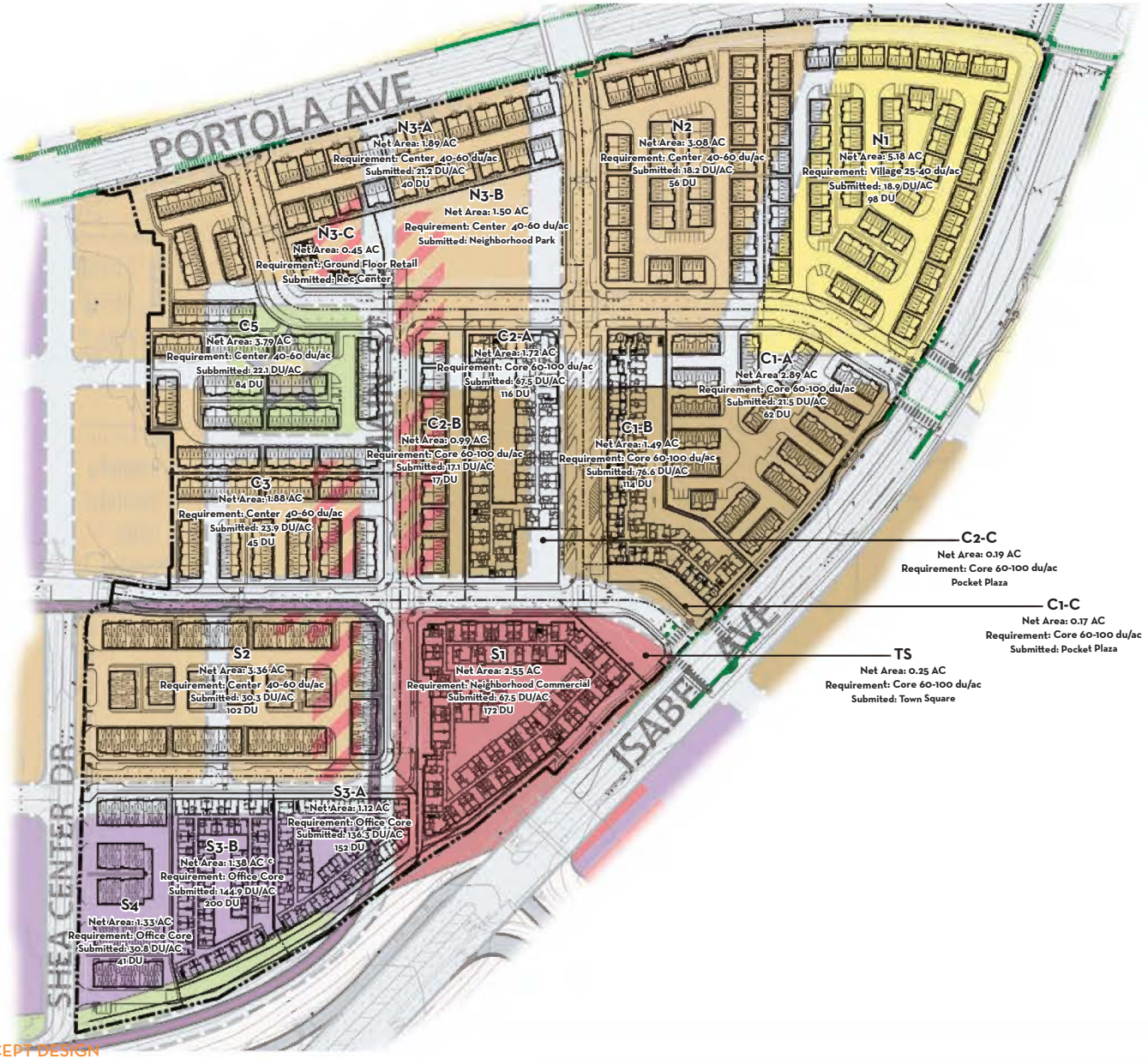
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EXHIBIT C



Existing INSP Density Requirement

- Village: 25-40 du/ac
- Center: 40-60 du/ac
- Core: 60-100 du/ac
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

Density Comparison Planning Area	Existing Requirement Designation	Density	Submitted Density	Homes
N1	Village	25-40 du/ac	18.9 du/ac	98 du
N2	Center	40-60 du/ac	18.2 du/ac	56 du
N3-A	Center	40-60 du/ac	21.2 du/ac	40 du
N3-B	Center	40-60 du/ac	NA	NA
N3-C	Center	40-60 du/ac	NA	NA
C1-A	Core	60-100 du/ac	21.5 du/ac	62 du
C1-B	Core	60-100 du/ac	76.6 du/ac	114 du
C2-A	Core	60-100 du/ac	67.5 du/ac	116 du
C2-B	Core	60-100 du/ac	17.1 du/ac	17 du
C3	Center	40-60 du/ac	23.9 du/ac	45 du
C5	Center	40-60 du/ac	22.1 du/ac	84 du
S1	Nbhd Comm	NA	67.5 du/ac	172 du
S2	Center	25-40 du/ac	30.3 du/ac	102 du
S3-A	Office Core	NA	136.3 du/ac	152 du
S3-B	Office Core	NA	144.9 du/ac	200 du
S4	Office Core	NA	30.8 du/ac	41 du

CONCEPT DESIGN

MASTER PLAN
COMPARISON - LUP EXISTING

SP-2

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EXHIBIT C



Proposed INSP Land Use

- Village
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

CONCEPT DESIGN

MASTER PLAN COMPARISON - LUP PROPOSED

SP-3

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EXHIBIT C



Proposed INSP Land Use

- Village
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Parcel	Proposed Product	Product Type	Units	Gross Land Area (AC)	Perimeter ROW Areas (AC)	Net Land Area (AC)	Density (Net DU/AC)	Average Unit Size (sqft)	Residential Building Area (sqft)	Non-Residential Building Area (sqft)
Residential			1,299	34.86	2.22	32.65			1,743,741	74,362
N1	Product 2C	3-Story Attached (Duplex & Triplex)	98	5.59	0.41	5.18	18.9	1,943	190,432	
N2	Product 1	3-Story Attached (Duplex & Triplex)	56	3.17	0.10	3.08	18.2	2,324	130,116	
N3-A	Product 1	3-Story Attached (Duplex)	40	2.11	0.22	1.89	21.2	2,322	92,860	
C1-A	Product 17	3-Story Attached (Townhouse)	62	3.02	0.13	2.89	21.5	1,730	107,260	
C1-B	Product 15	Type V Apartments over Retail	114	1.53	0.04	1.49	76.6	889	101,373	22,520
C2-A	Product 16	Type V Stacked Flat Condos over Retail	116	1.72	0.00	1.72	67.5	1,394	161,680	27,918
C2-B	Product 1	3-Story Attached (Duplex & Triplex)	17	0.99	0.00	0.99	17.1	2,326	39,546	
C3	Product 2	3-Story Attached (Townhouse)	45	1.88	0.00	1.88	23.9	1,900	85,500	
C5	Product 2	3-Story Attached (Townhouse)	84	3.87	0.08	3.79	22.1	1,899	159,492	
S1	Product 9	Type V Stacked Flat Condos over Grocery	172	2.78	0.23	2.55	67.5	1,267	217,872	23,924
S2	Product 4	3-Story Attached (Townhouse)	102	3.46	0.10	3.36	30.3	1,326	135,284	
S3-A	Product 10	Type V Apartments	152	1.41	0.29	1.12	136.3	685	104,160	0
S3-B	Product 12	Type III Apartments	200	1.61	0.24	1.38	144.9	816	163,240	0
S4	Product 4	3-Story Attached (Townhouse)	41	1.71	0.38	1.33	30.8	1,340	54,926	
Non-Residential				10.51	0.02	10.50				8,575
N3-B		Neighborhood Park		1.50	0.00	1.50				
N3-C		Rec Center		0.45	0.00	0.45				8,575
C1-C		Pocket Plaza		0.17	0.00	0.17				
C2-C		Pocket Plaza		0.19	0.00	0.19				
TS		Town Square		0.27	0.02	0.25				
ROW				7.94		7.94				
Total			1,299	45.37	2.23	43.14	30.1		1,743,741	82,937

Product Summary		
Market-Rate For Sale Duplex & Triplex	211	
Market-Rate For Sale Townhomes:	334	
Market-Rate For Sale Condos:	231	
Affordable For Sale Condos:	57	
Market-Rate For Rent Apartments:	160	
Affordable For Rent Apartments:	306	
Total Market-Rate Units:	**936**	72%
Total Affordable Units:	**363**	28%
Total Units:	**1299**	100%

Notes:
Amenity space for Parcels C1-B, C2-A, S1, S3-A and S3-B included in total non-residential space
Perimeter ROW includes ROW of Portola Avenue, Isabel Avenue, Trail & EVA, and Shea Center Drive

CONCEPT DESIGN

MASTER PLAN PARCEL SUMMARY

SP-4

ISABEL PORTOLA OWNER, LLC

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EXHIBIT C



Parcel	Product Type	Product	Bed / Bath	Units	Total Beds	Total Baths	Total Half Bath	Unit SQFT	Total Residential SQFT	Total Non-Res SQFT	Total Usable SQFT	Gross Construction Area: Residential Parking Area	Gross Construction Area: Non-Residential Parking Area	Gross Construction Area: Residential Area	Gross Construction Area: Non-Residential Area	Gross Construction Area: Total Area
N1	3-Story Attached (Duplex & Triplex)	Product 2C		98	362	264	30	1,943	190,432		190,432	46,452		190,432	18,080	254,964
		Plan 1C	3 / 2.5	30	90	60	15	1,851	55,530			13,710		55,530	4,950	74,190
		Plan 2C	4 / 3.5	30	120	90	15	1,895	56,850			13,590		56,850	4,770	75,210
		Plan 3C	4 / 3.0	38	152	114	0	2,054	78,052			19,152		78,052	8,360	105,564
N2	3-Story Attached (Duplex & Triplex)	Product 1		56	197	168	28	2,324	130,116		130,116	28,532		130,116	10,860	169,508
		Plan 1	3 / 3.5	14	42	42	7	2,192	30,688			6,888		30,688	2,800	40,376
		Plan 2	3 / 3.5	13	39	39	7	2,290	29,770			6,448		29,770	2,405	38,623
		Plan 3	4 / 3.5	29	116	87	15	2,402	69,658			15,196		69,658	5,655	90,509
N3-A	3-Story Attached (Duplex)	Product 1		40	140	120	20	2,322	92,860		92,860	20,360		92,860	7,750	120,970
		Plan 1	3 / 3.5	10	30	30	5	2,192	21,920			4,920		21,920	2,000	28,840
		Plan 2	3 / 3.5	10	30	30	5	2,290	22,900			4,960		22,900	1,850	29,710
		Plan 3	4 / 3.5	20	80	60	10	2,402	48,040			10,480		48,040	3,900	62,420
N3-C	Rec Center / Pool Building	Rec Building								8,575	8,575				8,575	8,575
C1-A	3-Story Attached (Townhouse)	Product 17		62	217	155	16	1,730	107,260		107,260	31,806		107,260	9,021	148,087
		Plan 1	3 / 2.5	31	93	62	16	1,613	50,003			14,725		50,003	3,534	68,262
		Plan 2	4 / 3.0	31	124	93	0	1,847	57,257			17,081		57,257	5,487	79,825
C1-B	Type V Apartments over Retail	Product 15		114	183	162	11	889	101,373	22,520	123,893	72,655		127,143	22,520	222,318
		Unit A-1	1 / 1.0	63	63	63	0	731	46,053							
		Unit A-2	1 / 1.0	3	3	3	0	1,005	3,015							
		Unit B-1	2 / 2.0	24	48	48	0	950	22,800							
		Unit B-2	2 / 2.0	3	6	6	0	1,148	3,444							
		Unit C-1	3 / 2.5	21	63	42	11	1,241	26,061							
C2-A	Type V Stacked Flat Condos over Retail	Product 16		116	220	208	14	1,394	161,680	27,918	189,598	75,661		219,996	27,918	323,575
		Unit A-1	1 / 1.0	24	24	24	0	949	22,776							
		Unit B-1	2 / 2.0	64	128	128	0	1,373	87,872							
		Unit B-2	2 / 2.5	16	32	32	8	1,685	26,960							
		Unit C-1	3 / 2.5	12	36	24	6	2,006	24,072							
C2-B	3-Story Attached (Duplex & Triplex)	Product 1		17	60	51	9	2,326	39,546		39,546	8,668		39,546	3,295	51,509
		Plan 1	3 / 3.5	4	12	12	2	2,192	8,768			1,968		8,768	800	11,536
		Plan 2	3 / 3.5	4	12	12	2	2,290	9,160			1,984		9,160	740	11,884
		Plan 3	4 / 3.5	9	36	27	5	2,402	21,618			4,716		21,618	1,755	28,089
C3	3-Story Attached (Townhouse)	Product 2		45	171	126	18	1,900	85,500		85,500	20,880		85,500	7,758	114,138
		Plan 1	3 / 2.5	9	27	18	5	1,827	16,443			4,113		16,443	1,485	22,041
		Plan 2	4 / 3.5	27	108	81	14	1,873	50,571			12,231		50,571	4,293	67,095
		Plan 3	4 / 3.0	9	36	27	0	2,054	18,486			4,536		18,486	1,980	25,002
C5	3-Story Attached (Townhouse)	Product 2		84	320	236	34	1,899	159,492		159,492	38,932		159,492	14,428	212,852
		Plan 1	3 / 2.5	16	48	32	8	1,827	29,232			7,312		29,232	2,640	39,184
		Plan 2	4 / 3.5	52	208	156	26	1,873	97,396			23,556		97,396	8,268	129,220
		Plan 3	4 / 3.0	16	64	48	0	2,054	32,864			8,064		32,864	3,520	44,448
S1	Type V Stacked Flat Condos over Grocery	Product 9		172	328	300	0	1,267	217,872	23,924	241,796	164,022		296,184	23,924	484,130
		Unit A-1	1 / 1.0	44	44	44	0	949	41,756							
		Unit B-1	2 / 2.0	84	168	168	0	1,373	115,332							
		Unit C-1	3 / 2.0	24	72	48	0	1,418	34,032							
		Unit D-1	2 / 2.0	16	32	32	0	1,338	21,408							
		Unit E-1	3 / 2.0	4	12	8	0	1,336	5,344							
S2	3-Story Attached (Townhouse)	Product 4		102	236	236	35	1,326	135,284		135,284	57,936		135,284	9,168	202,388
		Plan 1	2 / 2.5	35	70	70	18	1,177	41,195			18,585		41,195	3,395	63,175
		Plan 2	2 / 2.5	35	70	70	18	1,315	46,025			18,935		46,025	3,885	68,845
		Plan 3	3 / 3.0	32	96	96	0	1,502	48,064			20,416		48,064	1,888	70,368
S3-A	Type V Apartments	Product 10		152	272	192	0	685	104,160		104,160	79,879		135,124	0	215,003
		Unit A-1	Studio / 1.0	40	40	40	0	453	18,120							
		Unit A-2	1 / 1.0	32	32	32	0	533	17,056							
		Unit B-1	2 / 1.0	36	72	36	0	710	25,560							
		Unit B-2	2 / 1.0	4	8	4	0	786	3,144							
		Unit C-1	3 / 2.0	40	120	80	0	1,007	40,280							
S3-B	Type III Apartments	Product 12		200	280	280	0	816	163,240		163,240	105,273		214,395	0	319,668
		Unit A-1	1 / 1.0	120	120	120	0	727	87,240							
		Unit B-1	2 / 2.0	80	160	160	0	950	76,000							
S4	3-Story Attached (Townhouse)	Product 4		41	97	97	13	1,340	54,926		54,926	23,506		54,926	3,589	82,021
		Plan 1	2 / 2.5	13	26	26	7	1,177	15,301			6,903		15,301	1,261	23,465
		Plan 2	2 / 2.5	13	26	26	7	1,315	17,095			7,033		17,095	1,443	25,571
		Plan 3	3 / 3.0	15	45	45	0	1,502	22,530			9,570		22,530	885	32,985
Total				1,299	3,083	2,595	227		1,743,741	82,937	1,826,678	774,562	0	1,988,258	166,886	2,929,706

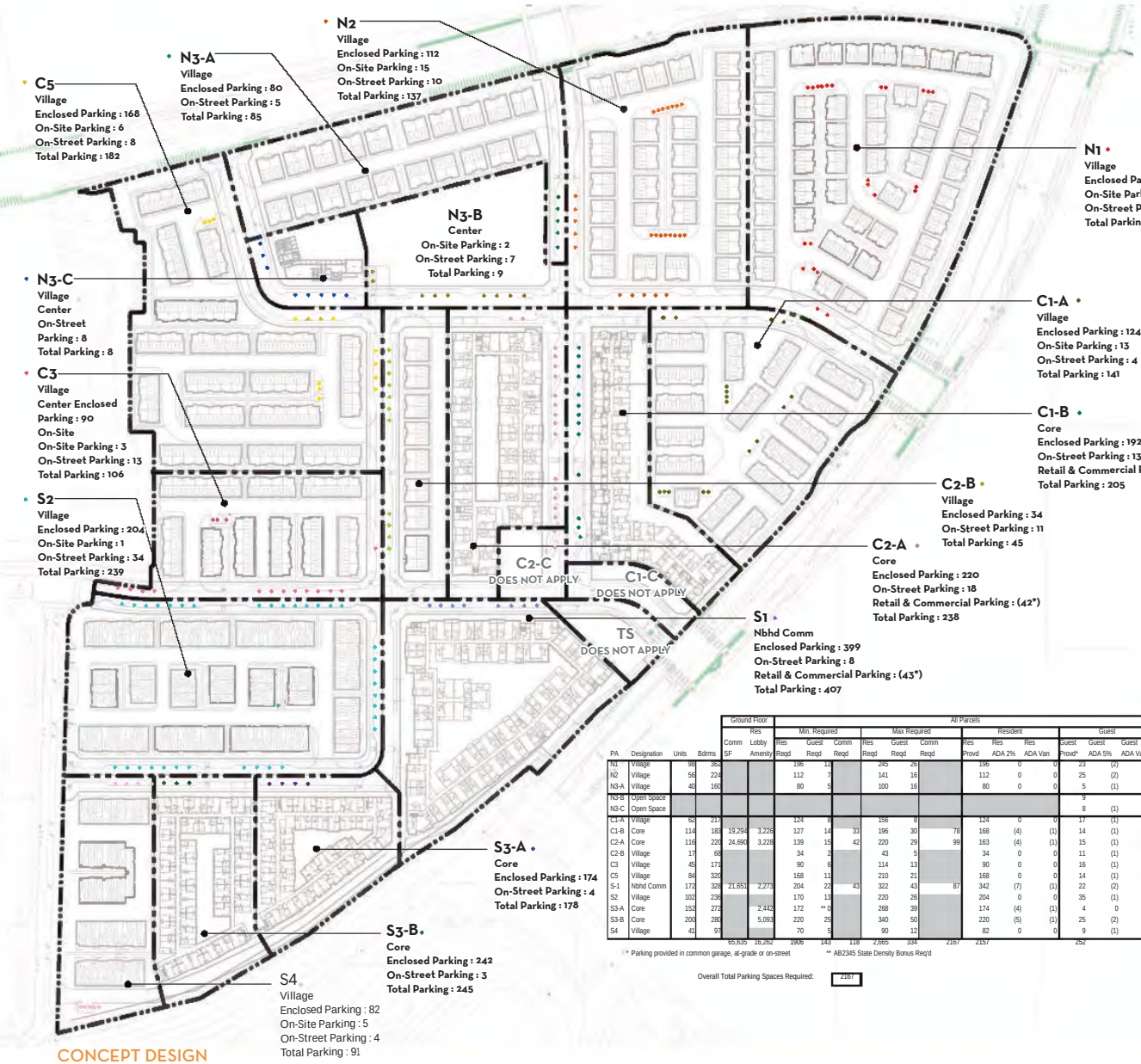
CONCEPT DESIGN

MASTER PLAN PRODUCT SUMMARY

SP-5

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EXHIBIT C



Minimum Parking Requirements:

Village/ Transition		Core/Center	
Studio/ 1-Bed:	1.0 Spaces/ Unit	Studio:	0.75 Spaces/ Unit
2-Bed:	1.5 Spaces/ Unit	1-Bed:	1.0 Spaces/ Unit
3-Bed +:	2.0 Spaces/ Unit	2+ Bed:	1.25 Spaces/ Unit

Guest Parking: 1 Space/ 8 Units (0.13 Spaces / Unit)
*Note: Onstreet parking for parcels C1-B, C2-A, and S1 is provided for the Retail & Commercial Parking requirement

Neighborhood Commercial and Ground Floor Retail/ Flex Space:
General Commercial:

Maximum Parking Requirements:

Village/ Transition		Core/ Center		AB 2345 Denisty Bonus Parking Requirment:	
Studio/ 1-Bed:	1.25 Spaces/ Unit	Studio:	0.75 Spaces/ Unit	Studio/ 1-Bed:	1.0 Spaces/ Unit
2-Bed:	2.0 Spaces/ Unit	1-Bed:	1.5 Spaces/ Unit	2-Bed:	1.5 Spaces/ Unit
3-Bed +:	2.5 Spaces/ Unit	2-Bed +:	2.0 Spaces/ Unit	3-Bed +:	1.5 Spaces/ Unit
Guest Parking	1 Space/ 4 Units			Guest Parking:	No Guest Parking required

Commercial

General Commercial	1 Space/ 600 SF
Retail	2 Space/ 400 SF

| | | | | Ground Floor | | All Parcels | | | | | | | | | | Podium Buildings C1-B, C2-A, S1, S3-A, S3-B | | | | | | | | | |

EXHIBIT C



FAR Comparison	Requirement		Submitted	
PA	Designation	FAR	FAR	
N1	Village	NA	NA	
N2	Village	NA	NA	
N3-A	Village	NA	NA	
N3-B	Village	NA	NA	
N3-C	Village	NA	NA	
C1-A	Core	NA	NA	
C1-B	Core	NA	NA	
C2-A	Core	NA	NA	
C2-B	Core	NA	NA	
C3	Village	NA	NA	
C5	Village	NA	NA	
S1	Nbhd Comm	.04 - 1.0	0.30	Waiver
S2	Village	NA	NA	
S3-A	Core	NA	NA	
S3-B	Core	NA	NA	
S4	Village	NA	NA	

CONCEPT DESIGN

MASTER PLAN F.A.R. ANALYSIS

SP-7

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EXHIBIT C



Parcel	INSP Requirement	Land Use	Units	Common Area Required[1] (AC)	Common Area Open Space per unit SF	Neighborhood Park (AC)	Common Area Provided[4] Common Open Space Total (SF)		Playgrounds/ Community Gardens/ Pocket Parks and Pocket Plazas (AC)	Plazas (AC)	Trails (AC)	Setback[5] (AC)	Total Area (AC)	Private Open Space Provided[6] Private Open Space (SF)	Private Open Space per unit (SF)	Total Open Space Provided (SF)	Total Open Space per unit (SF)
Residential			**1,299**	**2.24**		**0.00**	**4.47**		**4.11**	**0.00**	**0.76**	**3.57**	**8.81**				
N1	Village	3-Story Attached (Duplex & Triplex)	98	0.17	430		42,154	SF	0.97			0.67	1.64	8,618	88	50,772	518
N2	Village	3-Story Attached (Duplex & Triplex)	56	0.10	183		10,241	SF	0.24			0.39	0.62	3,757	67	13,998	250
N3-A	Village	3-Story Attached (Duplex)	40	0.07	130		5,192	SF	0.12			0.41	0.53	2,680	67	7,872	197
C1-A	Village	3-Story Attached (Townhouse)	62	0.11	249		15,420	SF	0.35			0.38	0.74	4,960	80	20,380	329
C1-B	Core	Type V Apartments over Retail	114	0.20	128		14,618	SF	0.34			0.07	0.48	5,700	50	20,318	178
C2-A	Core	Type V Stacked Flat Condos over Retail	116	0.20	102		11,887	SF	0.27			0.06	0.40	5,800	50	17,687	152
C2-B	Village	3-Story Attached (Duplex & Triplex)	17	0.03	109		1,847	SF	0.04			0.11	0.16	1,163	68	3,010	177
C3	Village	3-Story Attached (Townhouse)	45	0.08	96		4,336	SF	0.10			0.24	0.34	3,870	86	8,206	182
C5	Village	3-Story Attached (Townhouse)	84	0.14	191		16,053	SF	0.37			0.44	0.80	7,220	86	23,273	277
S1	Neighborhood Center	Type V Stacked Flat Condos over Grocery	172	0.30	111		19,071	SF	0.44		0.23	0.27	0.98	8,600	50	27,671	161
S2	Village	3-Story Attached (Townhouse)	102	0.18	90		9,186	SF	0.21			0.30	0.51	5,409	53	14,595	143
S3-A	Core	Type V Apartments	152	0.26	84		12,841	SF	0.24		0.22	0.05	0.57	7,600	50	20,441	134
S3-B	Core	Type III Apartments	200	0.34	115		23,075	SF	0.34		0.19	0.04	0.68	10,000	50	33,075	165
S4	Village	3-Story Attached (Townhouse)	41	0.07	214		8,770	SF	0.08		0.12	0.15	0.35	2,280	56	11,050	270
Non-Residential				**0.00**		**1.50**	**0.00**		**0.00**	**0.61**	**0.00**	**0.00**	**2.11**				
N3-B	Center	Neighborhood Park				1.50						0.00	1.50				
C1-C	Core	Pocket Plaza								0.17		0.00	0.17				
C2-C	Core	Pocket Plaza								0.19		0.00	0.19				
TS	Neighborhood Center	Town Square								0.25		0.00	0.25				
Sub-Total			**1,299**	**2.24**		**1.50**	**4.47**		**4.11**	**0.61**	**0.76**	**3.58**	**10.92**	**77,657**		**272,347**	
N3-C	Park	Community Rec Center[3]					0.25		0.25			0.09	0.45				
Total			**1,299**	**2.24**		**1.50**	**4.72**		**4.36**	**0.61**	**0.76**	**3.67**	**65646.01**	**77,657**		**272,347**	

Perimeter ROW includes ROW of Portola Avenue, Isabel Avenue, Trail & EVA, and Shea Center Drive

[1] Min. 75 sq. ft. per unit

[2] Up to 10% may be provided through indoor space

[3] Setback areas have not been counted toward the common area provided.

[4] Common areas must have a minimum dimension in any direction of 10 ft, include Common Garden/pocket parks, and Trails.

[5] Area counted towards common area excludes building footprint

[6] Private Open Space must have a mimimum dimension of 4'x8' of 50 sf in Core/Center

[7] Private Open Space must have a mimimum dimension of 6'x8' of 75 sf in Village

Min/ Max Park Sizes

Playground	N/A
Community Gardens	0.1 AC - 1.0 AC
Neighborhood Pocket Parks	0.1 AC - 1.0 AC
Pocket Plazas	0.1 AC - 1.0 AC
Plazas	0.25 AC - 2.0 AC

CONCEPT DESIGN

MASTER PLAN
OPEN SPACE ANALYSIS

SP-8

ISABEL PORTOLA
OWNER, LLC

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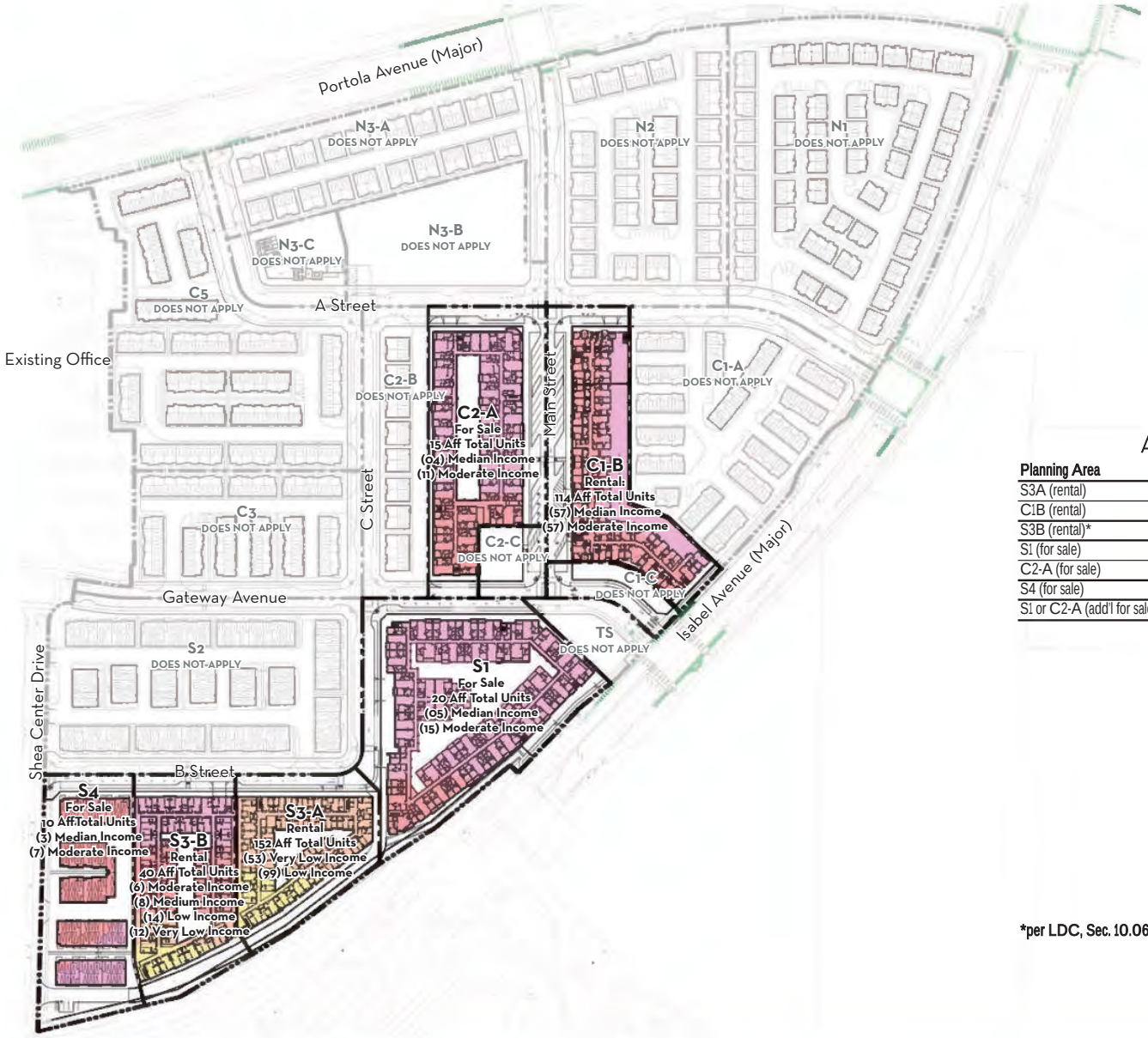
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EXHIBIT C



Affordable Housing Table

Planning Area	VLI	LI	Med	Mod	TOTALS
S3A (rental)	53	99			152
C1B (rental)			57	57	114
S3B (rental)*	12	14	8	6	40
S1 (for sale)			5	15	20
C2-A (for sale)			4	11	15
S4 (for sale)			3	7	10
S1 or C2-A (add'l for sale)			6	6	12

Total Affordable Units:	**363**	**28%**
Total For Rental	306	24%
Total Very Low Income Rental	(65)	(5%)
Total Low Income Rental	(113)	(8.7%)
Total Median Rental	(65)	(5%)
Total Moderate Rental	(63)	(5%)
Total For Sale	57	4%
Total Median For Sale	(18)	(1%)
Total Moderate For Sale	(39)	(3%)
Total Market-Rate Units:	**936**	**72%**
Total Units	**1,299**	**100%**

*per LDC, Sec. 10.06.050-D(4)(c)(2)

CONCEPT DESIGN

MASTER PLAN
AFFORDABLE HOUSING LOCATION SITE PLAN

SP-9

ISABEL PORTOLA
OWNER, LLC

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EXHIBIT C



Project Summary - N1

Gross
Land Area: ±5.6 Acres

Net
Land Area: ±5.2 Acres

Total Units: 98 Homes

Density: 18.9 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 14,700 SF Total (150 SF per home)
' Common: 7,350 SF (75 SF per home; 10' min. dim.)
' Private: 7,350 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 50,772 SF Total (518 SF per home)
' Common: 42,153 SF (10' Min. Dimension)
' Private: 8,618 SF (88 SF per home)

Porches:
' Porch Condition
' Corner Porch Condition

Enhanced
Elevation:

Walkway
Connection:

Setback:

Setback Table PA N1	Proposed	Provided	Notes
Facing Portola Village	Facing Main Street:		
Front	Facing Major Streets: Facing All Other Streets:		
Interior			
Rear			
Building Separation			
Alley/Garage Separation			
Porches			
Notes			

CONCEPT DESIGN

MASTER PLAN
N1 OPEN SPACE EXHIBIT

SP-10

ISABEL PORTOLA
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EXHIBIT C



Project Summary - N2

Gross
Land Area: ± 3.2 Acres

Net
Land Area: ± 3.1 Acres

Total Units: 56 Homes

Density: 18.2 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 8,400 SF Total (150 SF per home)
' Common: 4,200 SF (75 SF per home; 10' min. dim.)
' Private: 4,200 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 13,998 SF Total (250 SF per home)
' Common: 10,241 SF (10' Min. Dimension)
' Private: 3,540 SF (67 SF per home)

Porches:
' Porch Condition
' Corner Porch Condition

Enhanced
Elevation:

Walkway
Connection:

Setback:

Setback Table HA N2	Proposed	Provided	Notes
Existing Zoning Center			
	Facing Main Street		
Front	Facing Major Streets		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Porch Separation			
Notes			

CONCEPT DESIGN

MASTER PLAN
N2 OPEN SPACE EXHIBIT

SP-11

ISABEL PORTOLA
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EXHIBIT C



Project Summary - N3-A

Gross Land Area: ± 2.11 Acres

Net Land Area: ± 1.89 Acres

Total Units: 40 Homes

Density: 21.2 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 6,000 SF Total (150 SF per home)
- Common: 3,000 SF (75 SF per home; 10' min. dim.)
- Private: 3,000 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 7,872 SF Total (197 SF per home)
- Common: 5,192 SF (10' Min. Dimension)
- Private: 2,680 SF (67 SF per home)

Porches:
- Porch Condition
- Corner Condition

Enhanced Elevation: ⬢

Walkway Connection: - - - - - -

Setback: — — — — —

Setback Table PA N3-A	Proposed	Provided	Notes
Existing Zoning Center			
Front	Facing N 2nd Street:		
	Facing Major Streets:		
	Facing All Other Streets:		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Porch Separation			
Notes			

CONCEPT DESIGN

MASTER PLAN
N3-A OPEN SPACE EXHIBIT

SP-12

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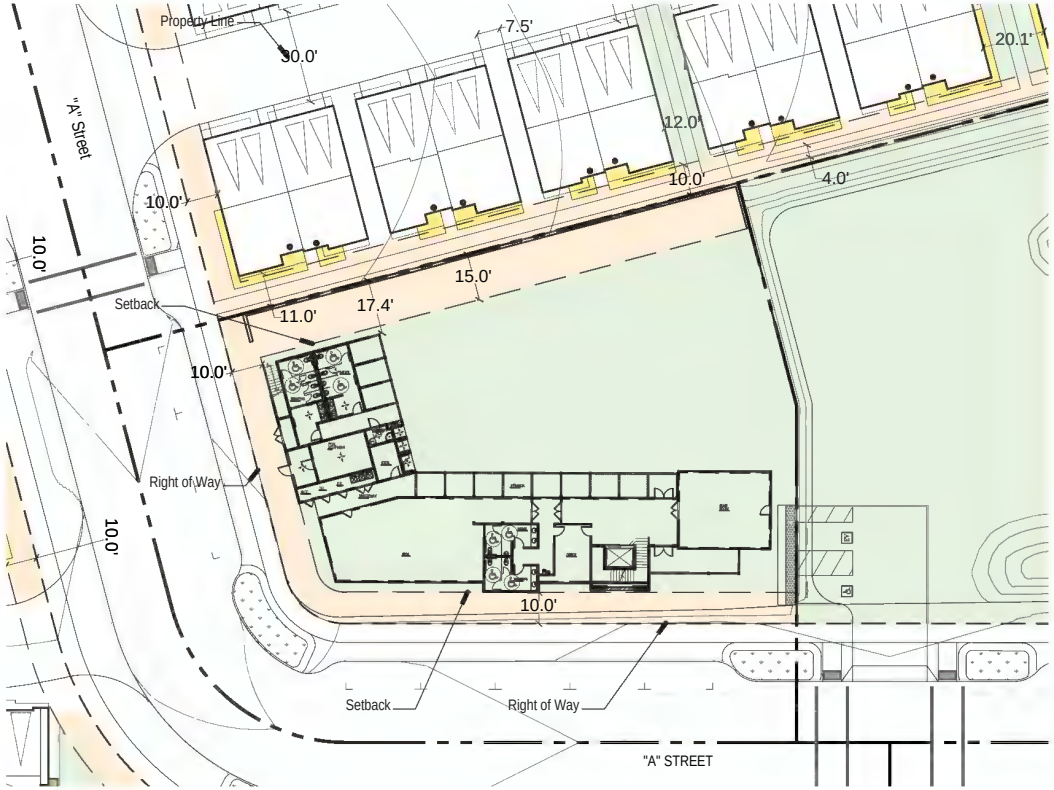
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2546

EXHIBIT C



Project Summary - N3-C

Gross
Land Area: ± 0.45 Acres

Setbacks:

Setback Table PA N3-C	Original	Proposed	Notes
Front	Facing Major Street Facing Major Streets Facing All Other Streets		
Interior			
Rear Building Separation			
Alley Garage Separation			
Notes			

MASTER PLAN
N3-C OPEN SPACE EXHIBIT

SP-13

CONCEPT DESIGN

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EXHIBIT C



Project Summary - C1-A

Gross
Land Area: ± 3.02 Acres

Net
Land Area: ± 2.89 Acres

Total Units: 62 Homes

Density: 21.5 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 9,300 SF Total (150 SF per home)
- Common: 4,650 SF (75 SF per home; 10' min. dim.)
- Private: 4,650 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 20,380 SF Total (329 SF per home)
- Common: 15,420 SF (249 SF per home)
- Private: 4,960 SF (80 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced
Elevation:

Walkway
Connection:

Setback:

Setback Table PA C1-A	Proposed	Provided	Notes
Existing Zoning Code			
Front			
Interior			
Rear			
Building Separation			
Alley Carriage Separation			
Porch Separation			
Notes			

MASTER PLAN
C1-A OPEN SPACE EXHIBIT

SP-14

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Project Summary - C1-B

Gross
Land Area: ± 1.53 Acres

Net
Land Area: ± 1.49 Acres

Total Units: 114 Homes

Density: 76.6 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 14,250 SF Total (125 SF per home)
- Common: 8,550 SF (75 SF per home; 10' min. dim.)
- Private: 5,700 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 20,318 SF Total (178 SF per home)
- Common: 14,618 (10' Min. Dimension)
- Private: 5,700 SF (50 SF per home)

Setback:

Setback Table PA C1-B	Proposed	Provided	Notes
Existing Zoning Code			
Front	Facing Main Street		
	Facing Major Streets		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Notes			

CONCEPT DESIGN

MASTER PLAN
C1-B OPEN SPACE EXHIBIT

SP-15

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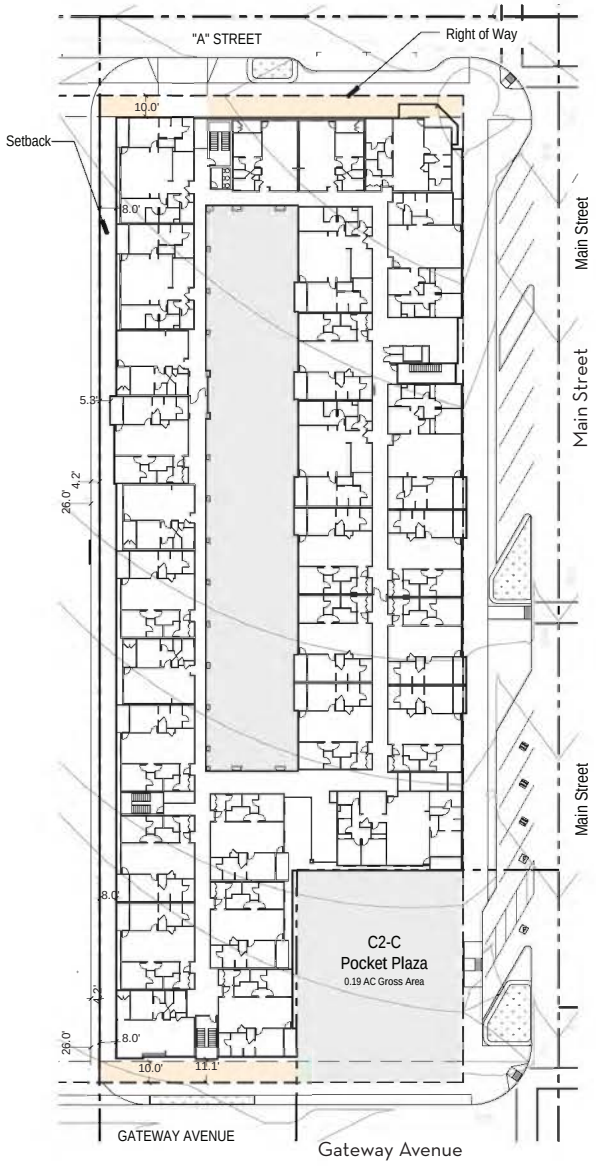
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Project Summary - C2-A

Gross
Land Area: ±1.7 Acres

Net
Land Area: ±1.7 Acres

Total Units: 116 Homes

Density: 67.5 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 14,500 SF Total (125 SF per home)
' Common: 8,700 SF (75 SF per home; 10' min. dim.)
' Private: 5,800 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 17,687 SF Total (152 SF per home)
' Common: 11,887 (10' Min. Dimension)
' Private: 5,800 SF (50 SF per home)

Setback:

Setback Table PA C2-A	Proposed	Provided	Notes
Existing Zoning Code			
Front	Facing Main Street		
	Facing Major Streets		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Notes			

CONCEPT DESIGN

MASTER PLAN
C2-A OPEN SPACE EXHIBIT

SP-16

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2550

Project Summary - C2-B

Gross Land Area: ±0.99 Acres

Net Land Area: ±0.99 Acres

Total Units: 17 Homes

Density: 17.1 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

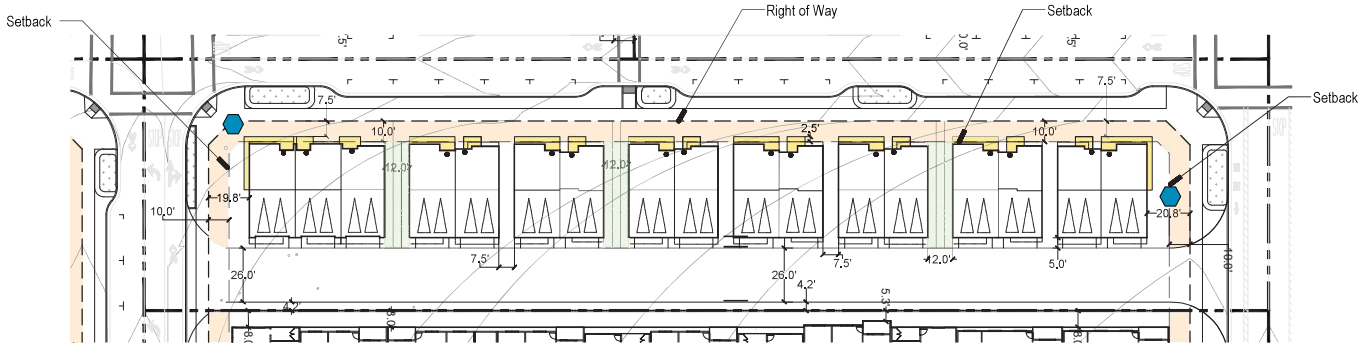
Required: 2,550 SF Total (150 SF per home)
- Common: 1,275 SF (75 SF per home; 10' min. dim.)
- Private: 1,275 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 3,010 SF Total (177 SF per home)
- Common: 1,847 SF (10' Min. Dimension)
- Private: 1,163 SF (68 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition (Enhanced Elevation)

Enhanced Elevation:

Setback:



Setback Table PA: C2-B	Proposed	Provided	Notes
Existing Zoning: Core	Village		
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft from curb **Facing All Other Streets:** 10 ft from PL	10 ft from PL	Compliant
Interior	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	10 ft from PL	Compliant
Rear	Same as Interior Setback	Setback from rear PL: appx. 33' all floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, cining, bedroom) of residential units.	7'-6" between buildings. There are no primary windows from living, dining, bedrooms)	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 26' paved width / garage face to garage face doesn't apply because garages do not face each other.	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches encroach 2'-6" into the setback	Compliant
Notes			One (1) triplex building has been added to fit the site constraints.

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Project Summary - C3

Gross
Land Area: ± 1.88 Acres

Net
Land Area: ± 1.88 Acres

Total Units: 45 Homes

Density: 23.9 Homes per Acre

Dwelling Unit
Front Door: •

Open Space:
Required: 6,750 SF Total (150 SF per home)
- Common: 3,375 SF (75 SF per home; 10' min. dim.)
- Private: 3,375 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 8,206 SF Total (182 SF per home)
- Common: 4,336 SF (10' Min. Dimension)
- Private: 3,870 SF (86 SF per home)

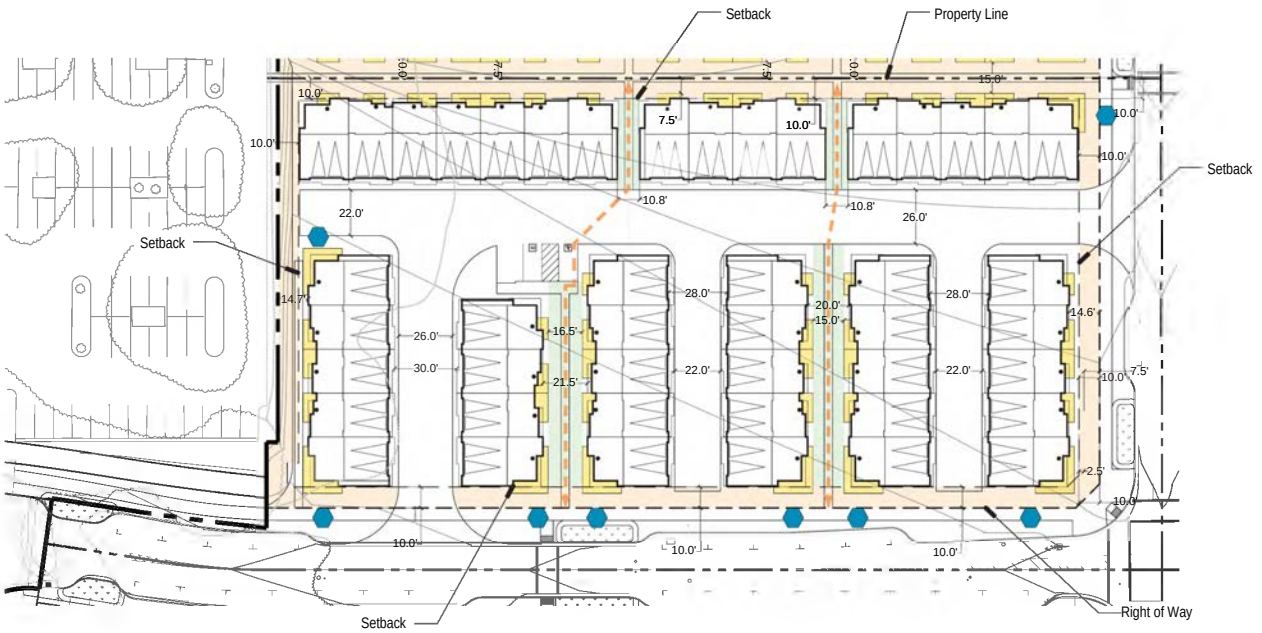
Porches:
- Porch Condition
- Corner Porch Condition

Enhanced
Elevation:

Walkway
Connection:

Setback:

Setback Table PA C3	Proposed	Provided	Notes
Existing Zoning Center			
Front	Facing Main Streets		
	Facing Major Streets		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Porch Separation			
Notes			



CONCEPT DESIGN

MASTER PLAN
C3 OPEN SPACE EXHIBIT

SP-18

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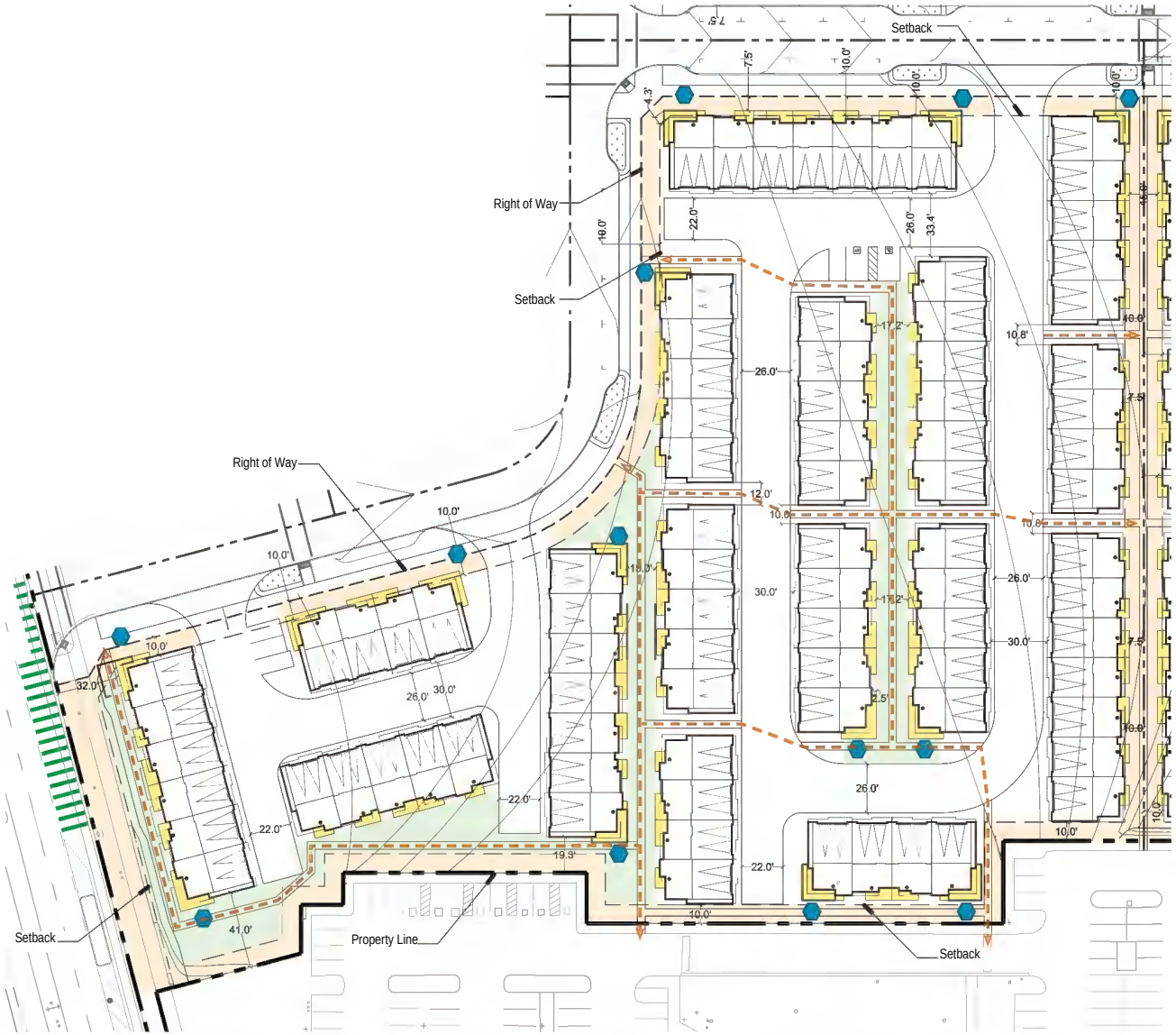
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EXHIBIT C



Project Summary - C5

Gross Land Area: ± 3.87 Acres

Net Land Area: ± 3.79 Acres

Total Units: 84 Homes

Density: 22.1 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 12,600 SF Total (150 SF per home)
- Common: 6,300 SF (75 SF per home; 10' min. dim.)
- Private: 6,300 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 23,273 SF Total (277 SF per home)
- Common: 16,053 SF (10' Min. Dimension)
- Private: 7,220 SF (86 SF per home)

Porches:
- Porch Condition
- Corner Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA C5	Proposed	Provided	Notes
Existing Zoning Center			
Front	Facing Main Streets:		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
[illegible]			
Notes			

CONCEPT DESIGN

MASTER PLAN
C5 OPEN SPACE EXHIBIT

SP-19

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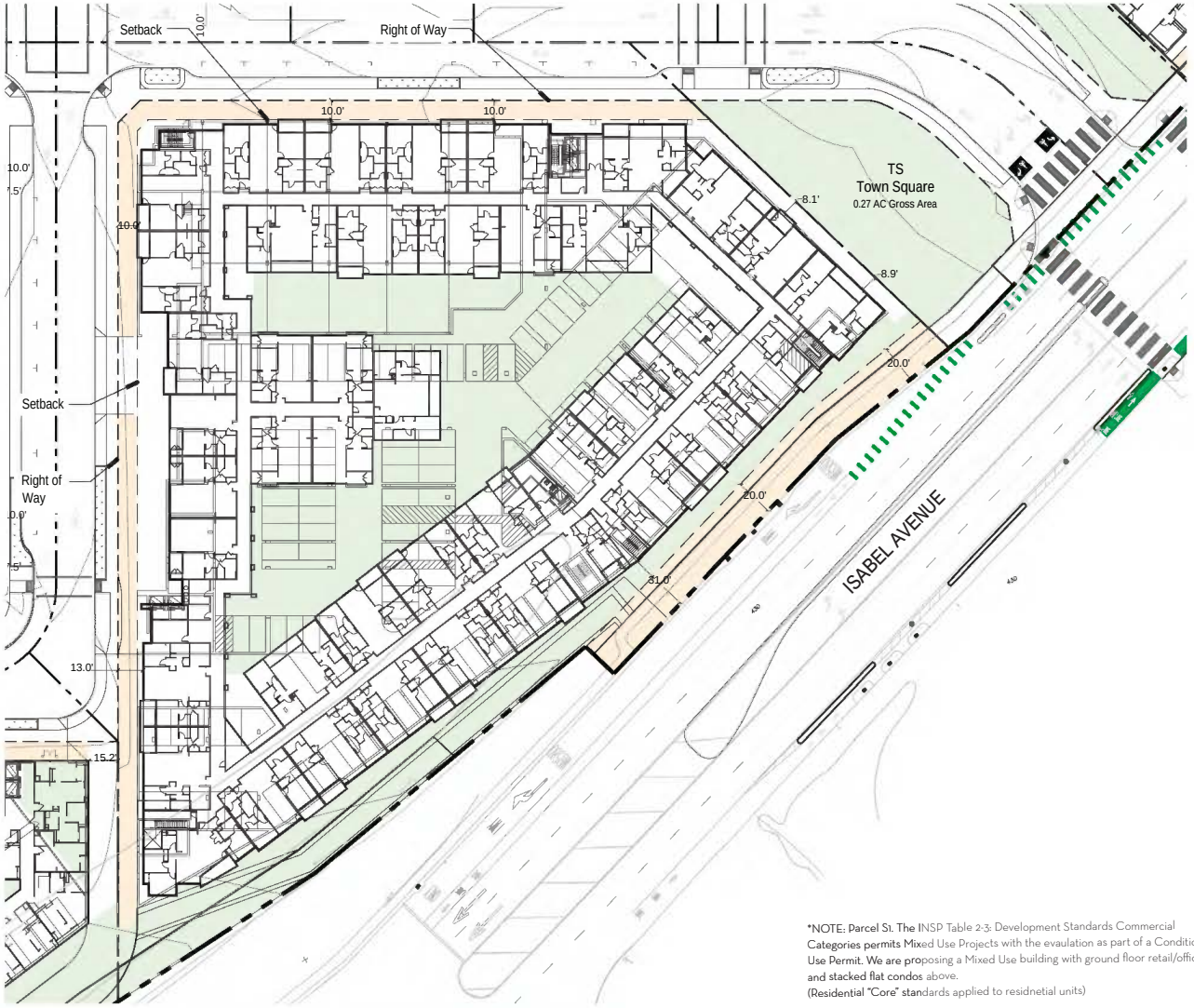
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2553

EXHIBIT C



*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Project Summary - S1

Gross
Land Area: ± 2.8 Acres

Net
Land Area: ± 2.5 Acres

Total Units: 172 Homes

Density: 67.5 Homes per Acre

Open Space:

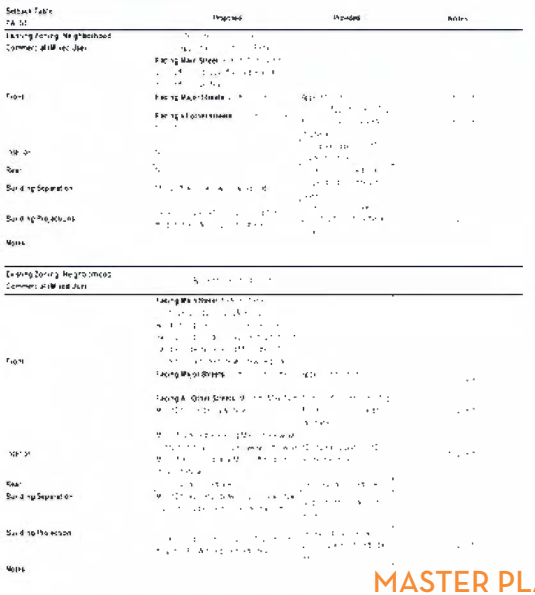
Neighborhood Commercial
Required: Min. 0.25 acres on Neighborhood Commercial block

Neighborhood Commercial
Provided: *Provided 0.27 AC plaza in Town Square (TS)

Residential (Core)
Required: 21,500 SF Total (125 SF per home)
- Common: 12,900 SF (75 SF per home; 10' min. dim.)
- Private: 8,600 SF (50 SF per home; 4' W. x 8' D min. dim.)

Residential (Core)
Provided: 27,671 SF Total (161 SF per home)
- Common: 19,071 SF (10' Min. Dimension)
- Private: 8,600 SF (50 SF per home)

Setback:



CONCEPT DESIGN

MASTER PLAN
S1 OPEN SPACE EXHIBIT

SP-20

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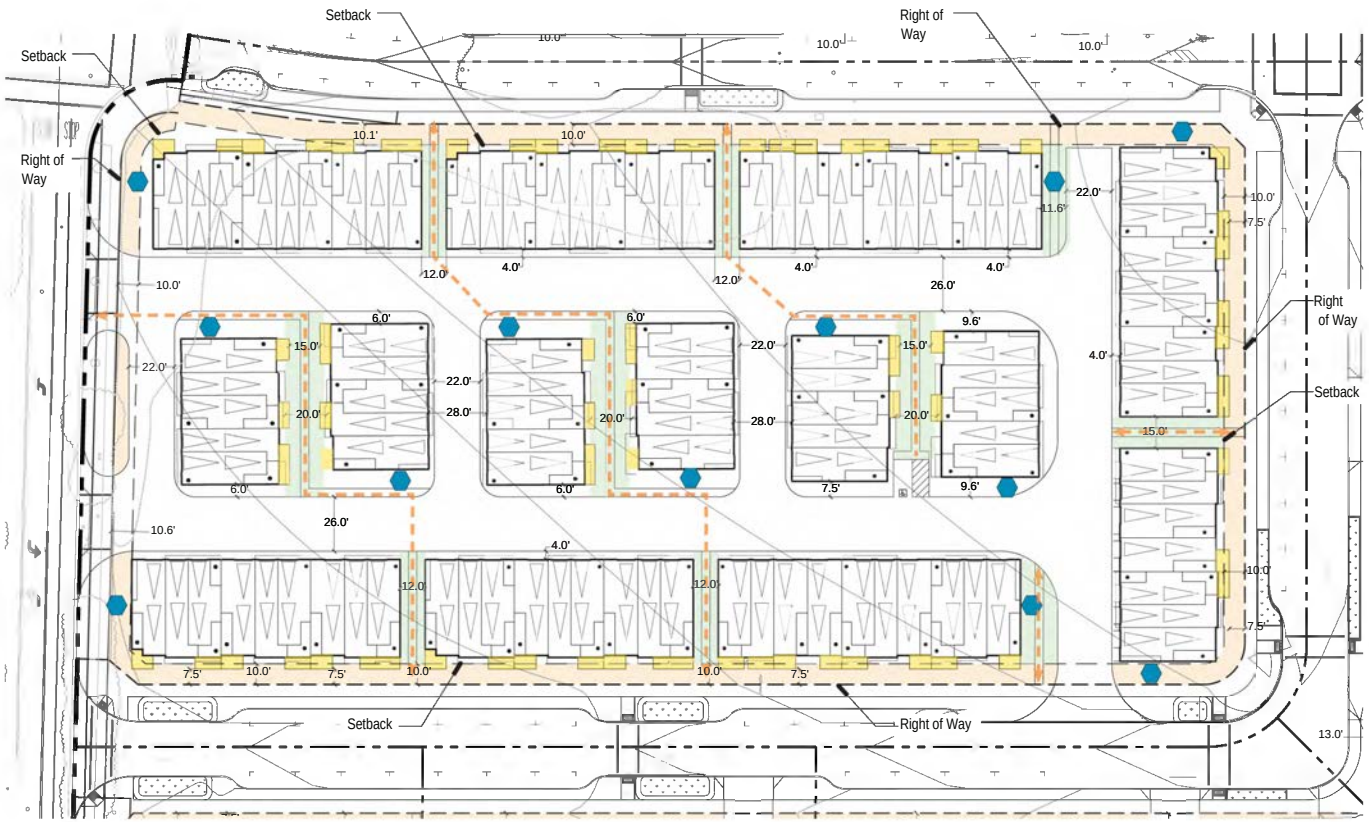
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2554

EXHIBIT C



Project Summary - S-2

Gross Land Area: ±3.46 Acres

Net Land Area: ±3.36 Acres

Total Units: 102 Homes

Density: 30.3 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 15,300 SF Total (150 SF per home)
- Common: 7,650 SF (75 SF per home; 10' min. dim.)
- Private: 7,650 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 14,595 SF Total (143 SF per home)
- Common: 9,186 SF (10' Min. Dimension)
- Private: 5,409 SF (53 SF per home)

Porches:
- Porch Condition

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table WA 62	Proposed	Provided	Notes
Existing Zoning Center			
Front	Facing Main Street		
	Facing Major Streets		
	Facing All Other Streets		
Interior			
Rear			
Building Separation			
Alley Garage Separation			
Porch Separation			
Notes			

CONCEPT DESIGN

MASTER PLAN
S2 OPEN SPACE EXHIBIT

SP-21

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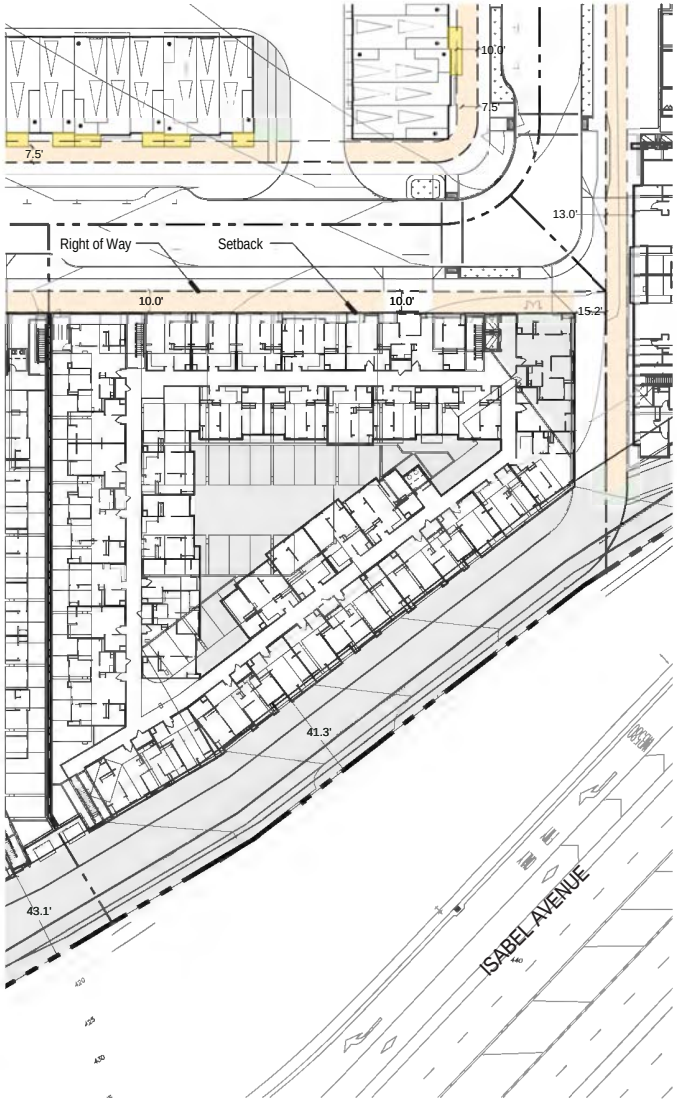
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Project Summary - S3-A

Gross
Land Area: ± 1.4 Acres

Net
Land Area: ± 1.1 Acres

Total Units: 152 Homes

Density: 136.3 Homes per Acre

Open Space:
Required: 19,000 SF Total (125 SF per home)
- Common: 11,400 SF (75 SF per home; 10' min. dim.)
- Private: 7,600 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 21,314 SF Total (140 SF per home)
- Common: 13,714 SF (10' Min. Dimension)
- Private: 7,600 SF (50 SF per home)

Setback:

Setback Table PA S3-A	Required	Provided	Notes
Existing Zoning: Office Core			
Front	Existing Building Setback		
Interior			
Rear			
Building Separation			
Building Projections			
Notes			

CONCEPT DESIGN

MASTER PLAN
S3-A OPEN SPACE EXHIBIT

SP-22

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Project Summary - S3-B

Gross
Land Area: ± 1.6 Acres

Net
Land Area: ± 1.4 Acres

Total Units: 200 Homes

Density: 145 Homes per Acre

Open Space:
Required: 25,000 SF Total (125 SF per home)
- Common: 15,000 SF (75 SF per home; 10' min. dim.
- Private: 10,000 SF (50 SF per home; 4' W. x 8' D min. dim.)

Provided: 33,075 SF Total (165 SF per home)
- Common: 23,075 SF (10' min dimension)
- Private: 10,000 SF (50 SF per home)

Setback:

Setback Table PA S3-B Existing Zoning: Office Core	Proposed	Provided	Notes
Front	Facing All Other Streets:		
Interior			
Rear			
Building Separation			
Building Projections			
Notes			

CONCEPT DESIGN

MASTER PLAN
S3-B OPEN SPACE EXHIBIT

SP-23

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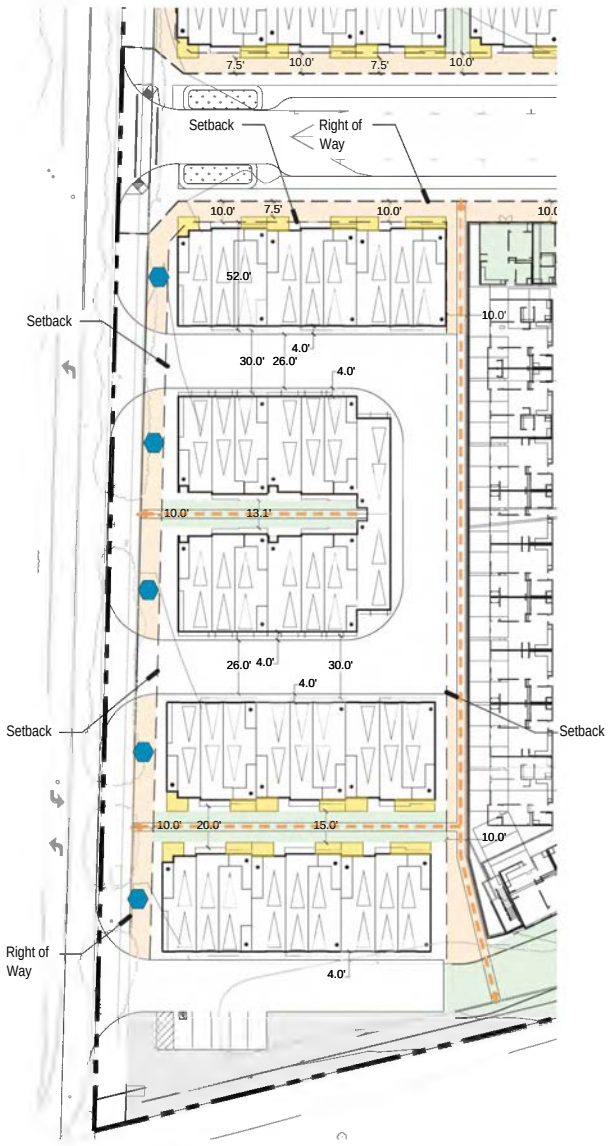
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Project Summary - S4

Gross Land Area: ± 1.71 Acres

Net Land Area: ± 1.33 Acres

Total Units: 41 Homes

Density: 30.8 Homes per Acre

Dwelling Unit Front Door: •

Open Space:

Required: 6,150 SF Total (150 SF per home)
- Common: 3,075 SF (75 SF per home; 10' min. dim.)
- Private: 3,075 SF (75 SF per home; 6' W. x 8' D min. dim.)

Provided: 11,050 SF Total (270 SF per home)
- Common: 8,770 SF (10' Min. Dimension)
- Private: 2,280 SF (56 SF per home)

Porches:

Enhanced Elevation:

Walkway Connection:

Setback:

Setback Table PA S4	Proposed	Provided	Notes
Existing Zoning: Office Zone			
Front	Facing Main Streets:		
	Facing Major Streets:		
	Facing All Other Streets:		
Interior			
Rear			
Building Separation			
Building Projections			
Alley Garage Separation			
Porch Separation			
Notes			

MASTER PLAN
S4 OPEN SPACE EXHIBIT

SP-24

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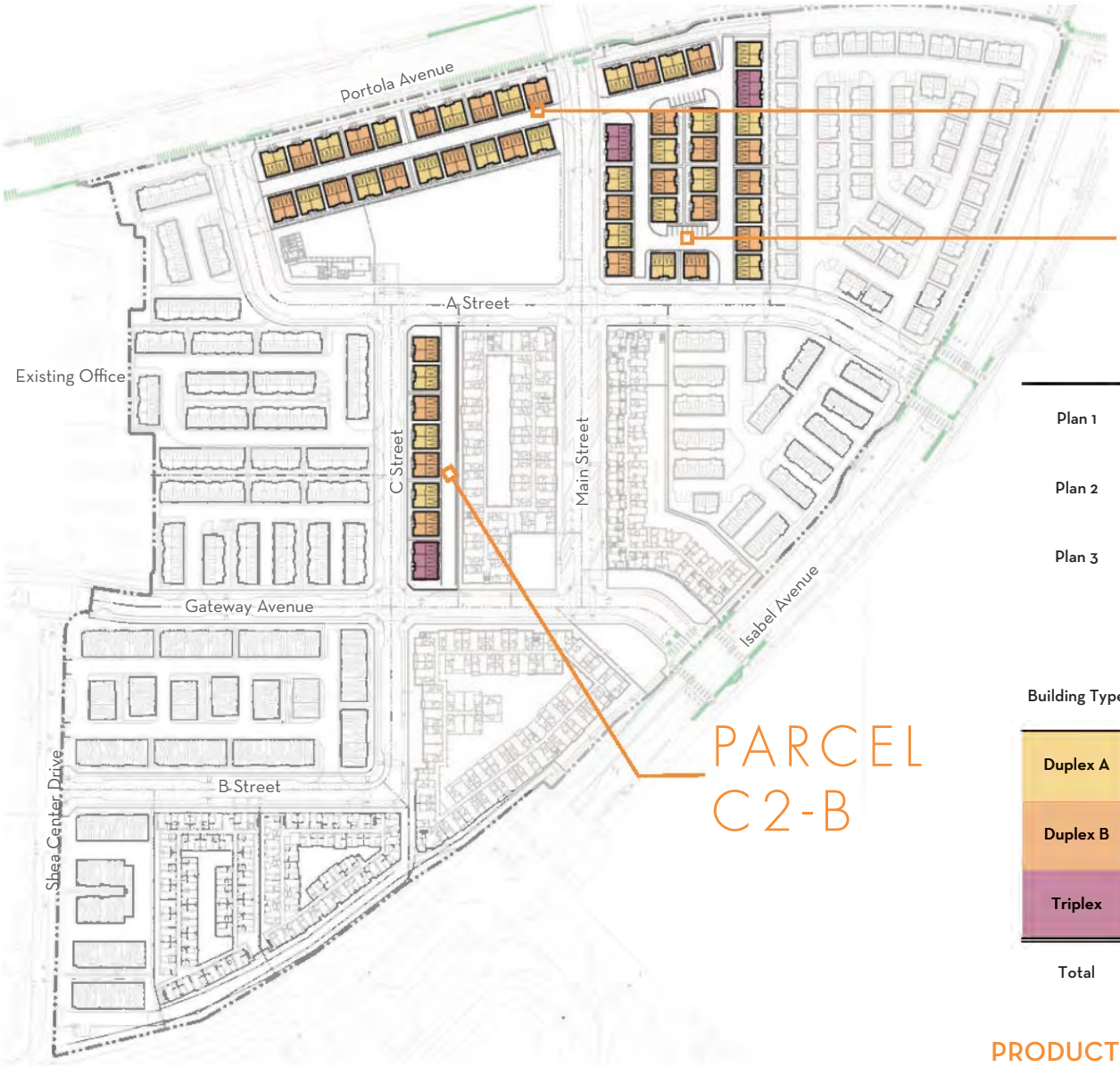
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	Unit Size (SQFT)	Bed	Bath
Plan 1	2,192	3	3.5
Plan 2	2,290	3	3.5
Plan 3	2,402	4	3.5

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
Duplex A	26	0	26	52	119,444
Duplex B	0	26	26	52	121,992
Triplex	0	3	6	9	21,282
Total	**26**	**29**	**58**	**113**	**258,588**

Height Limit N2: **490'-505'***
Max. Height: 486.5 MSL

Height Limit N3-A: **485'**-495'***
Max. Height: 487.5 MSL

Height Limit C2-B: **490'-500'***
Max. Height: 474.5 MSL

Building Height: **± 37.5'**

Stories: **3**

***Height above MSL**

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED PRODUCT ALLOCATION

A1-1

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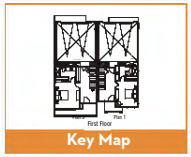
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A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3A PERSPECTIVE

A1-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



ENHANCED LEFT



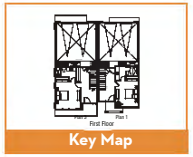
FRONT



RIGHT



REAR



Key Map

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 ELEVATIONS A

A1-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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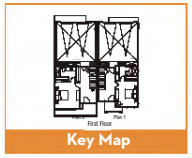
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B - TRADITIONAL

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3B PERSPECTIVE

A1-4

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LEFT



ENHANCED LEFT

ALTERNATE COLOR SCHEME SHOWN



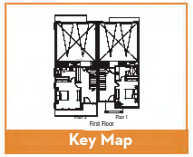
FRONT



RIGHT



REAR



Key Map

B - TRADITIONAL

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 ELEVATIONS B

A1-5

ISABEL PORTOLA
OWNER, LLC

WHA

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LIVERMORE, CALIFORNIA

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2563



LEFT



ENHANCED LEFT

ALTERNATE COLOR SCHEME SHOWN



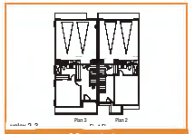
FRONT



RIGHT



REAR



Key Map

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 2-3 ELEVATIONS A

A1-6

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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2564



LEFT



ENHANCED LEFT



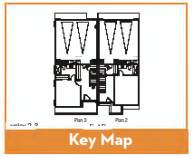
FRONT



RIGHT



REAR



Key Map

B - TRADITIONAL

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 2-3 ELEVATIONS B

A1-7

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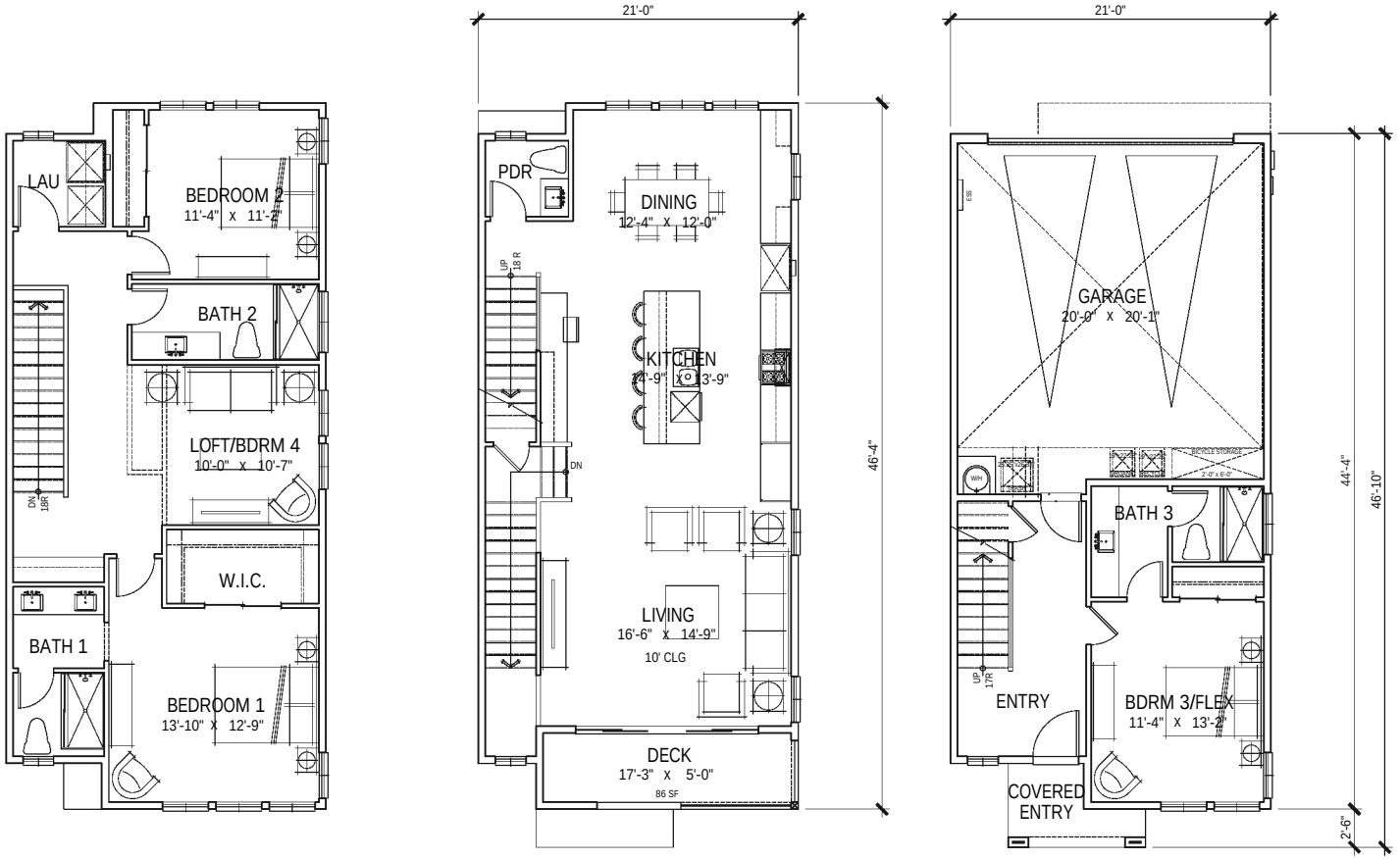
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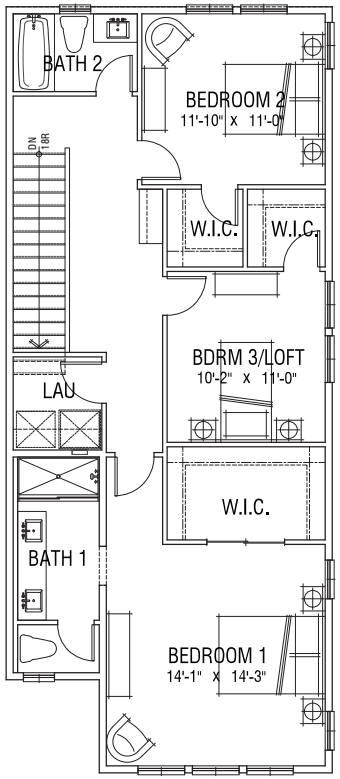


Third Floor | Second Floor | First Floor

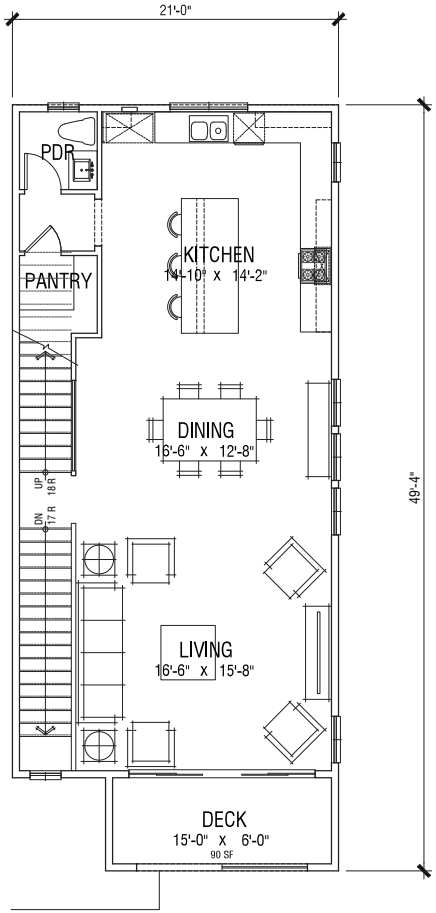
PLAN 1

3 Bedroom | 3.5 Bath | Loft
2- Bay Garage
2,192 S.F.

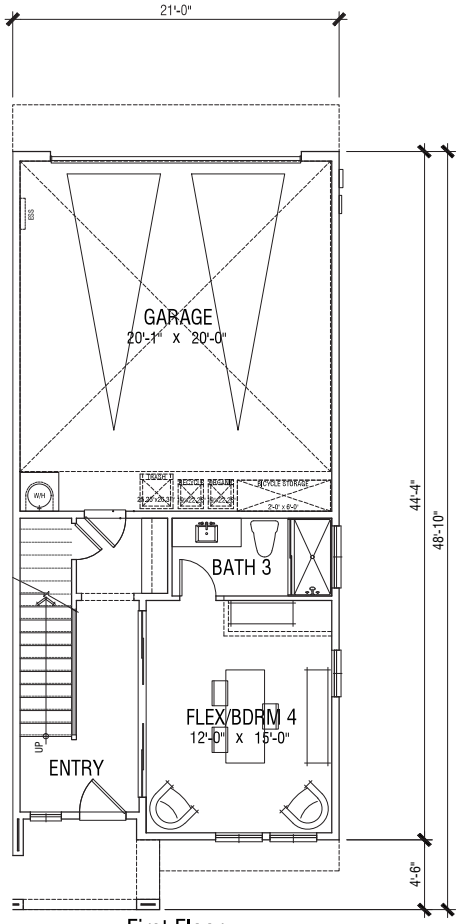
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Third Floor



Second Floor



First Floor

PLAN 2

3 Bedroom | 3.5 Bath
2- Bay Garage
2,290 S.F.

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
PLAN 2 FLOOR PLAN

A1-9

CONCEPT DESIGN

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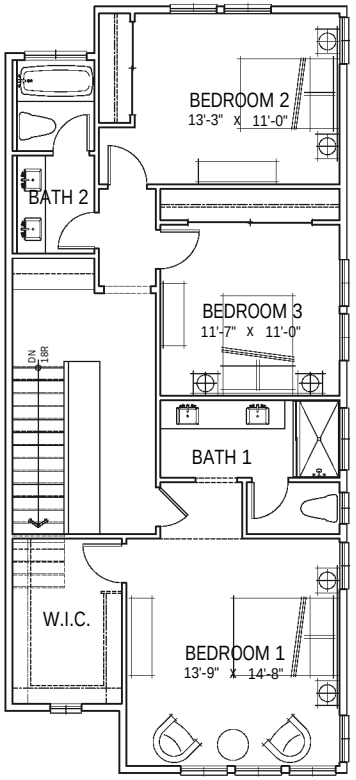
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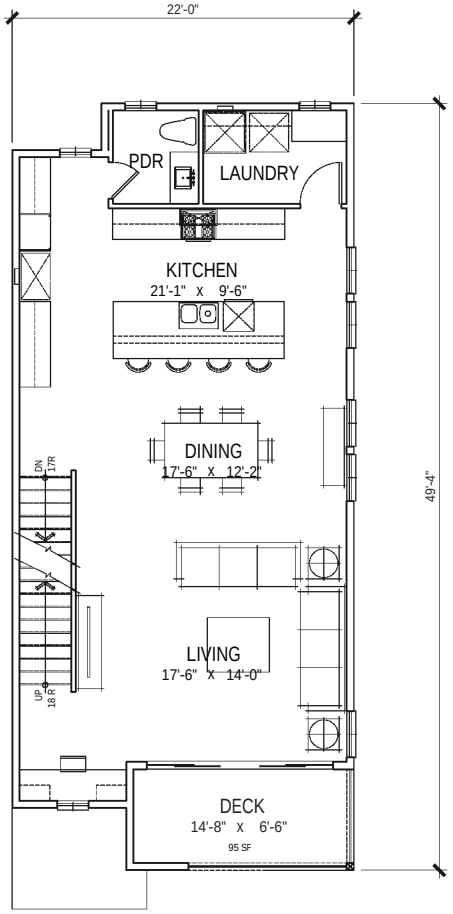
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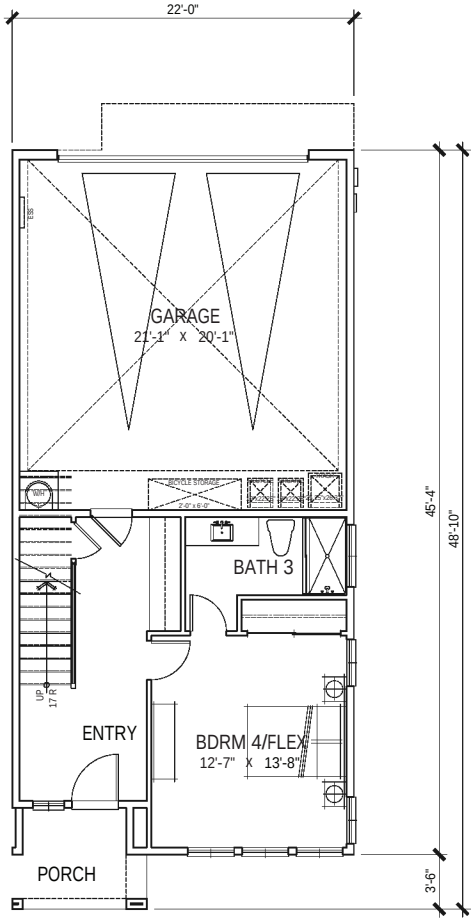
2567



Third Floor



Second Floor



First Floor

PLAN 3

4 Bedroom | 3.5 Bath
2- Bay Garage
2,402 S.F.

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED
PLAN 3 FLOOR PLAN

A1-10

ISABEL PORTOLA
OWNER, LLC

WHA. ARCHITECTS · PLANNERS · DESIGNERS

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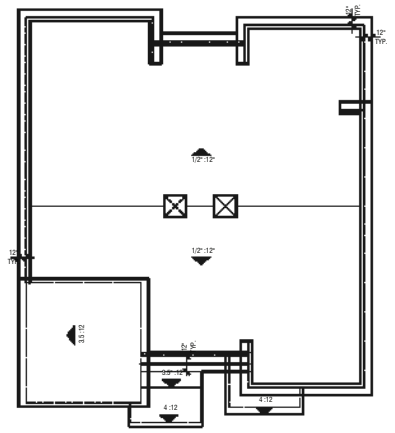
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LIVERMORE, CALIFORNIA

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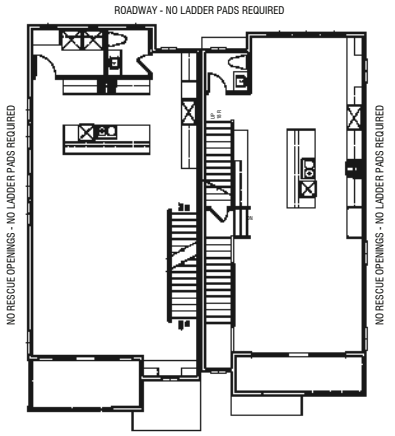
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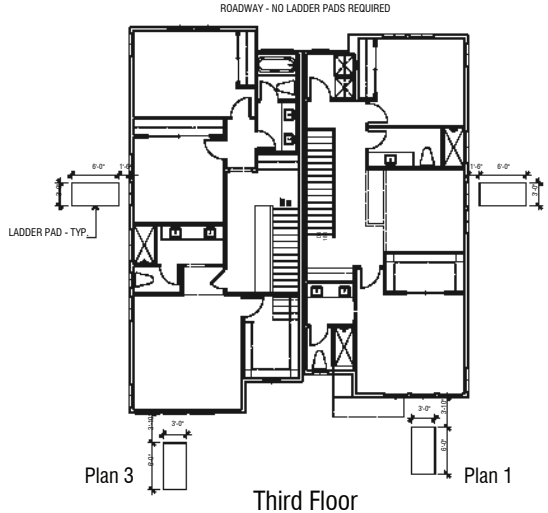
Plan 3 Plan 1

Roof Plan



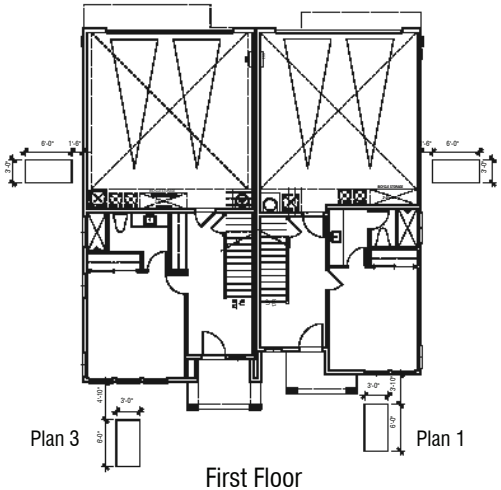
Plan 3 Plan 1

Second Floor



Plan 3 Plan 1

Third Floor



Plan 3 Plan 1

First Floor

Duplex 1-3

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM

CONCEPT DESIGN

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 1-3 | BUILDING & ROOF PLANS

A1-11

ISABEL PORTOLA OWNER, LLC
WHA

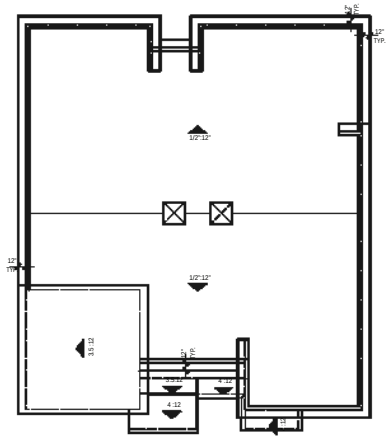
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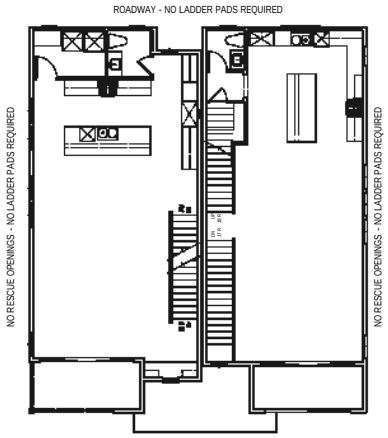
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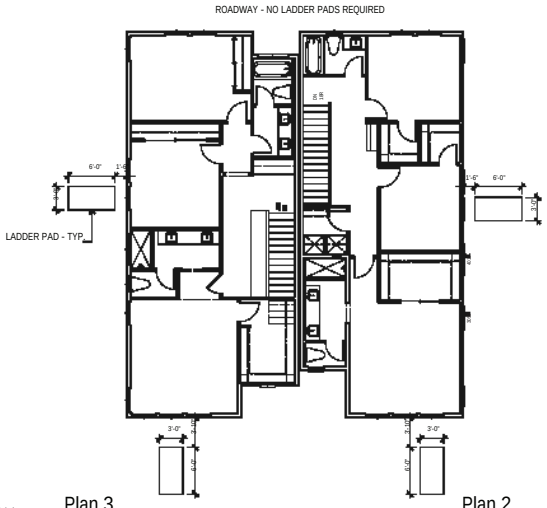
Plan 3 Plan 2

Roof Plan



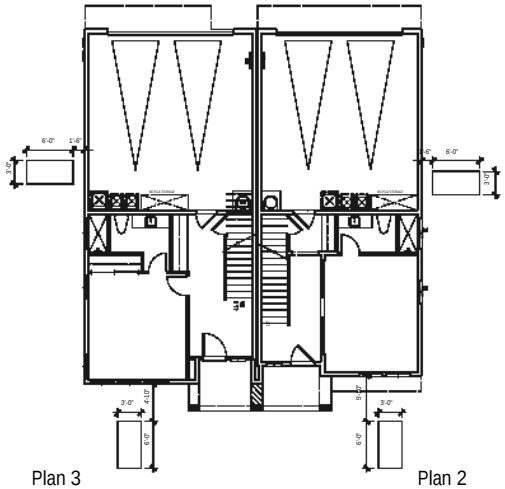
Plan 3 Plan 2

Second Floor



Plan 3 Plan 2

Third Floor



Plan 3 Plan 2

First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM

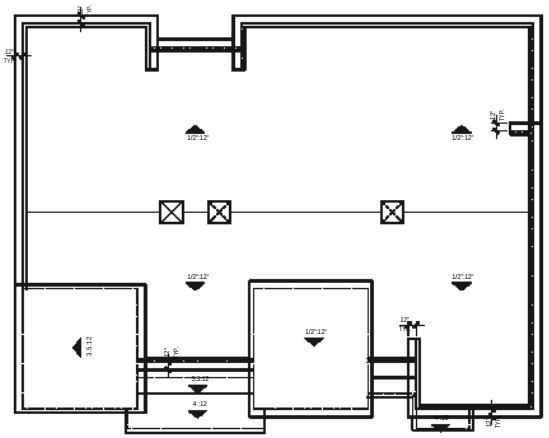
Duplex 2-3

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY ATTACHED DUPLEX 2-3 | BUILDING & ROOF PLANS

A1-12

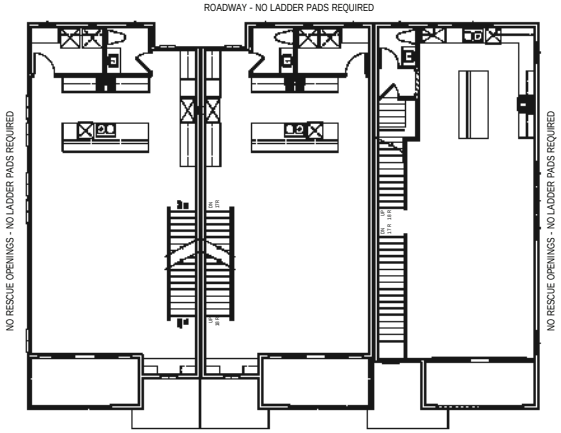
CONCEPT DESIGN





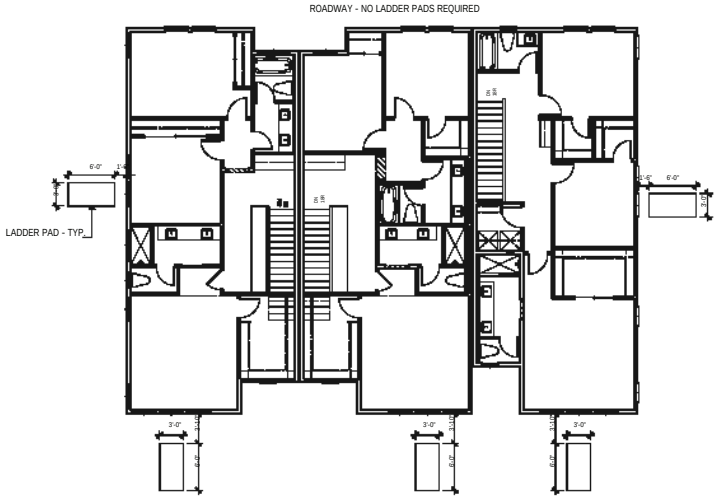
Plan 3 Plan 3X Plan 2

Roof Plan



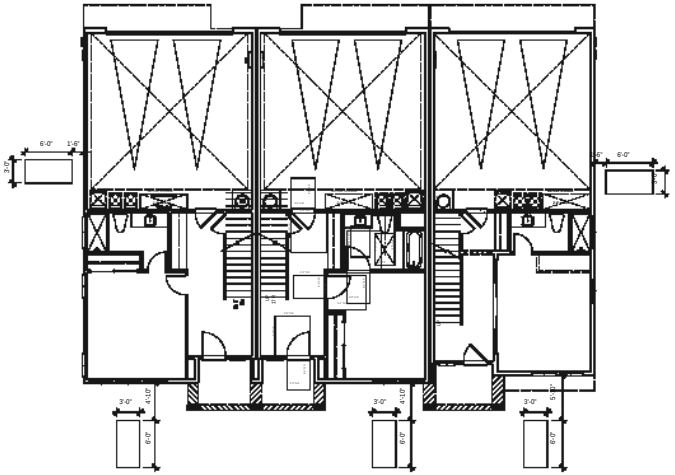
Plan 3 Plan 3X Plan 2

Second Floor



Plan 3 Plan 3X Plan 2

Third Floor



Plan 3 Plan 3X Plan 2

First Floor

Triplex 3-3X-2

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - 3-STORY TRIPLEX
TRIPLEX BUILDING & ROOF PLANS

A1-13

CONCEPT DESIGN

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2571



LEFT



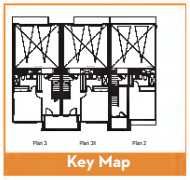
FRONT



RIGHT



REAR



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

A - CONTEMPORARY

PRODUCT 1 [PARCEL C2-B, N2, N3-A] - TRIPLEX
TRIPLEX 3-3-2 ELEVATIONS A

A1-14

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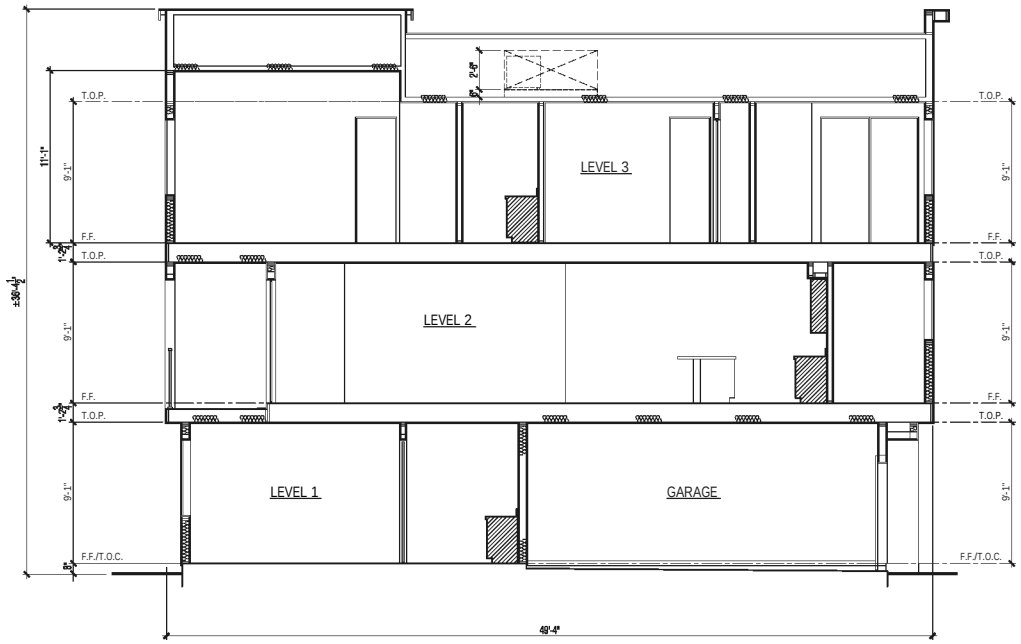
WHA

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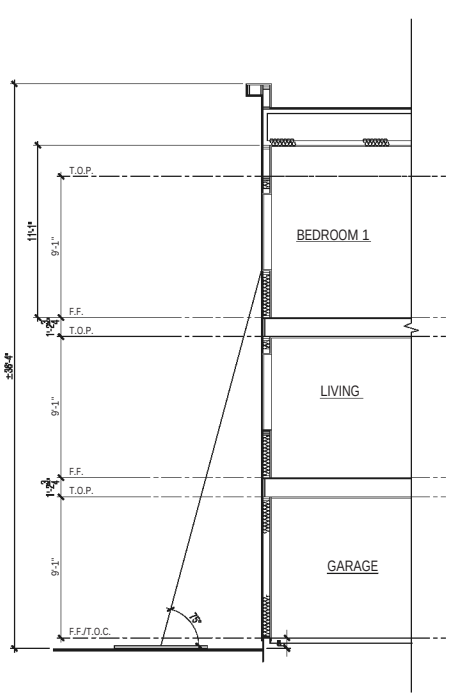
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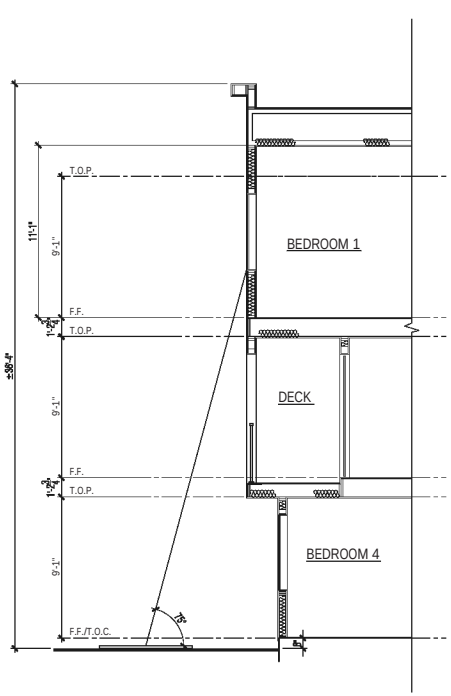


Building Sections
Duplex 2-3

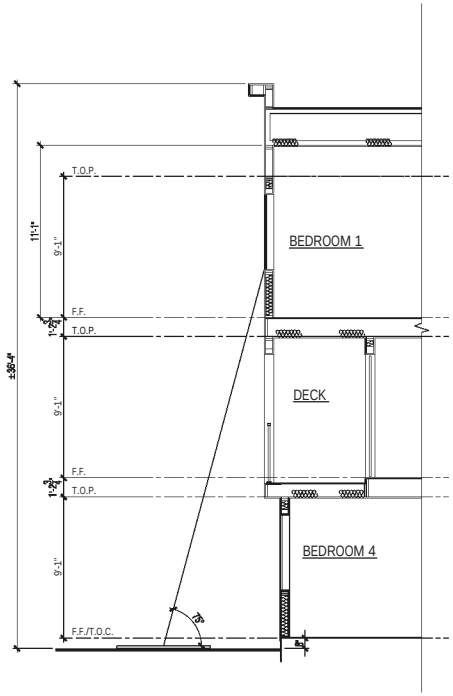
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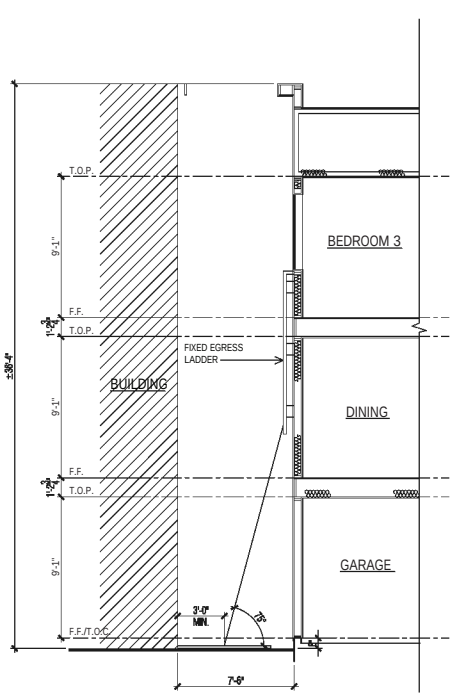
Unit 1



Unit 2



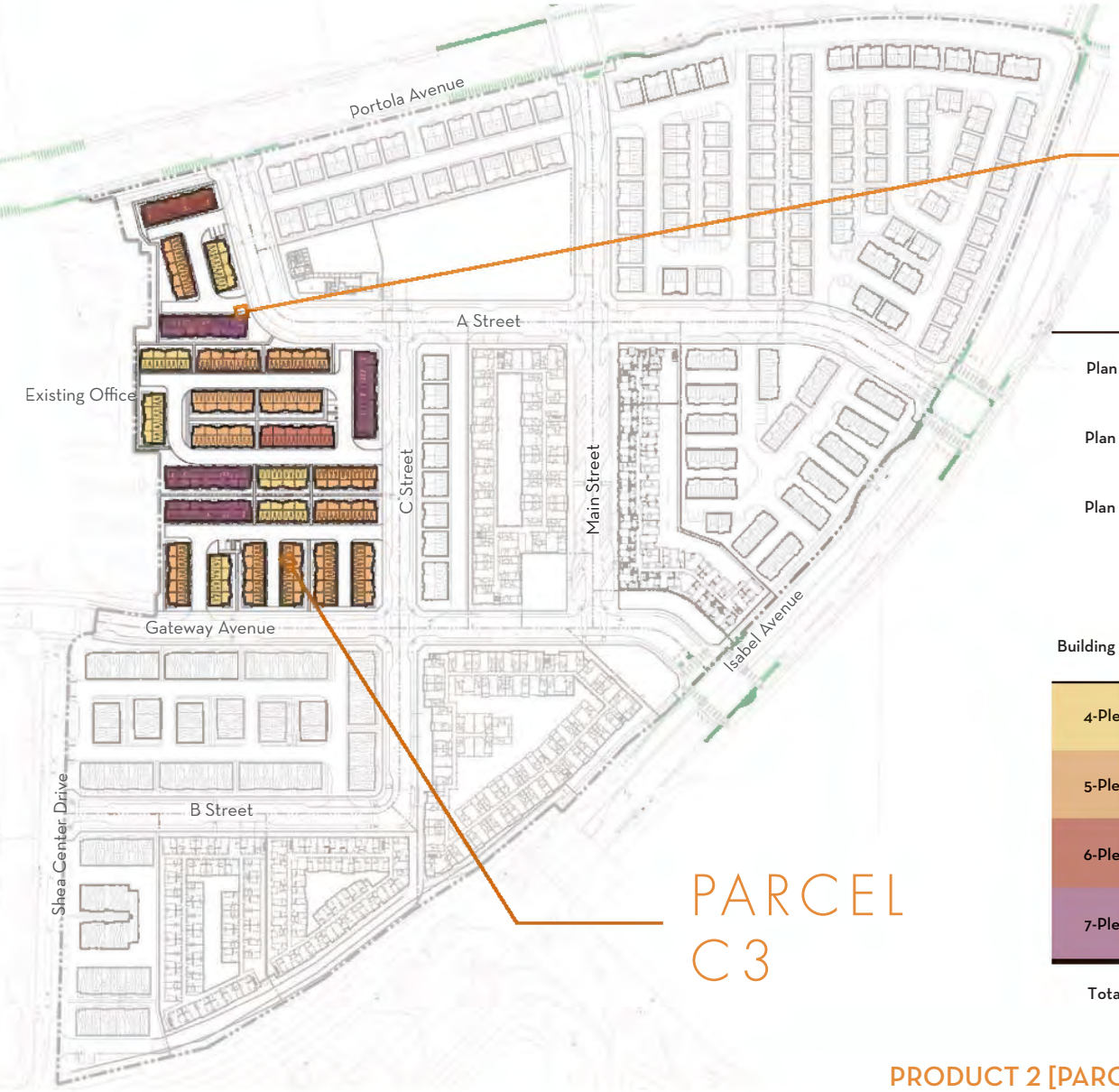
Unit 3



Unit 3-Side

Ladder Pad Sections

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	Unit Size (SQFT)	Bed	Bath
Plan 1	1,827	3	2.5
Plan 2	1,873	4	3.5
Plan 3	2,054	4	3.0

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
4-Plex	6	12	6	24	45,762
5-Plex	13	39	13	65	123,500
6-Plex	2	8	2	12	22,746
7-Plex	4	20	4	28	52,984
Total	25	79	25	129	244,992

Height Limit C3: 495'-500'*
Max. Height: 469.3 MSL

Height Limit C5: 455'-485'**
Max. Height: 478.3 MSL

Building Height: ± 38'-3"

Stories: 3

*Height above MSL

**Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.

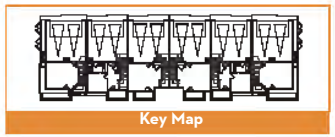
PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A2-1

CONCEPT DESIGN

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Key Map

A - CONTEMPORARY

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PERSPECTIVE

A2-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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2576



LEFT



FRONT



ENHANCED RIGHT



REAR

A - CONTEMPORARY)

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) ELEVATIONS A

A2-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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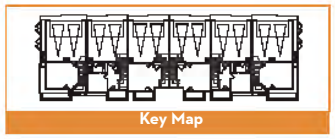
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

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2577





Key Map

B - TRADITIONAL

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) PERSPECTIVE

A2-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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2578



LEFT



FRONT



ENHANCED RIGHT



REAR

B - TRADITIONAL

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) ELEVATIONS B

A2-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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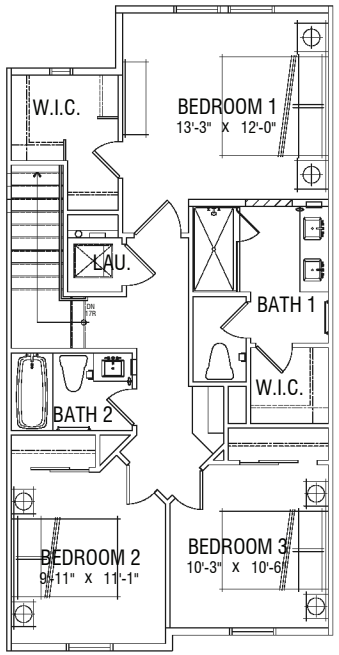
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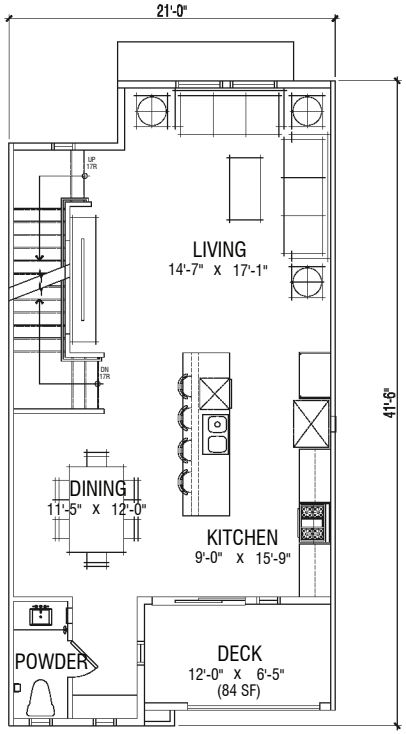
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06-07-24 | 2022236

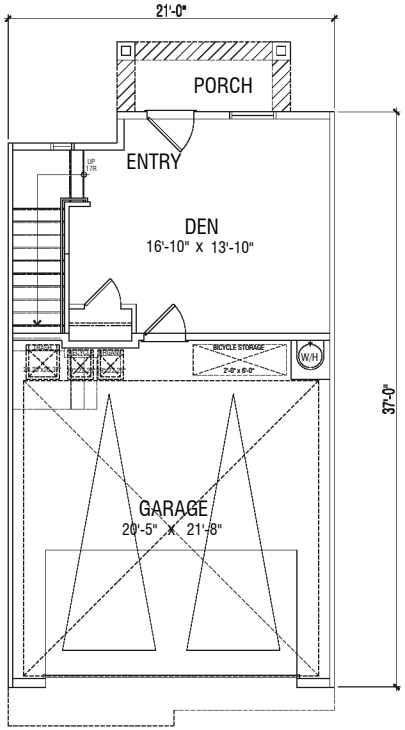
2579



Third Floor



Second Floor



First Floor

PLAN 1

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,827 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A2-6

CONCEPT DESIGN

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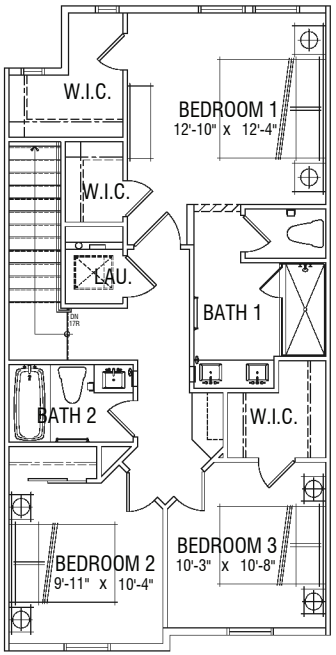
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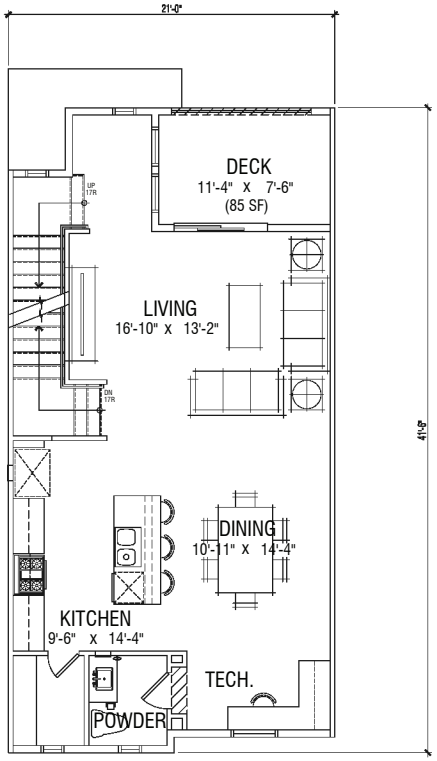
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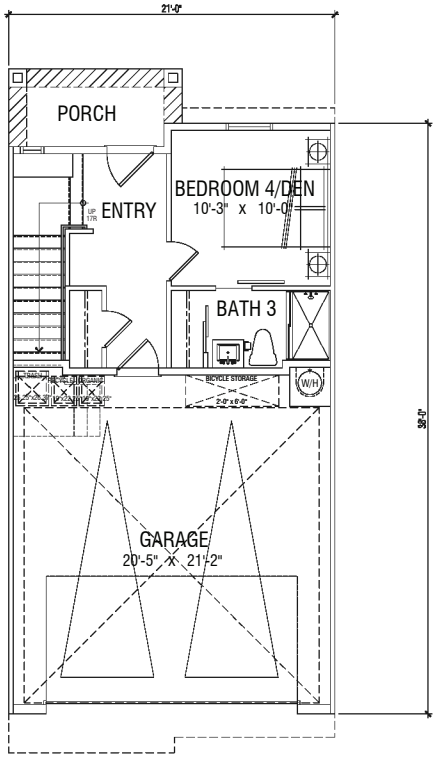
2580



Third Floor



Second Floor



First Floor

PLAN 2

4 Bdrm | 3.5 Bath |
2- Bay Garage
1,873 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A2-7

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA. ARCHITECTS · PLANNERS · DESIGNERS

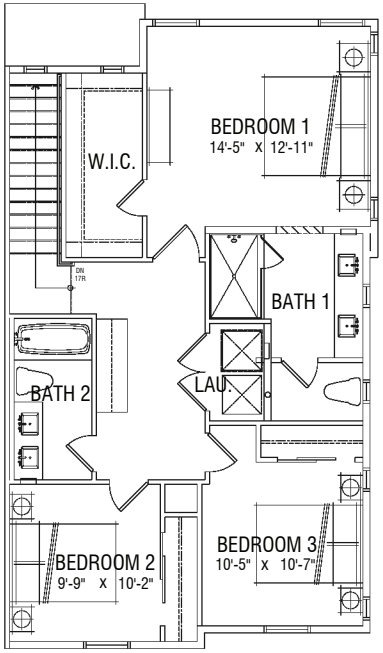
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LIVERMORE, CALIFORNIA

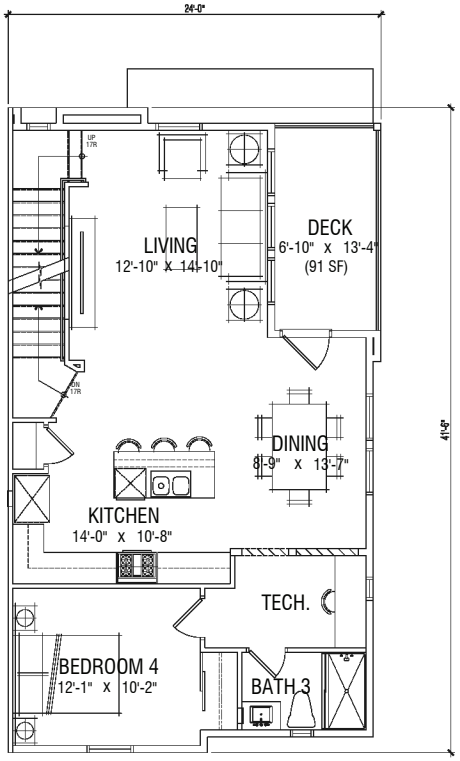
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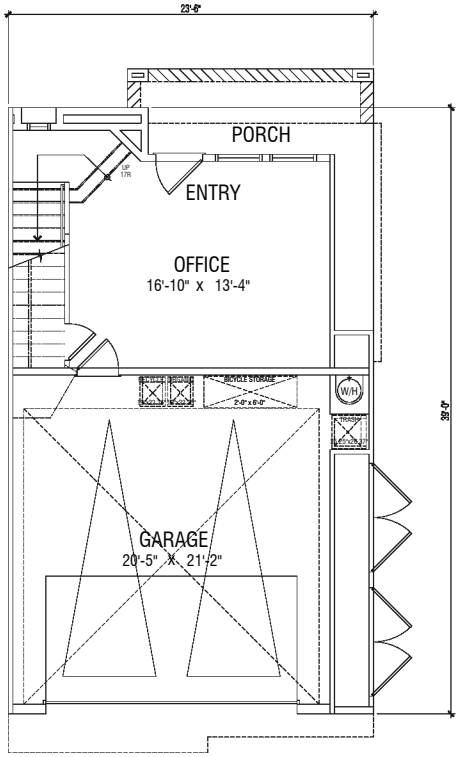
2581



Third Floor



Second Floor



First Floor

PLAN 3

4 Bdrm | 3 Bath | Office |
2- Bay Garage
2,054 S.F.

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 3 FLOOR PLAN

A2-8

CONCEPT DESIGN

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WHA.

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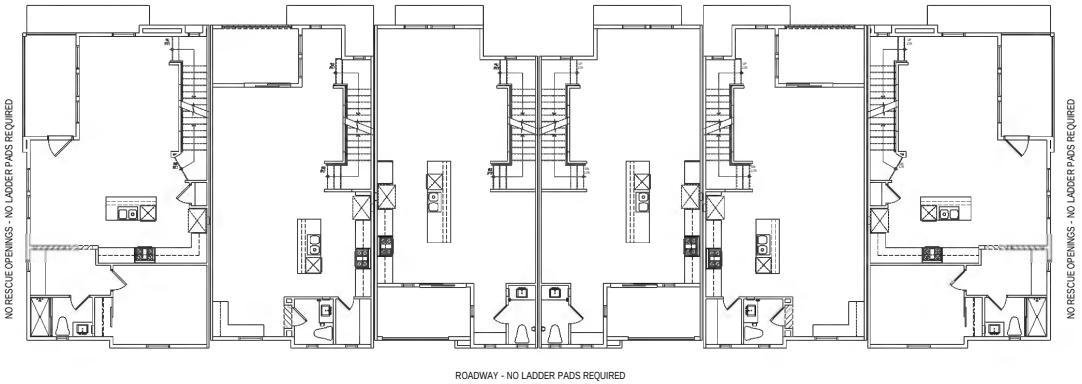
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LIVERMORE, CALIFORNIA

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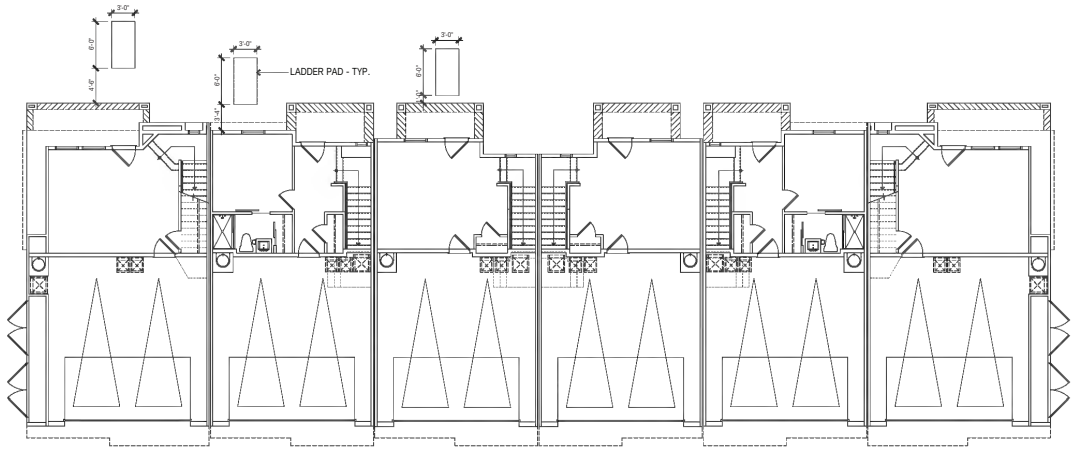
2582





Second Floor

Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3



First Floor

Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U – TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE) 6-PLEX | FIRST & SECOND FLOOR PLAN

A2-9

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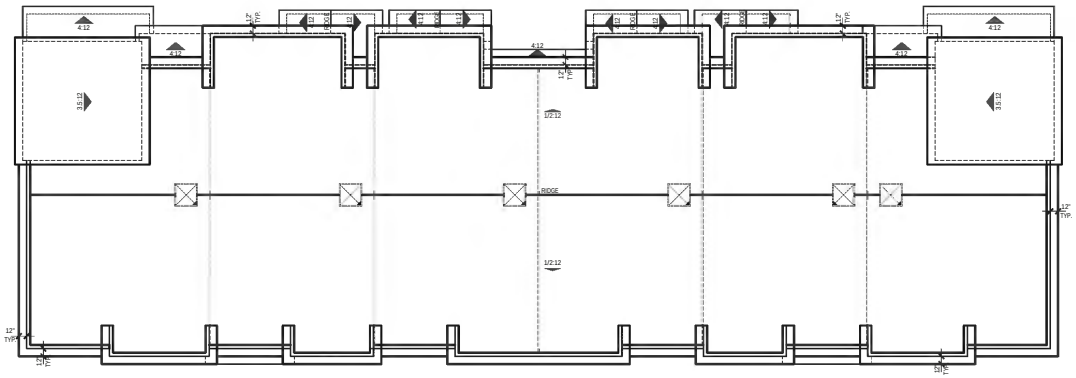
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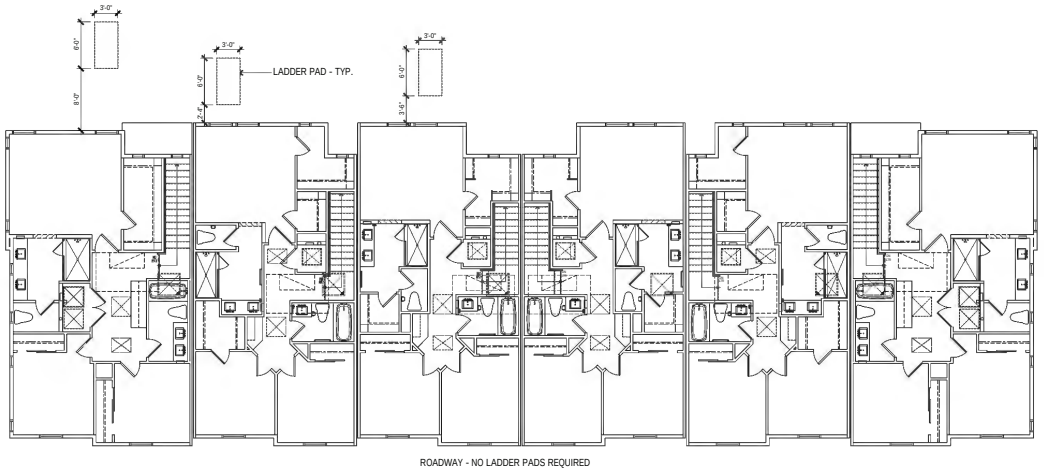
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Roof Plan



Third Floor

Plan 3 | Plan 2 | Plan 1 | Plan 1 | Plan 2 | Plan 3

CONCEPT DESIGN

PRODUCT 2 [PARCEL C3 & C5] - 3-STORY ATTACHED (TOWNHOUSE)
6-PLEX | THIRD FLOOR & ROOF PLAN

A2-10

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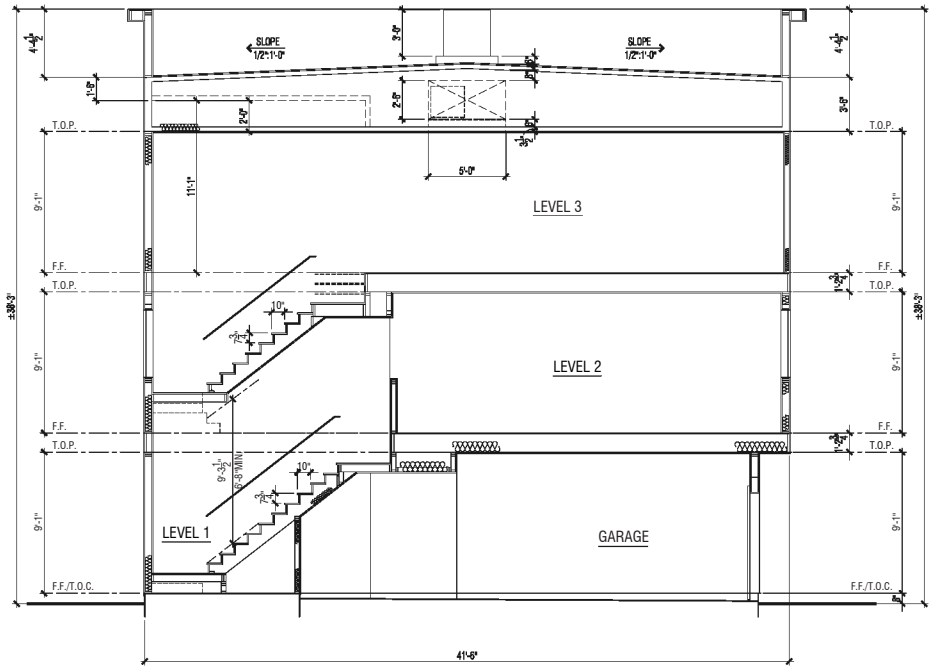
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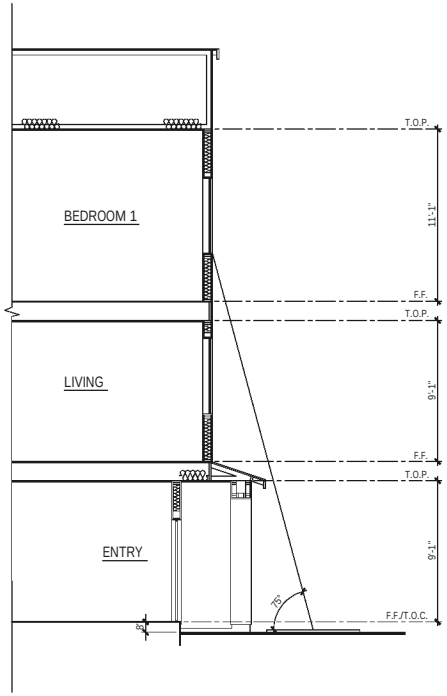
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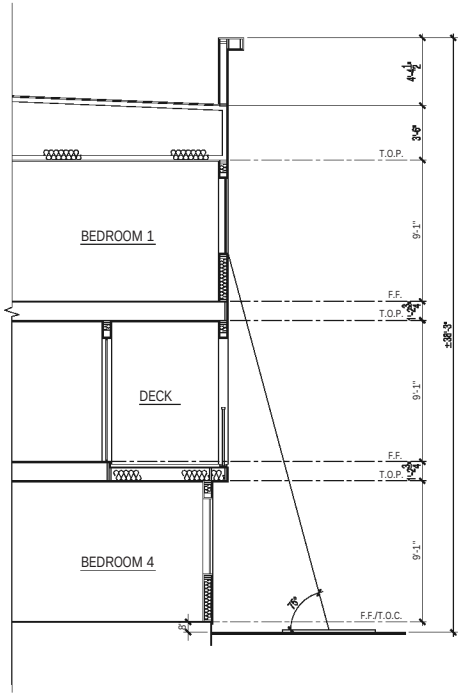


Building Section

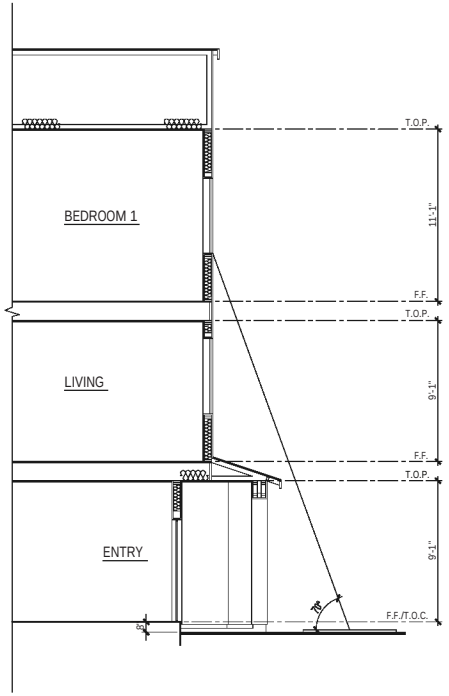
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Unit 1



Units 2



Unit 3

Ladder Pad Sections

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PARCEL N1

	Unit Size (SQFT)	Bed	Bath
Plan 1C	1,851	3	2.5
Plan 2C	1,895	4	3.5
Plan 3C	2,054	4	3.0

Height Limit N1: **490'- 495' - 505'***
Max. Height: 490.25 MSL

Building Height: **± 36.9'**

Stories: **3**

***Height above MSL**

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
Duplex A	17	0	17	34	66,385
Duplex B	9	9	0	18	33,714
Duplex C	0	17	17	34	67,133
Triplex	4	4	4	12	23,200
Total	**30**	**30**	**38**	**98**	**188,825**

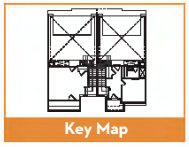
PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED PRODUCT ALLOCATION

A2C-1

CONCEPT DESIGN

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A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 PERSPECTIVE A

A2C-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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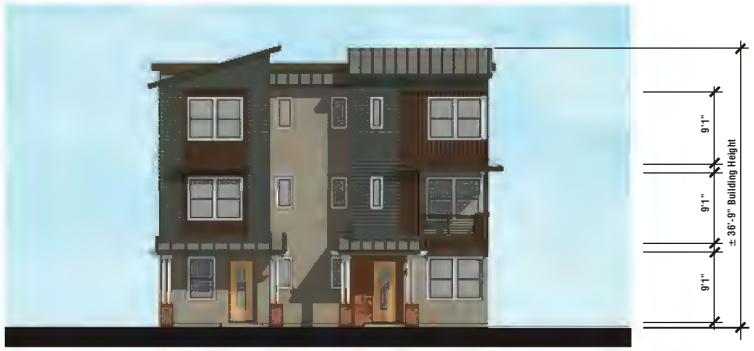
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LEFT



FRONT



RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 ELEVATIONS A

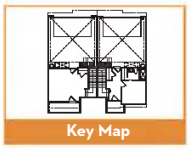
A2C-3

CONCEPT DESIGN

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B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 PERSPECTIVE B

A2C-4

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2590



LEFT



FRONT



RIGHT



REAR

B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 ELEVATIONS B

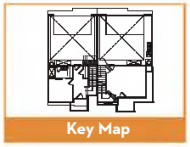
A2C-5

CONCEPT DESIGN

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A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 PERSPECTIVE A

A2C-6

CONCEPT DESIGN

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LEFT



FRONT



RIGHT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 ELEVATIONS A

A2C-7

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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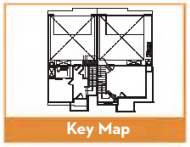
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2593





B - TRADITIONAL

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 PERSPECTIVE B

A2C-8

CONCEPT DESIGN

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LEFT



FRONT



RIGHT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 ELEVATIONS B

A2C-9

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA OWNER, LLC

WHA

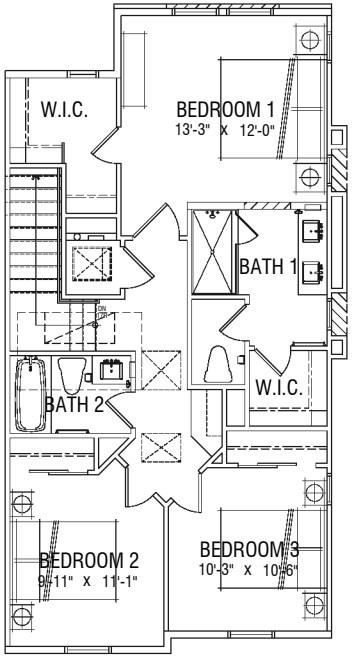
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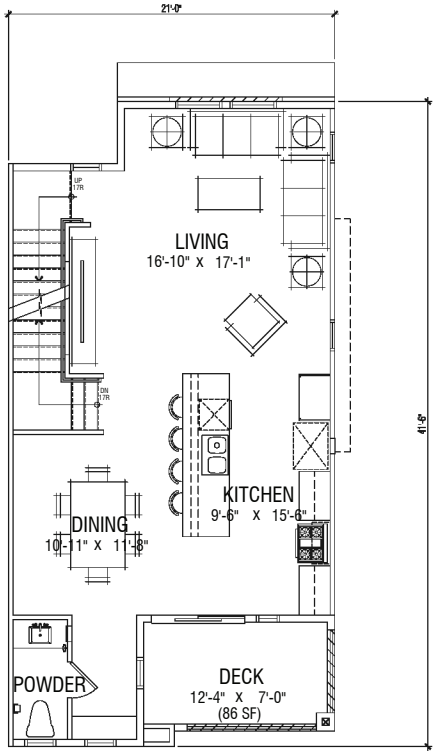
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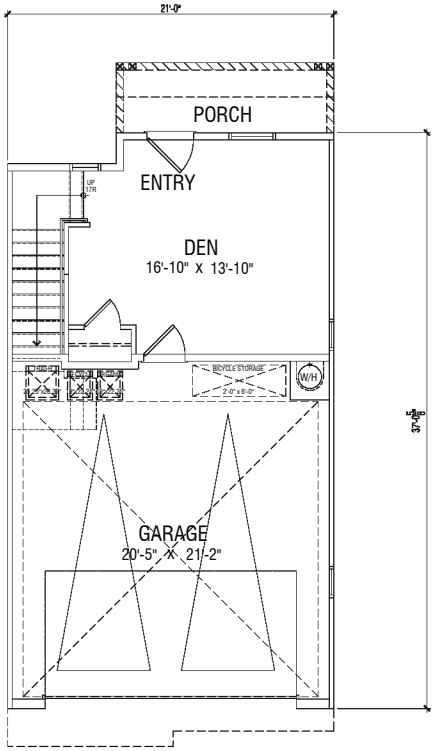
2595



Third Floor



Second Floor



First Floor

PLAN 1C

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,851 S.F.

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 1C FLOOR PLAN

A2C-10

CONCEPT DESIGN

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OWNER, LLC

WHA.

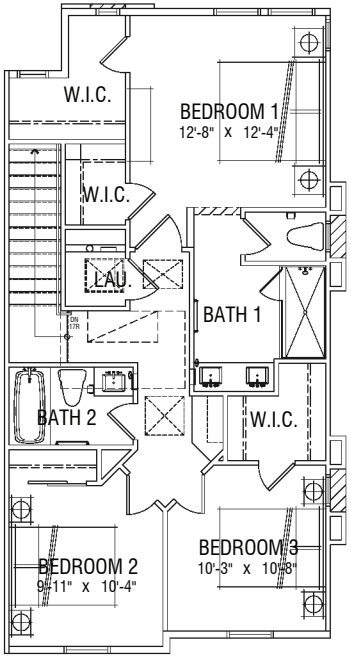
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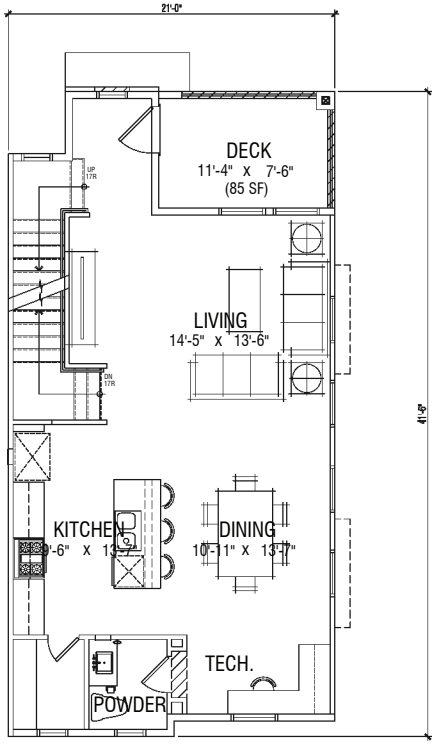
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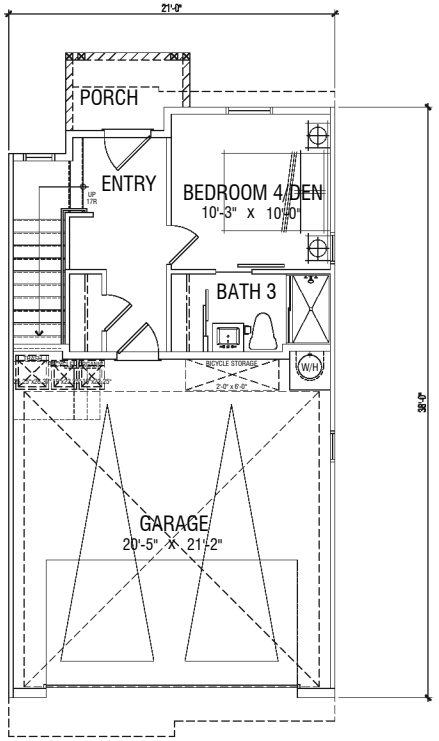
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Third Floor



Second Floor



First Floor

PLAN 2C

4 Bdrm | 3.5 Bath |
2- Bay Garage
1,895 S.F.

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 2C FLOOR PLAN

A2C-11

ISABEL PORTOLA
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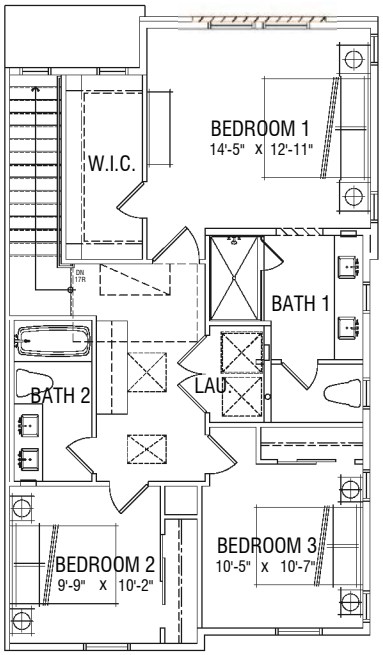
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LIVERMORE, CALIFORNIA

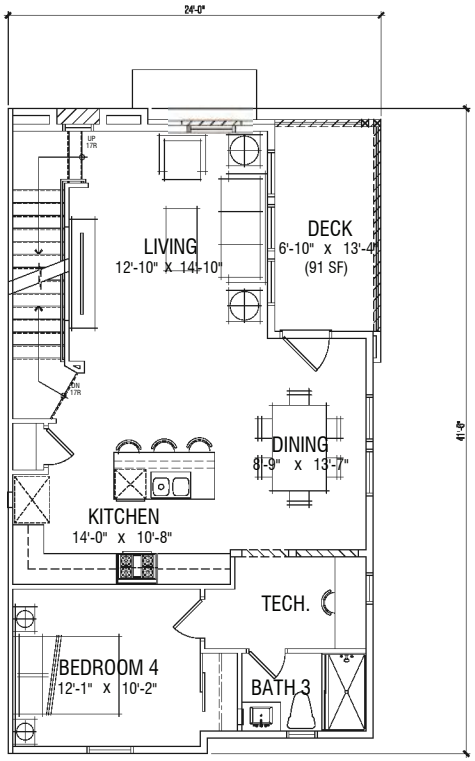
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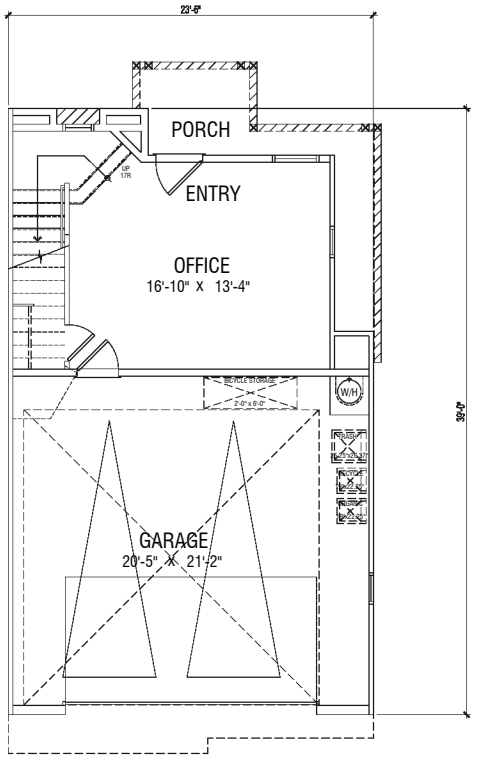
2597



Third Floor



Second Floor



First Floor

PLAN 3C

4 Bdrm | 3 Bath | Office |
2- Bay Garage
2,054 S.F.

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
PLAN 3C FLOOR PLAN

A2C-12

CONCEPT DESIGN

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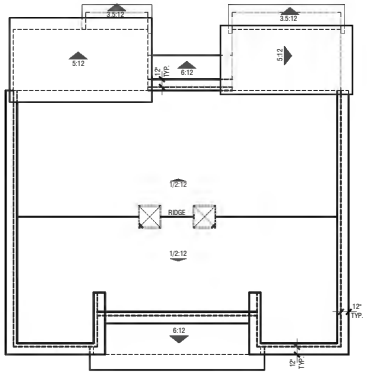
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LIVERMORE, CALIFORNIA

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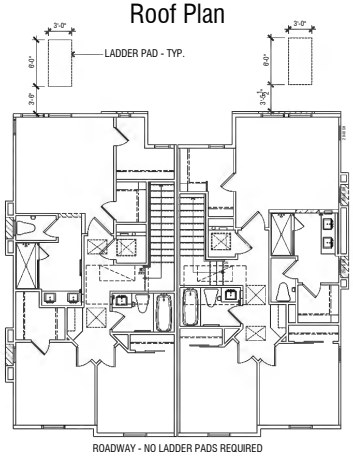
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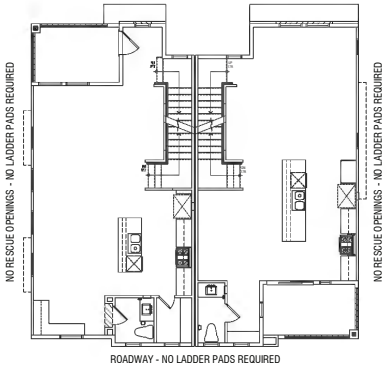


Roof Plan



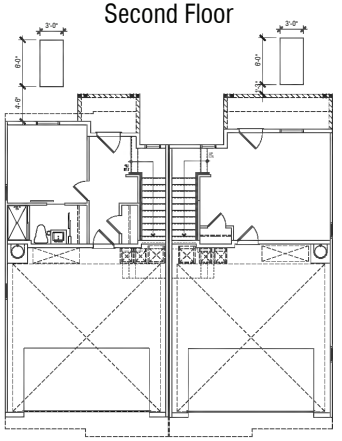
Plan 2R Plan 1

Third Floor



Plan 2R Plan 1

Second Floor



Plan 2R Plan 1

First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 1-2

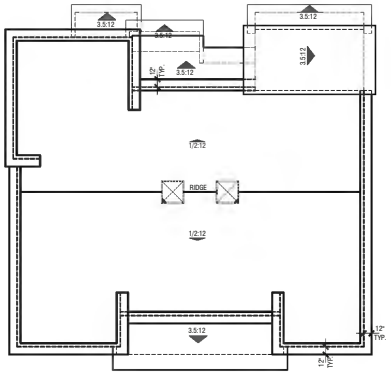
PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 2-1 BUILDING & ROOF PLAN

A2C-13

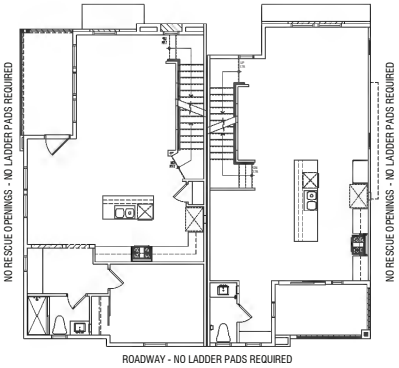
CONCEPT DESIGN

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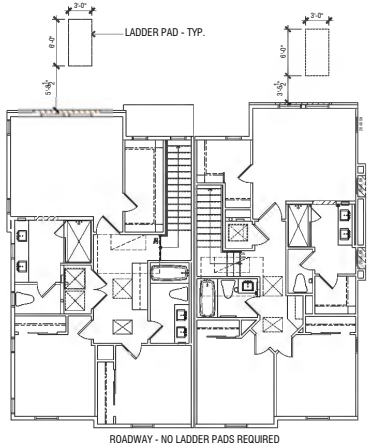




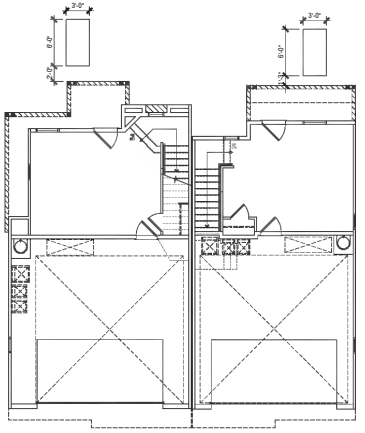
Roof Plan



Plan 3R Plan 1
Second Floor



Plan 3R Plan 1
Third Floor



Plan 3R Plan 1
First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 1-3

CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-1 BUILDING & ROOF PLAN

A2C-14

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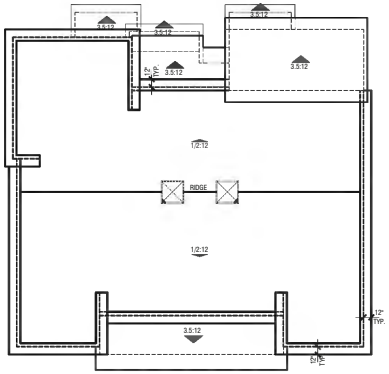
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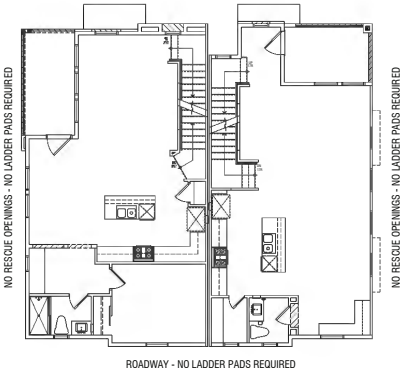
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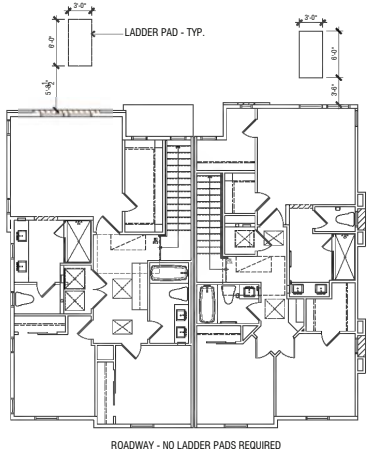




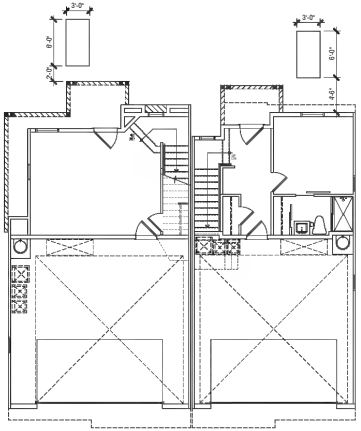
Roof Plan



Plan 3R Plan 2
Second Floor



Plan 3R Plan 2
Third Floor



Plan 3R Plan 2
First Floor

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - TOWNHOUSE AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

Duplex 2-3

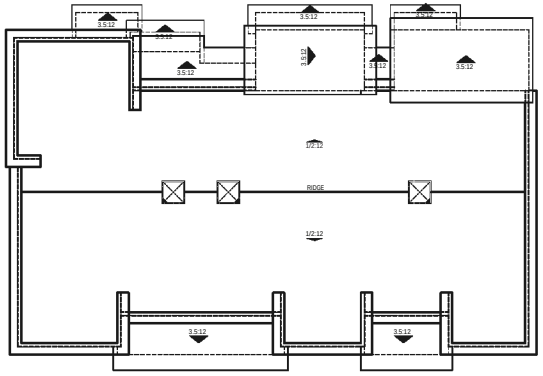
CONCEPT DESIGN

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED DUPLEX 3-2 BUILDING & ROOF PLAN

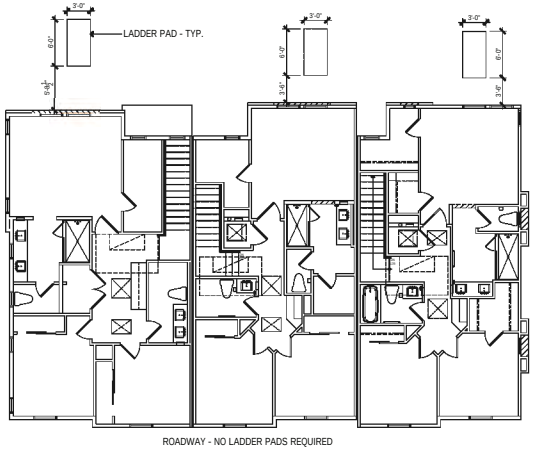
A2C-15

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EXHIBIT C

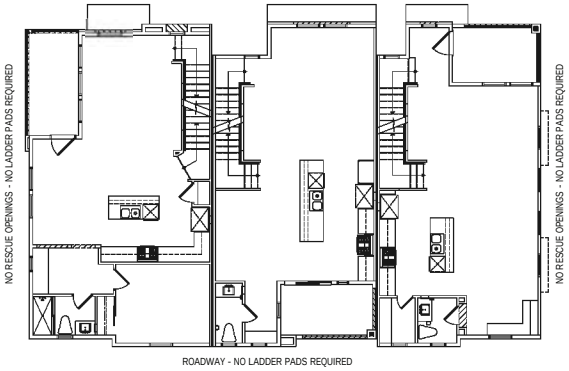


Roof Plan



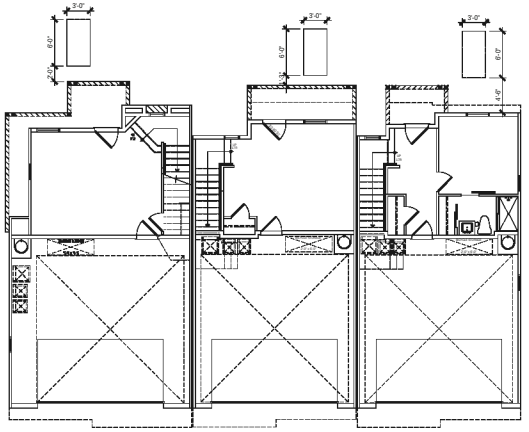
Plan 3R Plan 1 Plan 2

Third Floor



Plan 3R Plan 1 Plan 2

Second Floor



Plan 3R Plan 1 Plan 2

First Floor

Triplex 1-3

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED TRIPLEX BUILDING & ROOF PLAN

A2C-16

CONCEPT DESIGN

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LEFT



FRONT

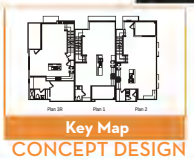


RIGHT



REAR

A - CONTEMPORARY



Key Map

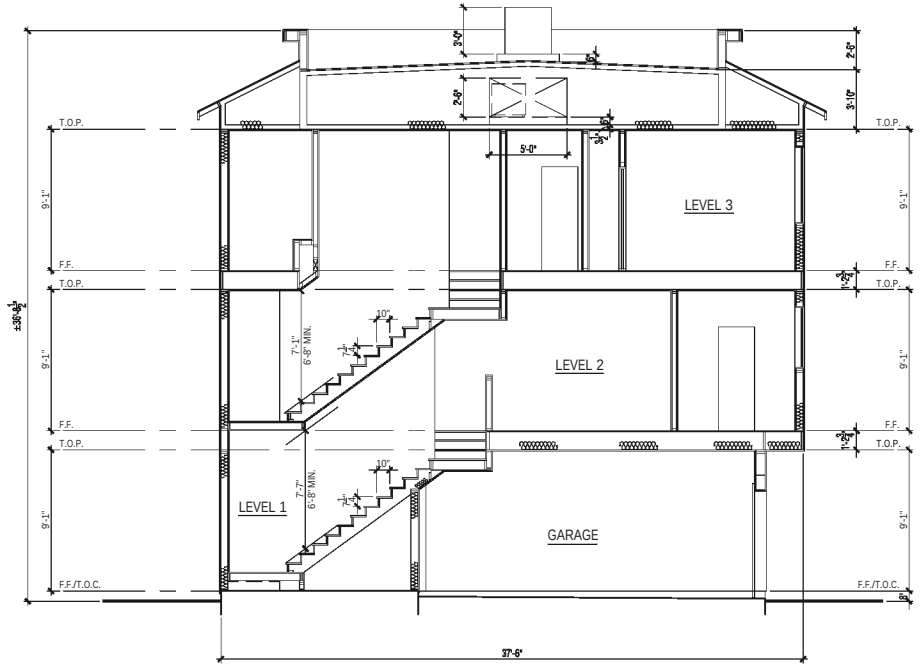
CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED TRIPLEX ELEVATIONS

A2C-17

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Building Section

PRODUCT 2C [PARCEL N1] - 3-STORY ATTACHED
BUILDING SECTION

A2C-18

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA

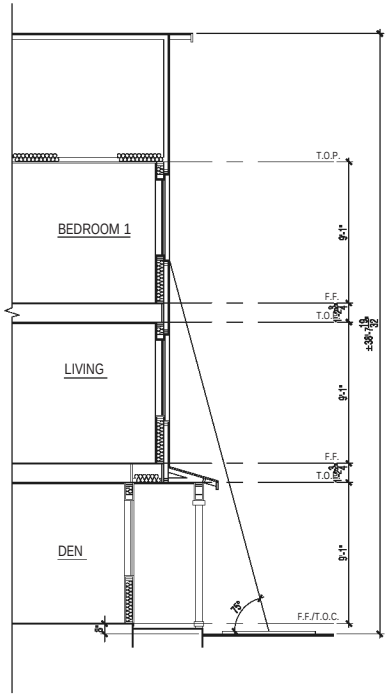
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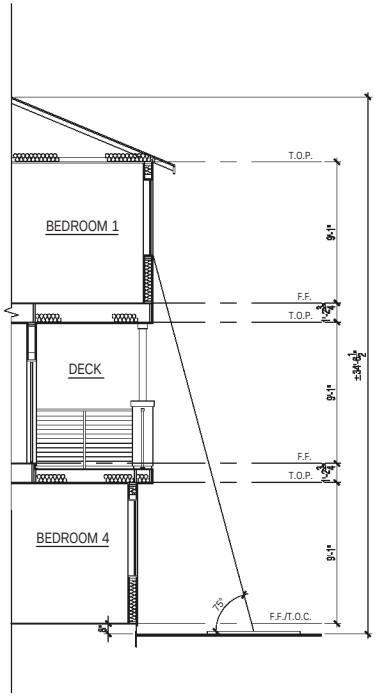
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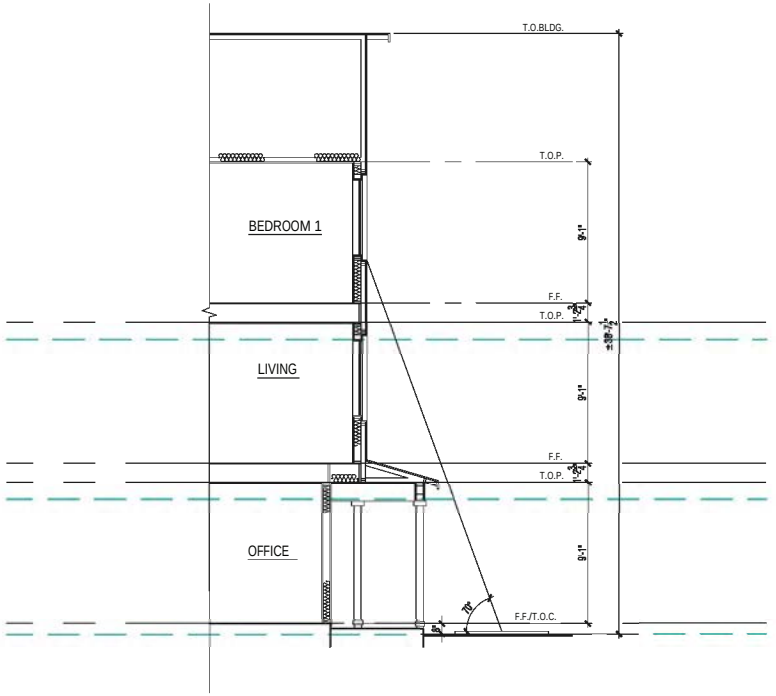
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Unit 1



Unit 2

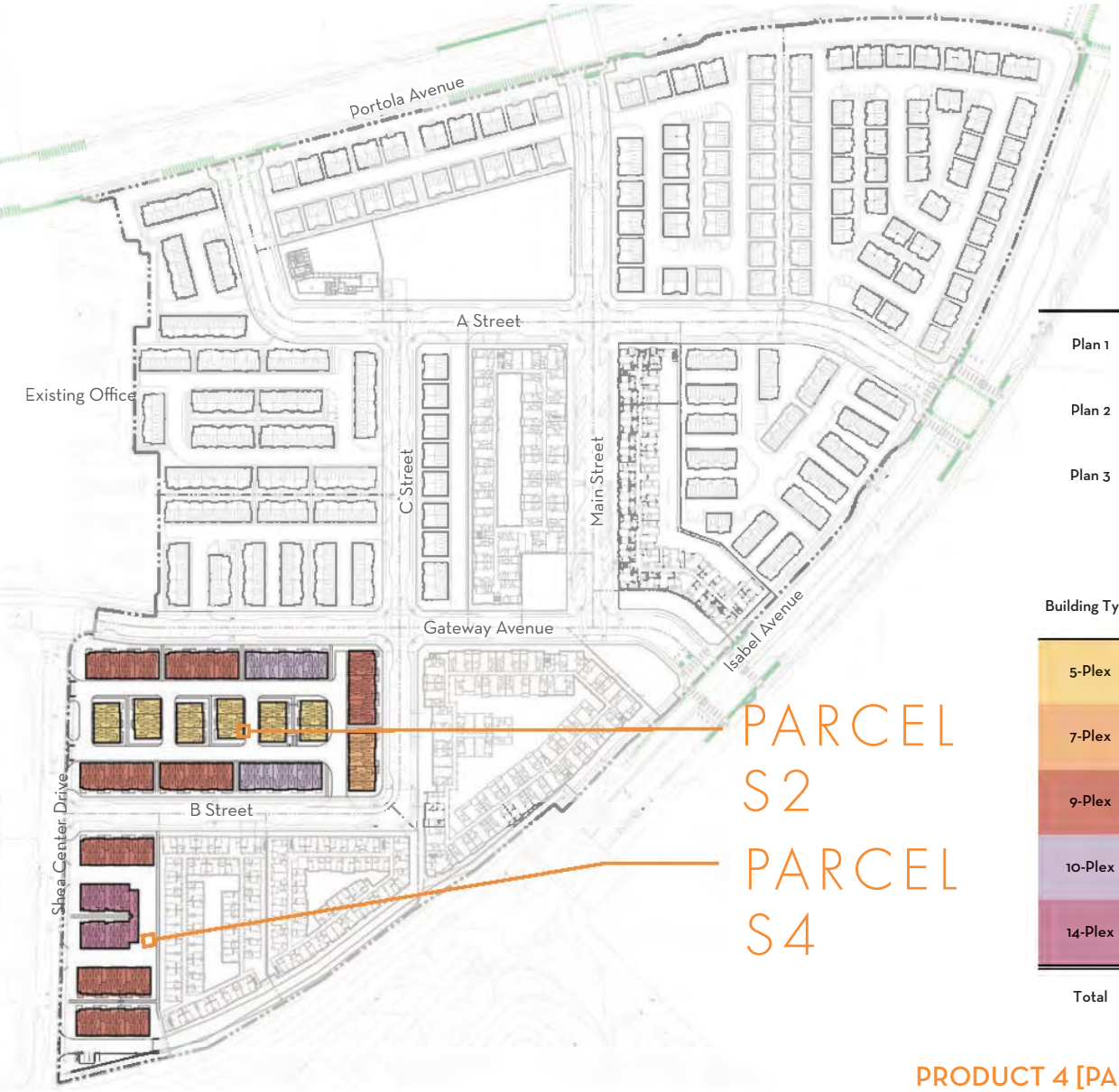


Unit 3

Ladder Pad Sections

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	1,177	2	2.5
Plan 2	1,315	2	2.5
Plan 3	1,502	3	3.0

Building Type	Plan 1	Plan 2	Plan 3	Total Units	Total Residential SQFT
5-Plex	12	12	6	30	38,916
7-Plex	2	2	3	7	9,490
9-Plex	24	24	24	72	95,856
10-Plex	6	6	8	20	26,968
14-Plex	4	4	6	14	18,980
Total	48	48	47	143	191,380

Height Limit: S2 485'-490'*
Max. Height: 463.5 MSL

S4 475'*
Max. Height: 457.8 MSL

Building Height: ± 37'- 8"

Stories: 3

*Height above MSL

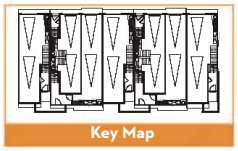
PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A4-1

CONCEPT DESIGN

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Key Map

A - CONTEMPORARY

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | PERSPECTIVES A

A4-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



FRONT



ENHANCED RIGHT



REAR

A - CONTEMPORARY

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
7-PLEX BUILDING | ELEVATIONS A

A4-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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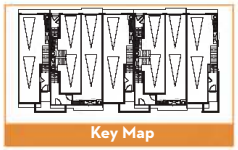
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Key Map

B - TRADITIONAL

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | PERSPECTIVES B

A4-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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LEFT



FRONT



ENHANCED RIGHT



REAR

B - TRADITIONAL

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | ELEVATIONS B

A4-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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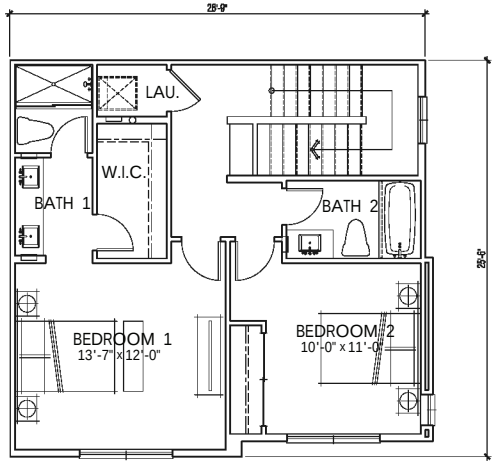
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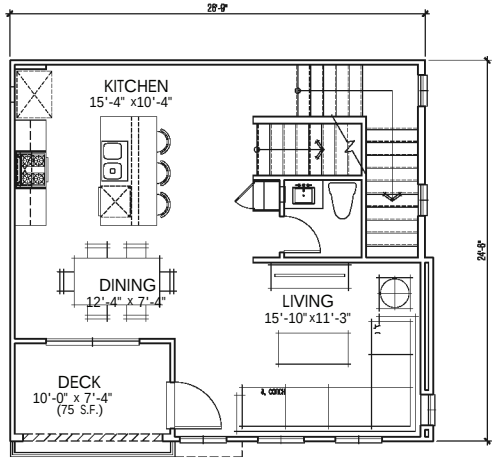
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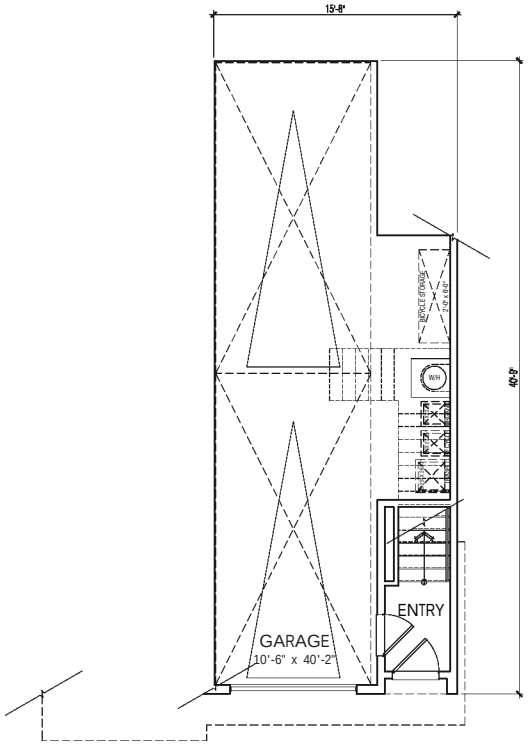
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Third Floor



Second Floor



First Floor

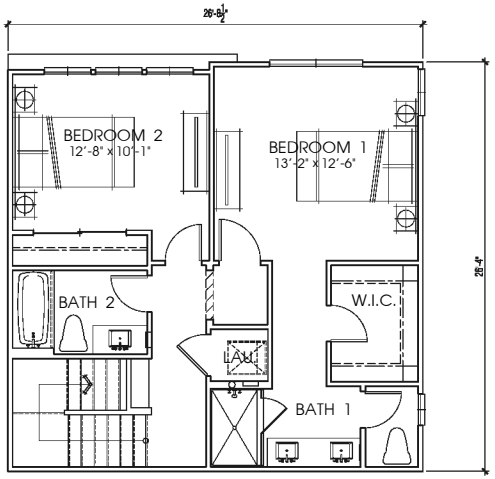
Plan 1

2 Bdrm | 2.5 Bath |
Tandem Garage |
1,177 S.F.

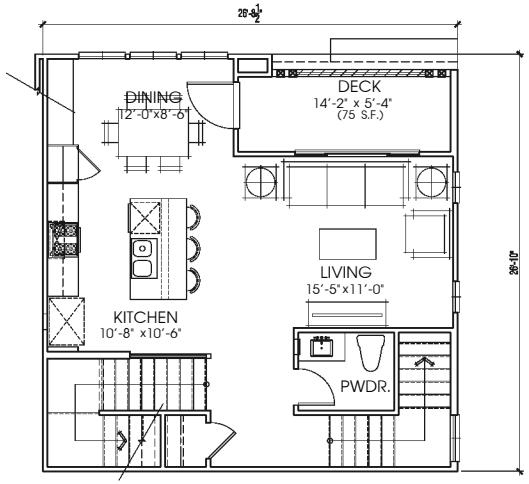
PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A4-6

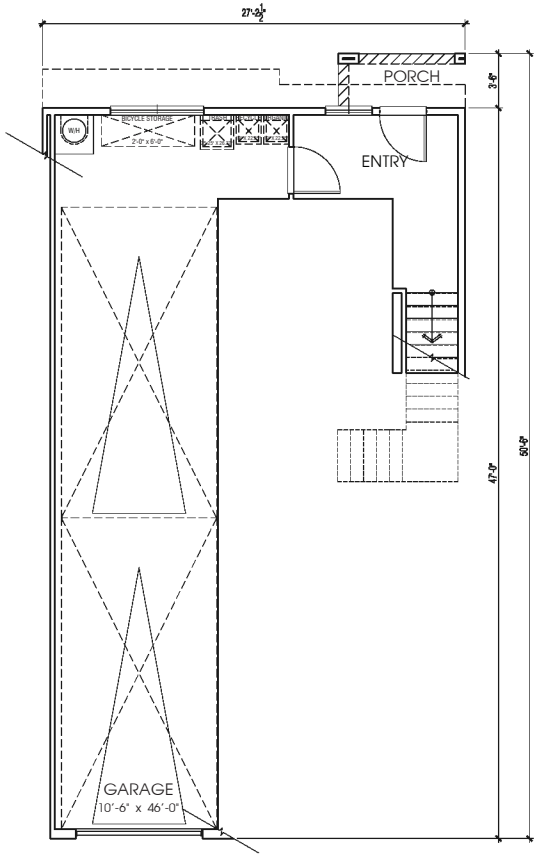
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Third Floor



Second Floor



First Floor

Plan 2

2 Bdrm | 2.5 Bath |
Tandem Garage |
1,315 S.F.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A4-7

CONCEPT DESIGN

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OWNER, LLC

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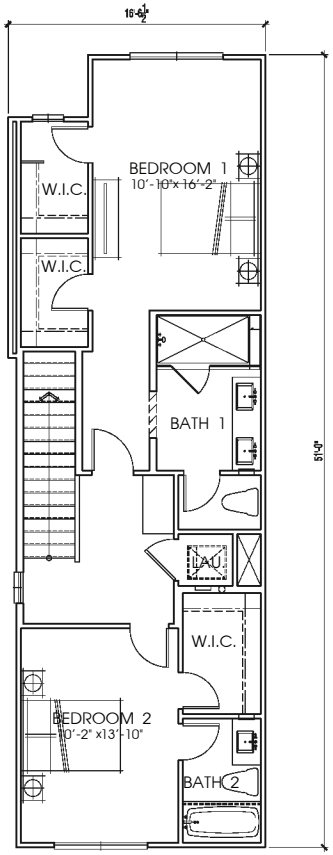
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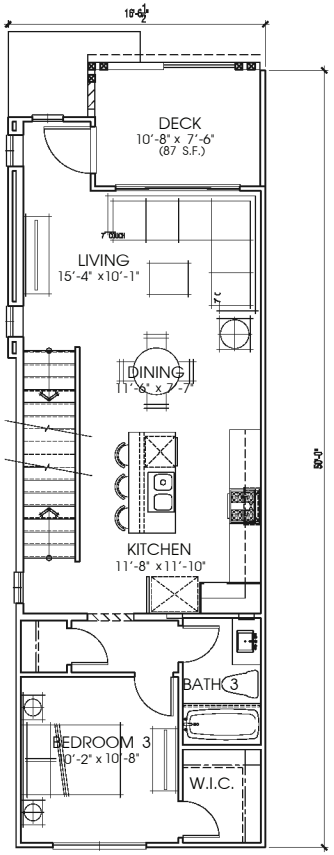
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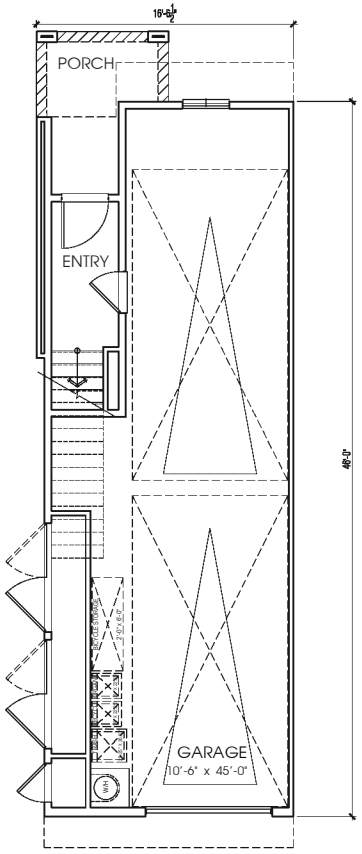
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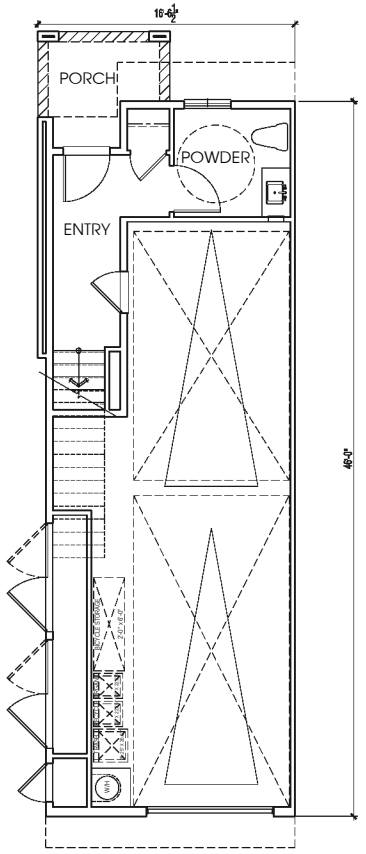
Third Floor



Second Floor



First Floor



First Floor +97 S.F.
@Accessible unit

Plan 3

3 Bdrm | 3 Bath |
Tandem Garage |
1,502 S.F.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 3 FLOOR PLAN

A4-8

CONCEPT DESIGN

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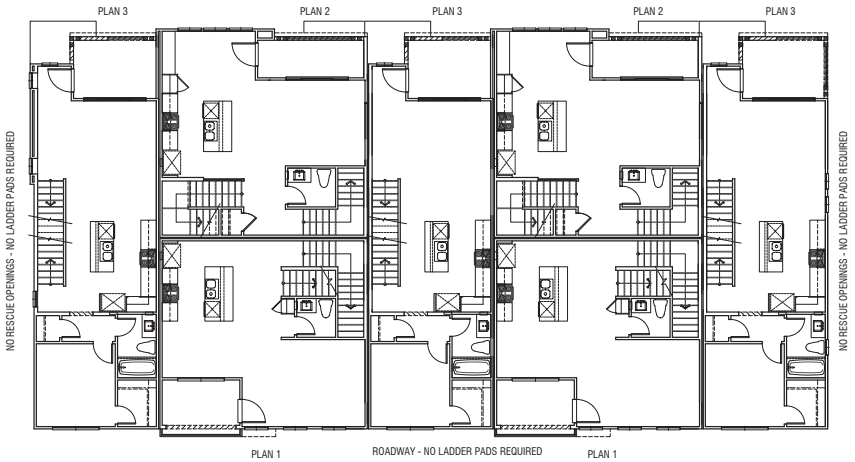
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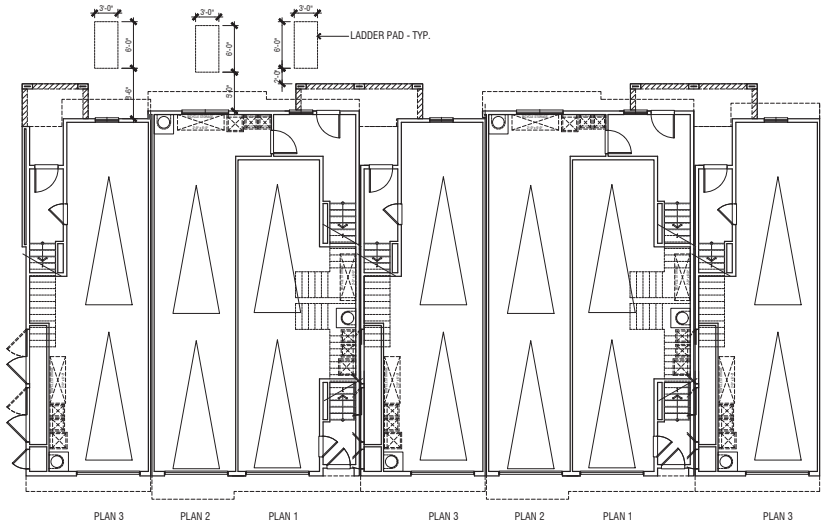
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SECOND FLOOR



FIRST FLOOR

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U - CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | FIRST & SECOND FLOOR

A4-9

CONCEPT DESIGN

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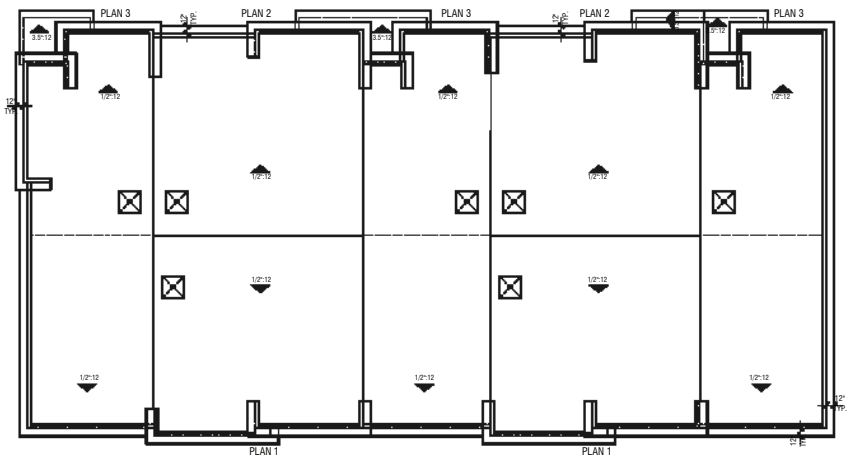
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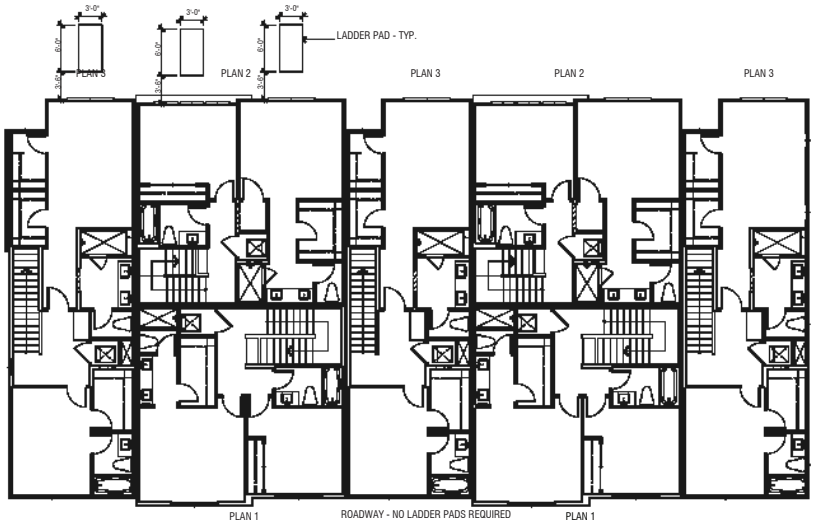
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2614





ROOF PLAN



THIRD FLOOR

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE V-A/NFPA 5000 CONSTRUCTION
- OCCUPANCY R2 / U - CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE) 7-PLEX BUILDING | THIRD FLOOR & ROOF PLAN

A4-10

CONCEPT DESIGN

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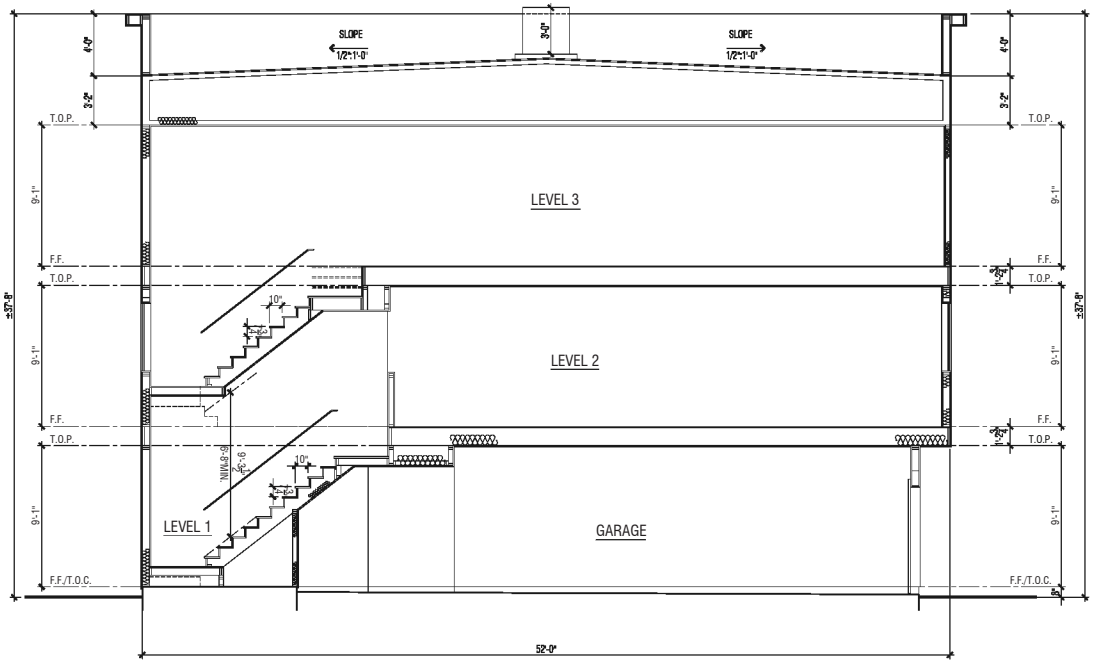
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Building Section

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION.

PRODUCT 4 [PARCEL S2, S4] - 3-STORY ATTACHED (TOWNHOUSE)
BUILDING SECTION

A4-11

CONCEPT DESIGN

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OWNER, LLC

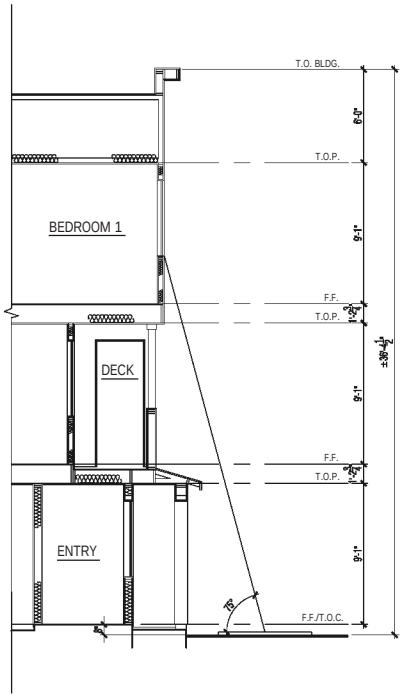
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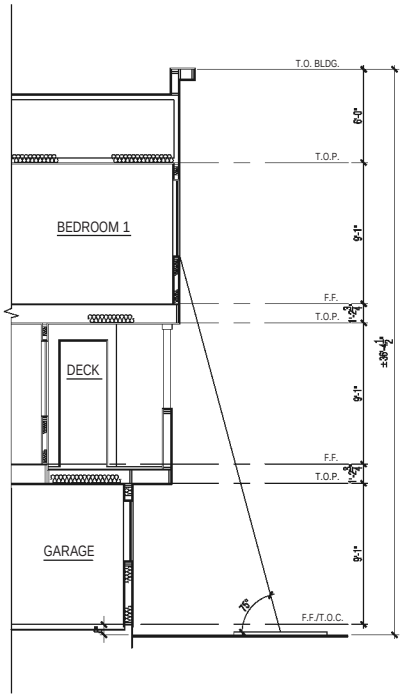
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Unit 2

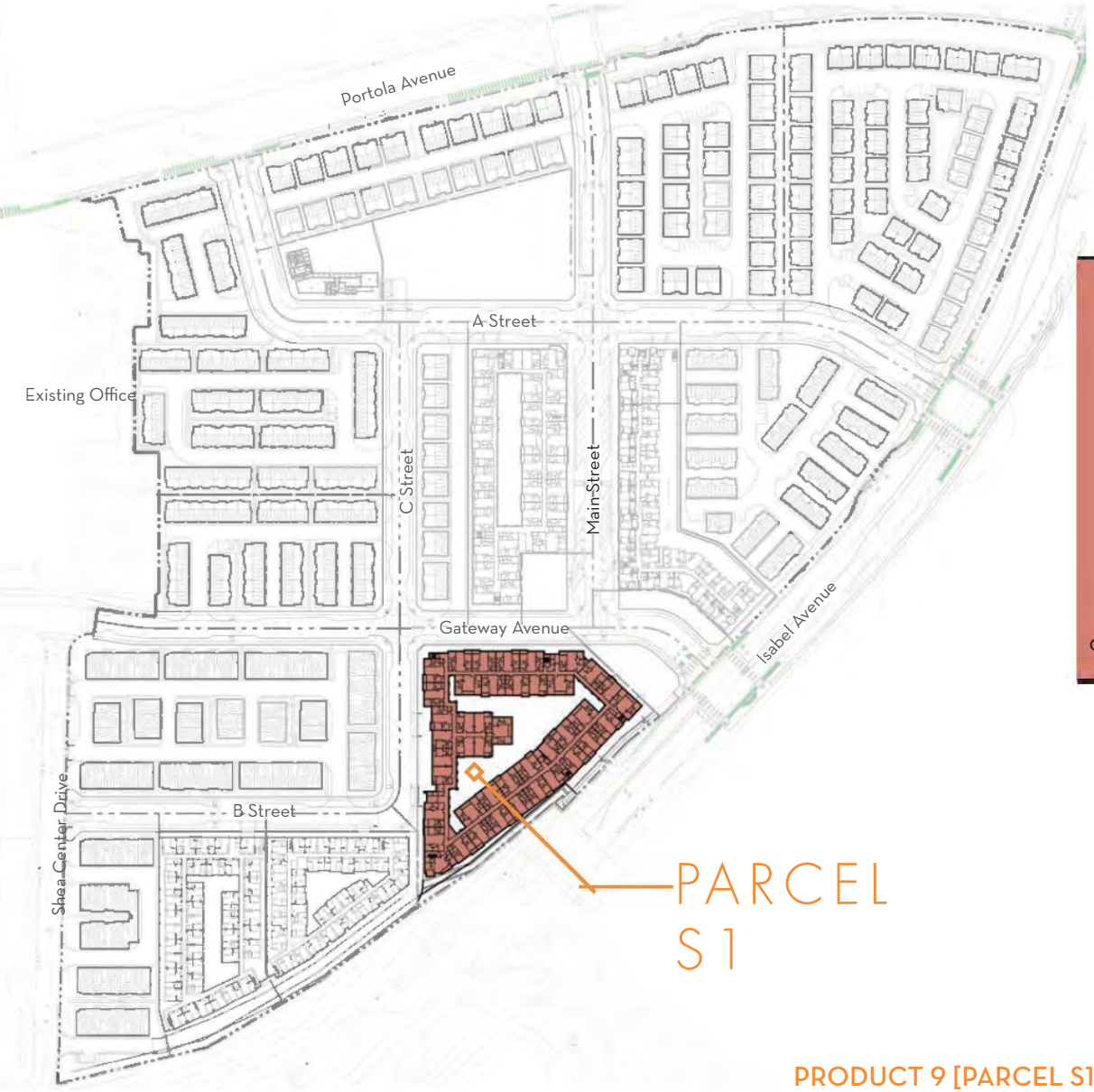


Unit 3

Ladder Pad Sections

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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	949	1	1	44	41,756
Unit B-1	1,373	2	2.0	84	115,332
Unit C-1	1,418	3	2.0	24	34,032
Unit D-1	1,338	2	2	16	21,408
Unit E-1	1,336	3	2.0	4	5,344
Commercial					21,924
Total				**172**	**239,796**

Height Limit: 485'*

Building Height: 496.5 MSL

± 69' to ± 72'-8"

Stories: 4 Stories over 3 Levels Parking (1 Basement)

Notes:

- 22' Floor Plate for Grocery

*Height above MSL

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PRODUCT ALLOCATION

A9-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

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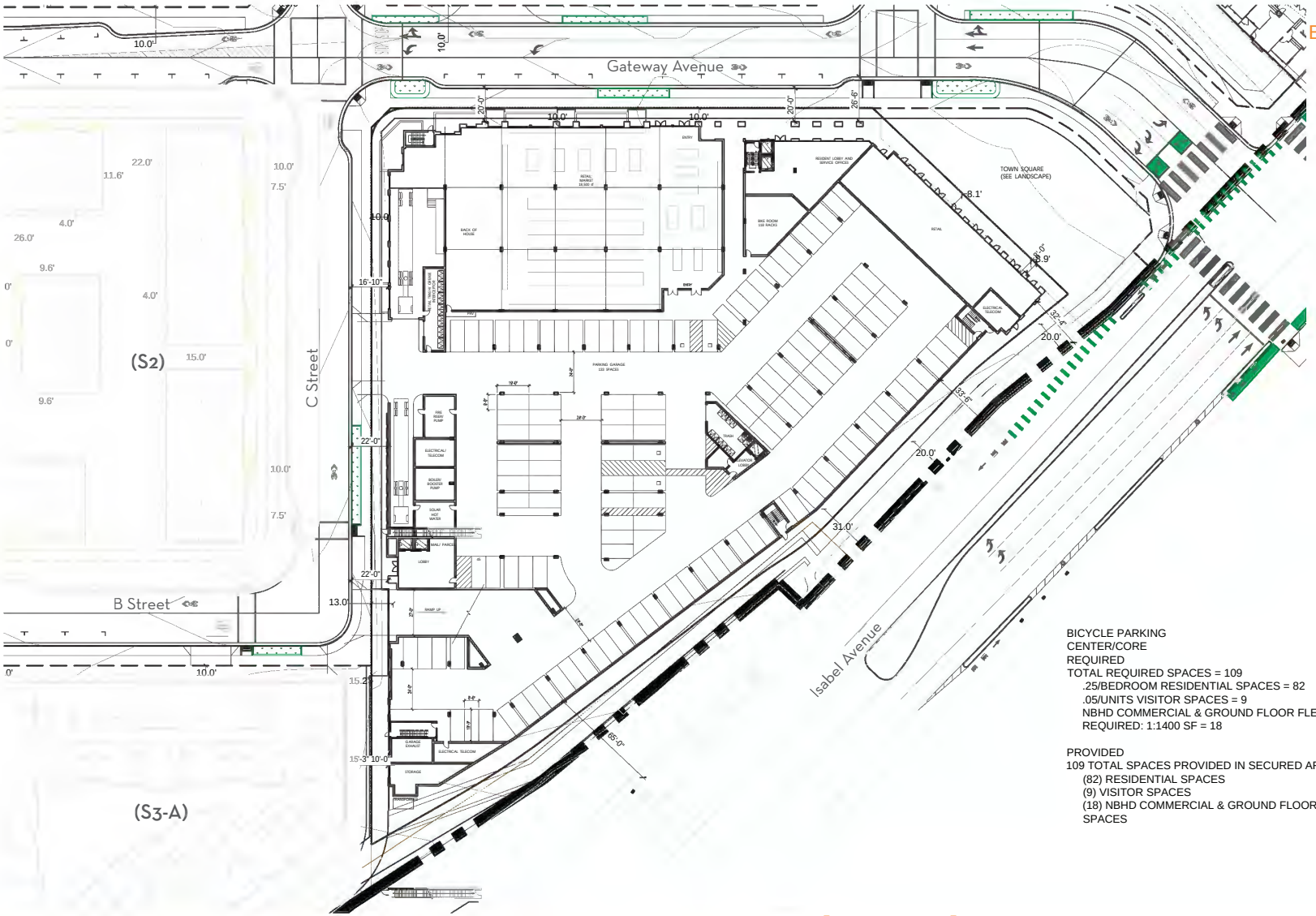
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2618

EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 2.55 ACRES (NET)
DENSITY: 67.5

5 STORIES OVER 3 LEVELS OF PARKING (1 BASEMENT)

LEVEL B, 1, 2 : TYPE 1A
LEVEL 3-6: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

172 TOTAL UNITS
- 44 ONE-BEDROOM; ONE-BATH
- 16 TWO-BEDROOM; TWO-BATH; DEN
- 84 TWO-BEDROOM; TWO-BATH
- 28 THREE-BEDROOM; TWO BATH

AVERAGE UNIT SIZE: 1,271 S.F.

BUILDING AREA
- 164,022 SF PARKING
- 21,651 COMMERCIAL
- 2,273 AMENITY
- 296,184 RESIDENTIAL
- 484,130 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 19,071 SF = 111 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVG.

PARKING
- MIN. REQUIRED:
- 204 RESIDENTIAL SPACES
- 22 GUEST SPACES
- 43 COMMERCIAL

269 TOTAL REQUIRED SPACES (MIN.)

PROVIDED:
342 RESIDENTAL SPACES
- (5) ADA SPACES
- (1) ADA VAN SPACE

22 GUEST PARKING
- (2) ADA SPACES
- (1) ADA VAN SPACE

43 COMMERCIAL PARKING
- (8) ON STREET SPACES
- (2) ADA SPACES
- (1) ADA VAN SPACE

407 TOTAL PROVIDED SPACES
- (8) EV COMMERCIAL CAPABLE
  - (2) EVSE
  - (1) ADA VAN
  - (1) ADA STD
- (145) EV RESIDENTIAL - 40% LP LEV 2
- (36) EV RESIDENTIAL - 10% LEV2
  - (8) VAN ACCESS

BICYCLE PARKING
CENTER/CORE
REQUIRED
TOTAL REQUIRED SPACES = 109
- .25/BEDROOM RESIDENTIAL SPACES = 82
- .05/UNITS VISITOR SPACES = 9
- NBHD COMMERCIAL & GROUND FLOOR FLEX REQUIRED: 1:1400 SF = 18

PROVIDED
109 TOTAL SPACES PROVIDED IN SECURED AREA
- (82) RESIDENTIAL SPACES
- (9) VISITOR SPACES
- (18) NBHD COMMERCIAL & GROUND FLOOR FLEX SPACES

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
SITE PLAN

A9-2

CONCEPT DESIGN

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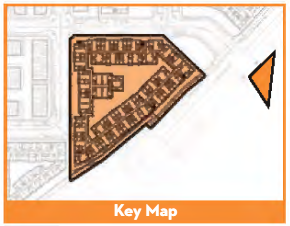
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2619




Key Map

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | LOOKING NORTH WEST

A9-3

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Key Map

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | MAIN ENTRY VIEW

A9-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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Key Map

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PERSPECTIVE | LOADING DOCK VIEW

A9-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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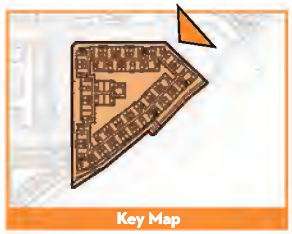
NORTH ELEVATION



BRICK COURSEWORK DETAILING



EAST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
NORTH & EAST ELEVATIONS

A9-6

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SOUTH ELEVATION



PARKING GARAGE
VENTILATION SCREENING



WEST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
SOUTH & WEST ELEVATIONS

A9-7

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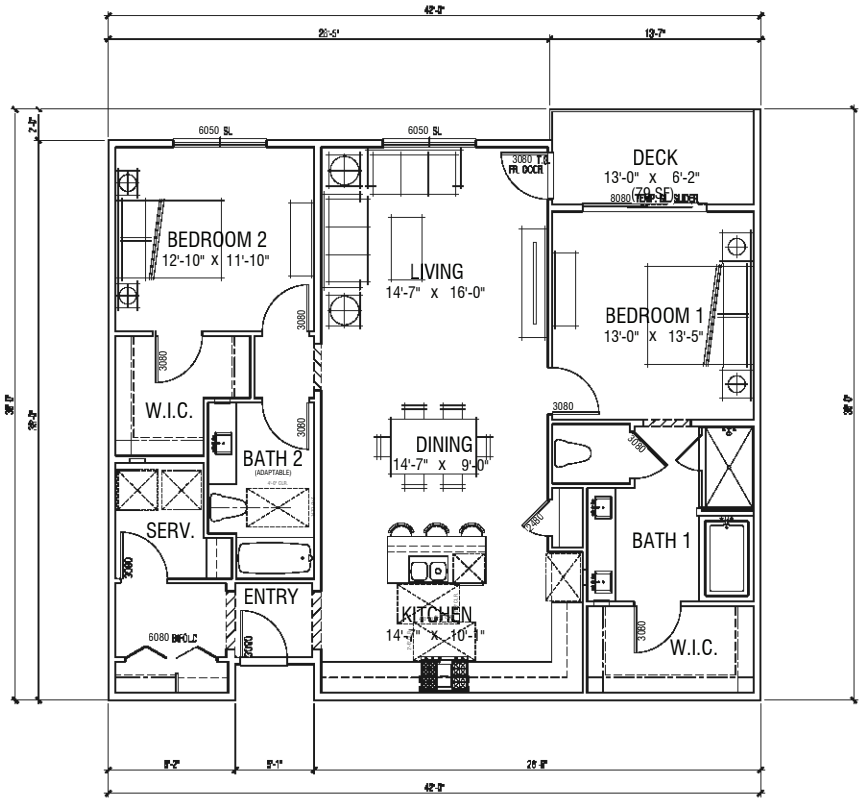
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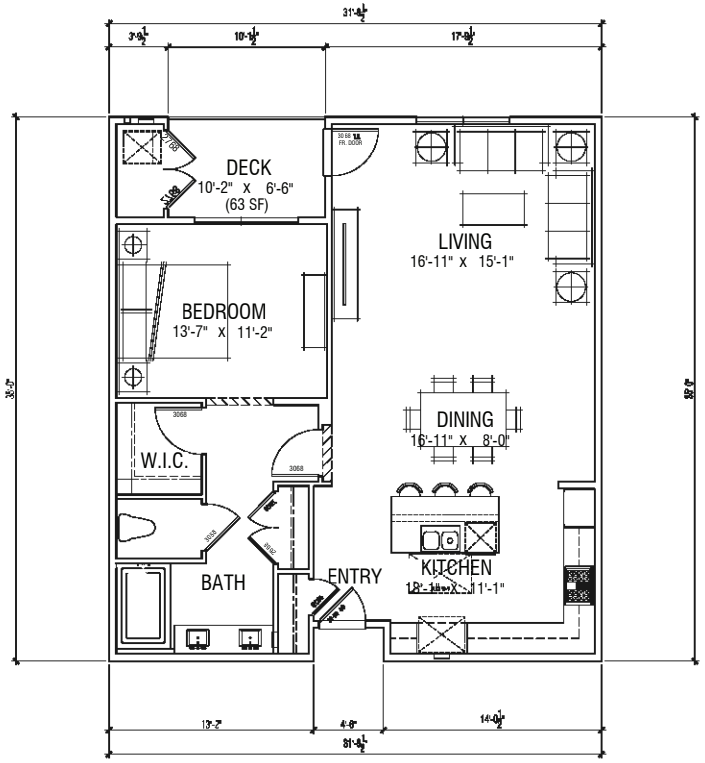
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UNIT B-1

2 Bdrm | 2 Bath |
Unit: 1,373 sf
Deck: 79 sf



UNIT A-1

1 Bdrm | 1 Bath |
Unit: 949 sf
Deck: 63 sf

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
A-1, B-1 UNIT FLOOR PLAN

A9-8

CONCEPT DESIGN

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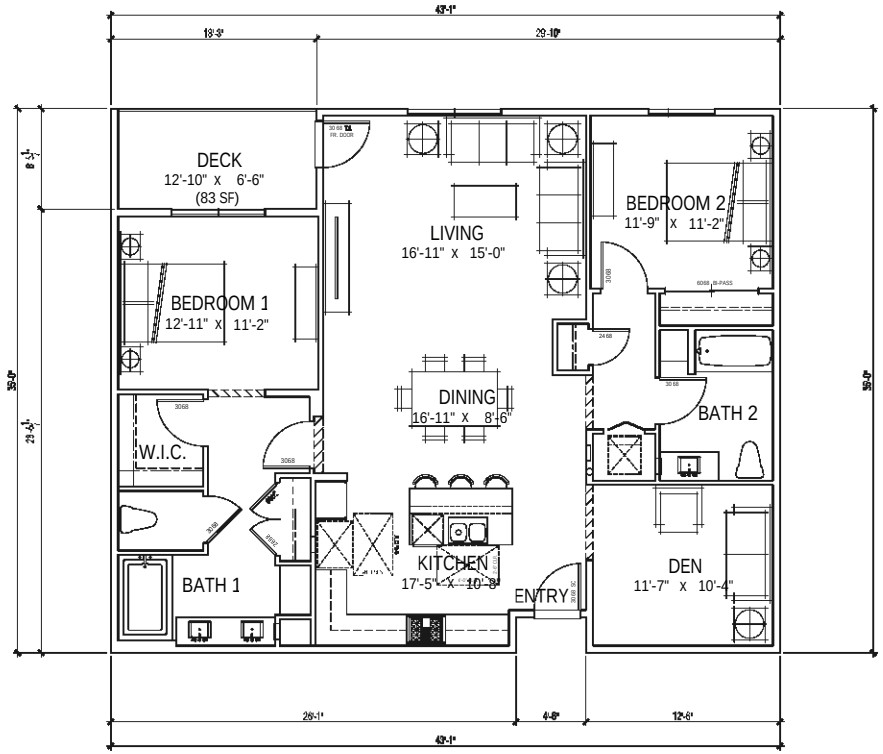
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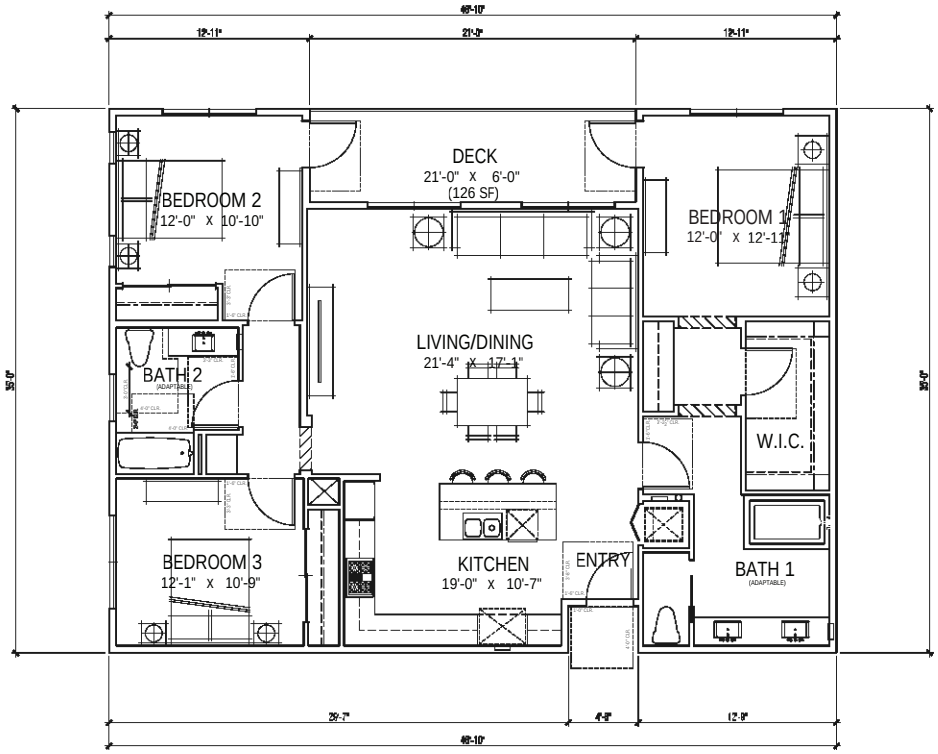
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2625



UNIT D-1

2 Bdrm | 2 Bath | Den |
Unit: 1,338 sf
Deck: 83 sf



UNIT C-1

3 Bdrm | 2 Bath |
Unit: 1,418 sf
Deck: 126 sf

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
C-1, D-2 UNIT FLOOR PLANS

A9-9

CONCEPT DESIGN

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WHA

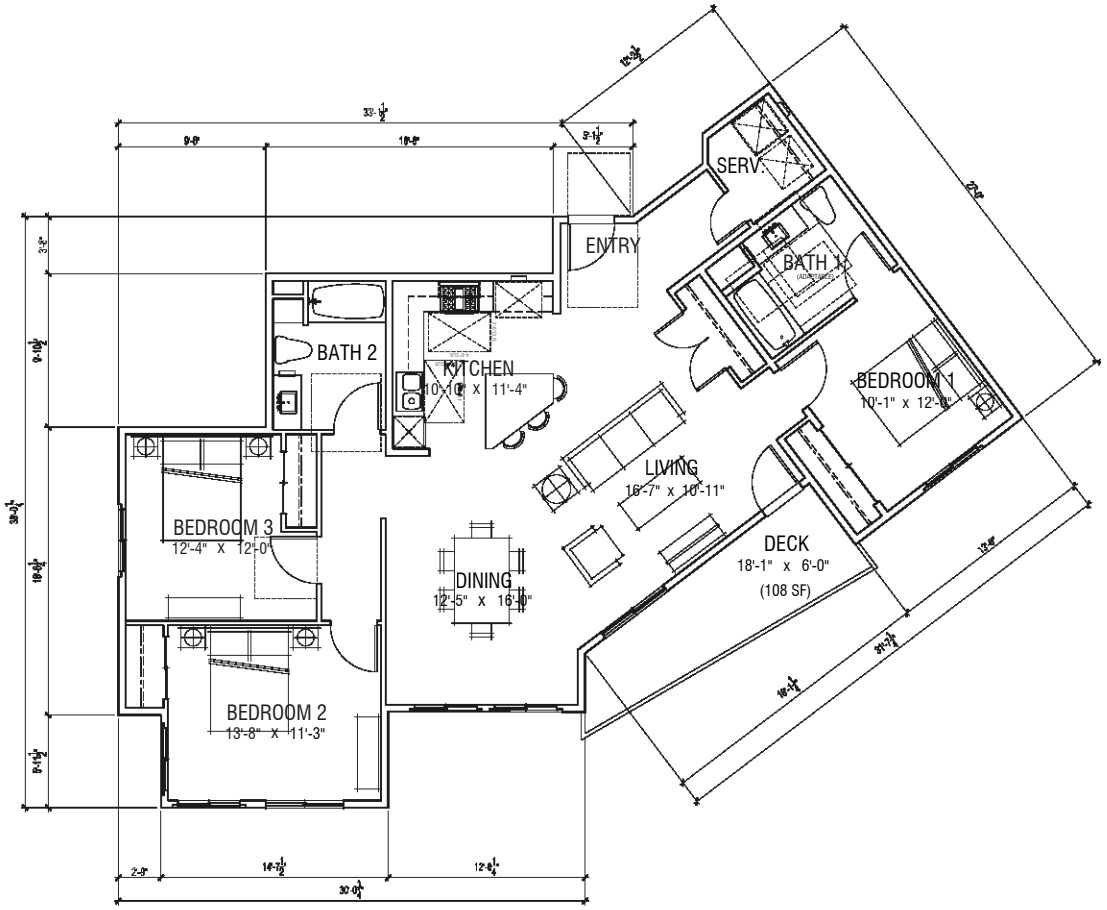
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UNIT E-1

3 Bdrm | 2 Bath
Unit: 1,336 sf
Deck: 108 sf

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
E-1 UNIT FLOOR PLAN

A9-10

CONCEPT DESIGN

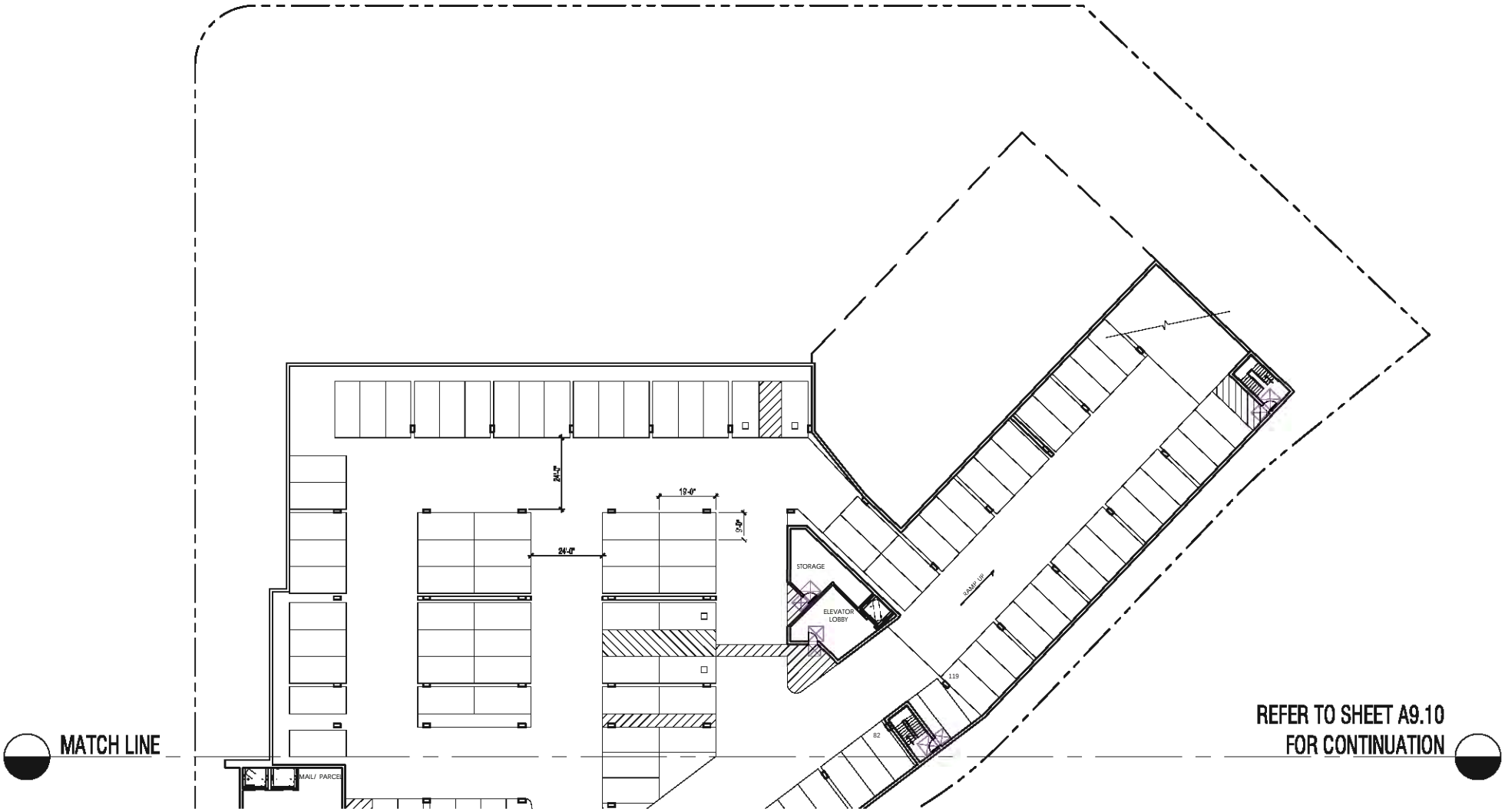
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CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
BASEMENT PARKING LEVEL - NORTH

A9-11

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WHA

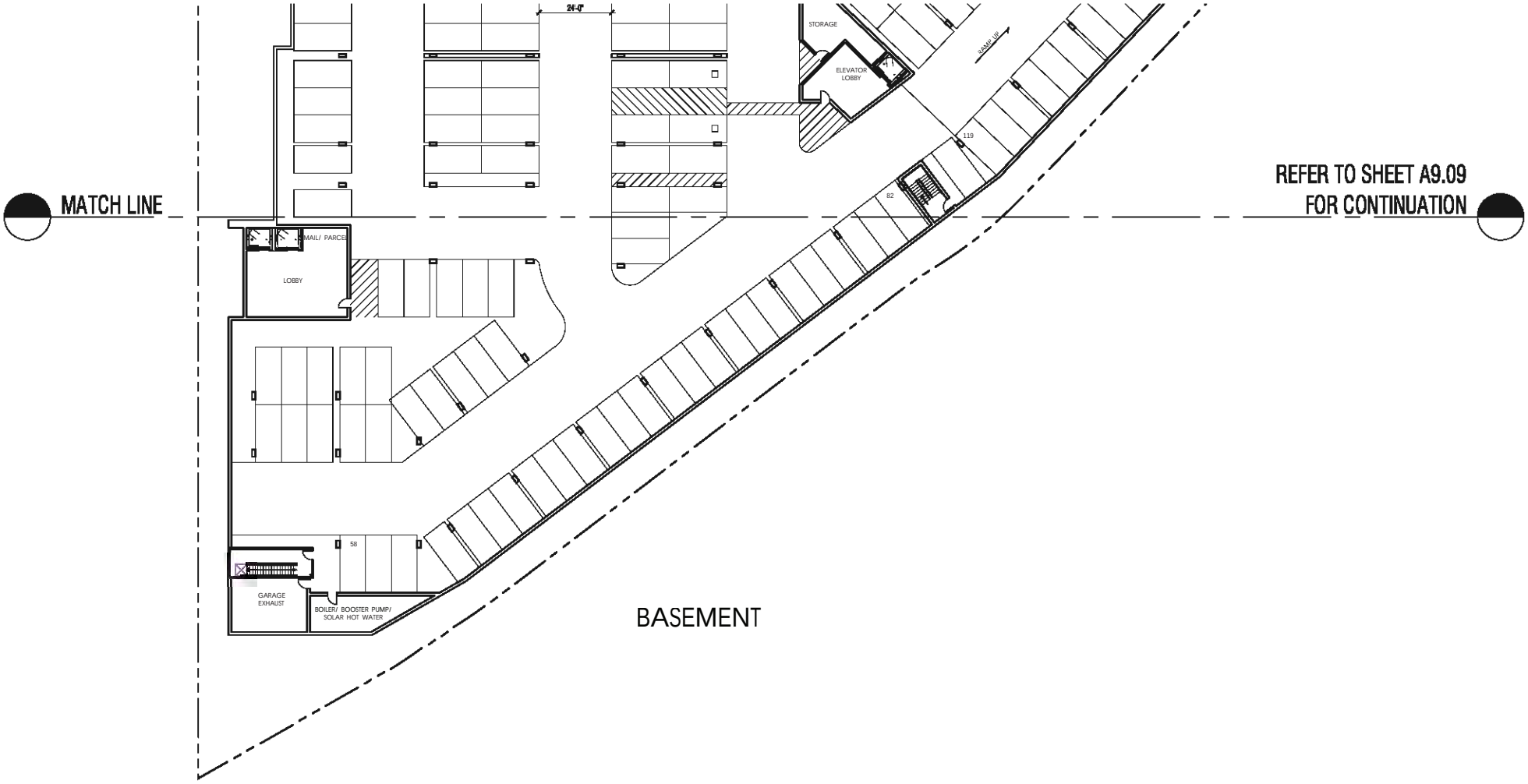
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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
BASEMENT PARKING LEVEL - SOUTH

A9-12

CONCEPT DESIGN

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WHA

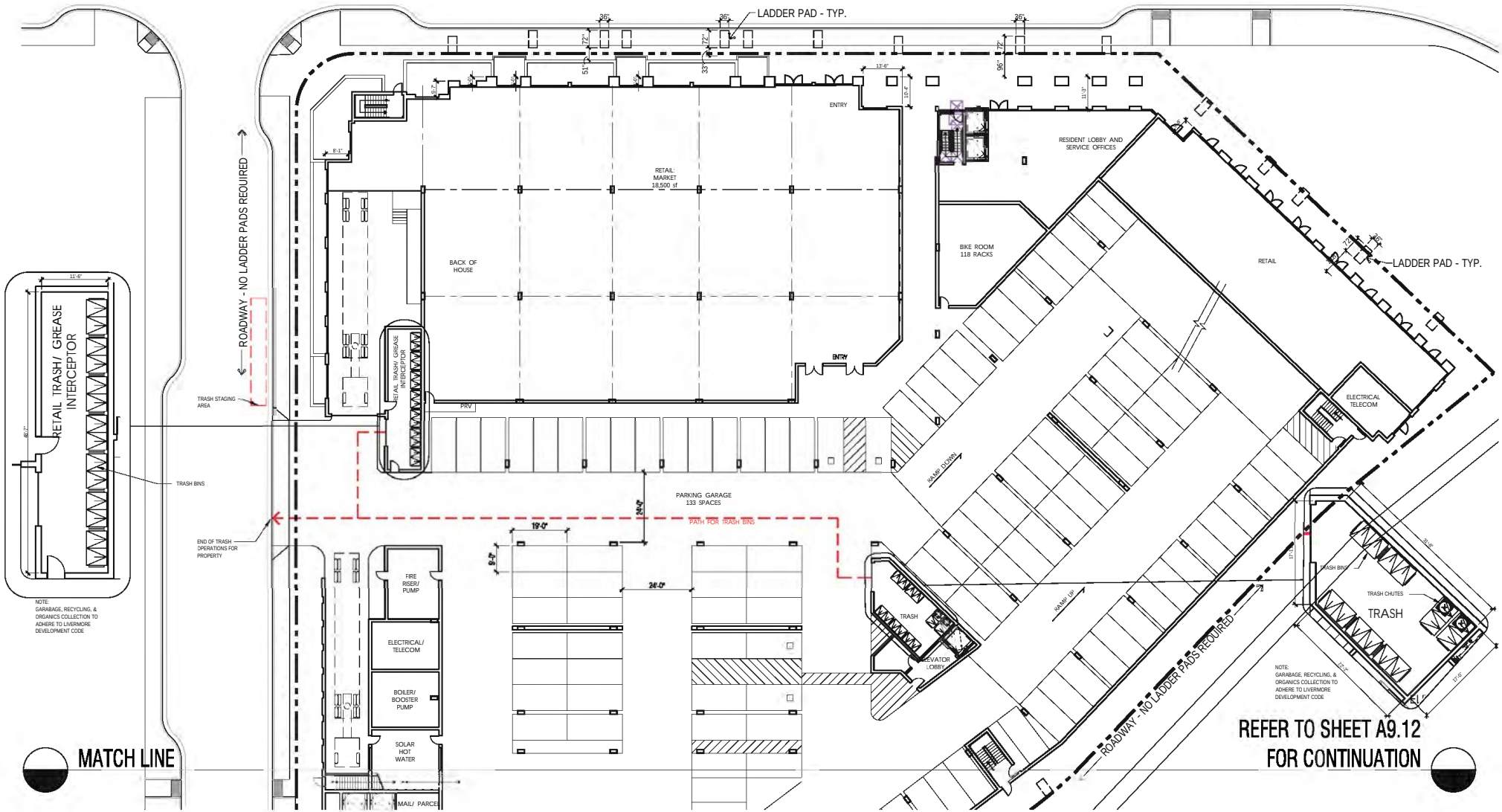
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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
FIRST LEVEL - NORTH

A9-13

CONCEPT DESIGN

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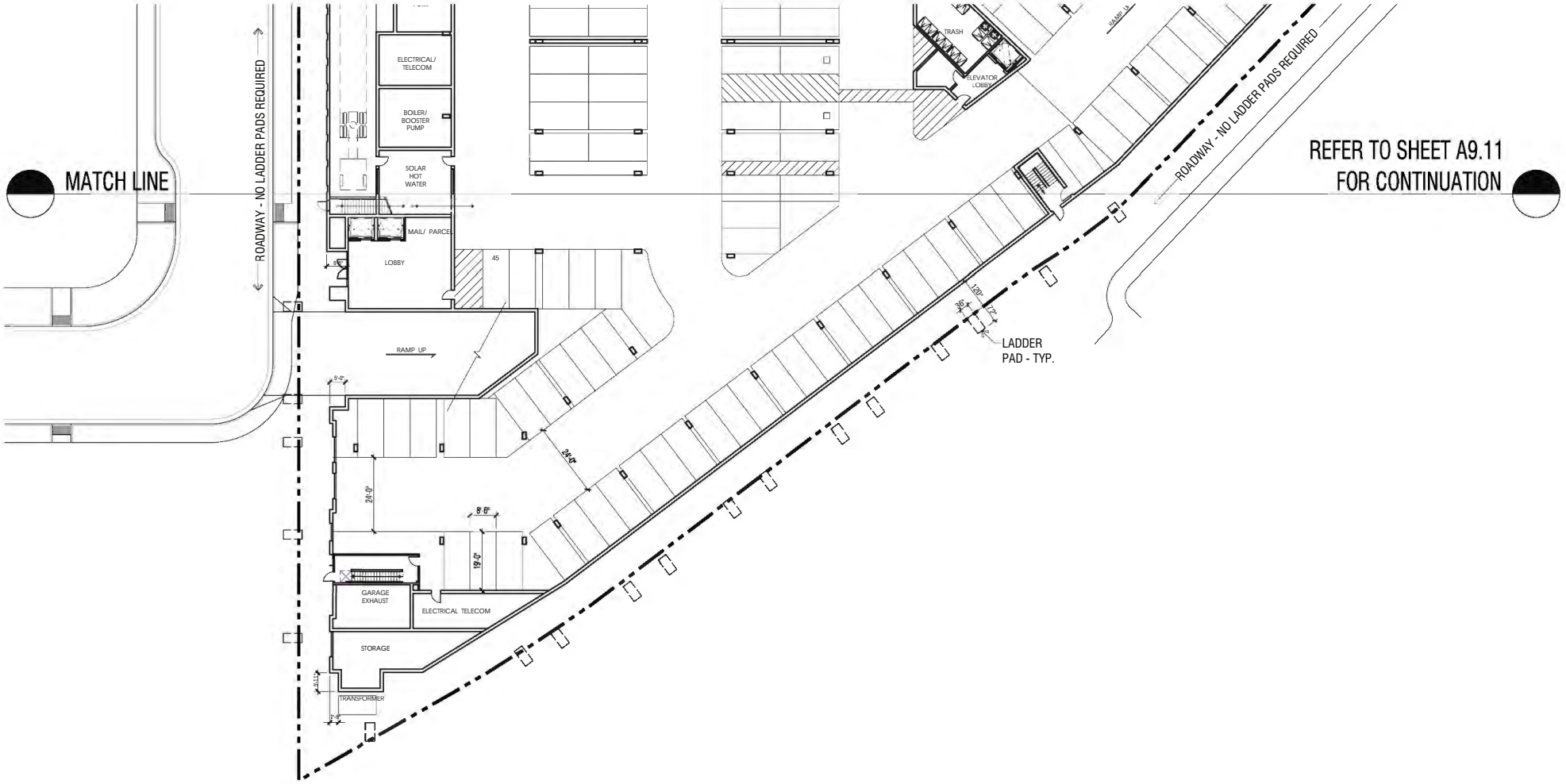
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CONCEPT DESIGN

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
FIRST LEVEL - SOUTH

A9-14

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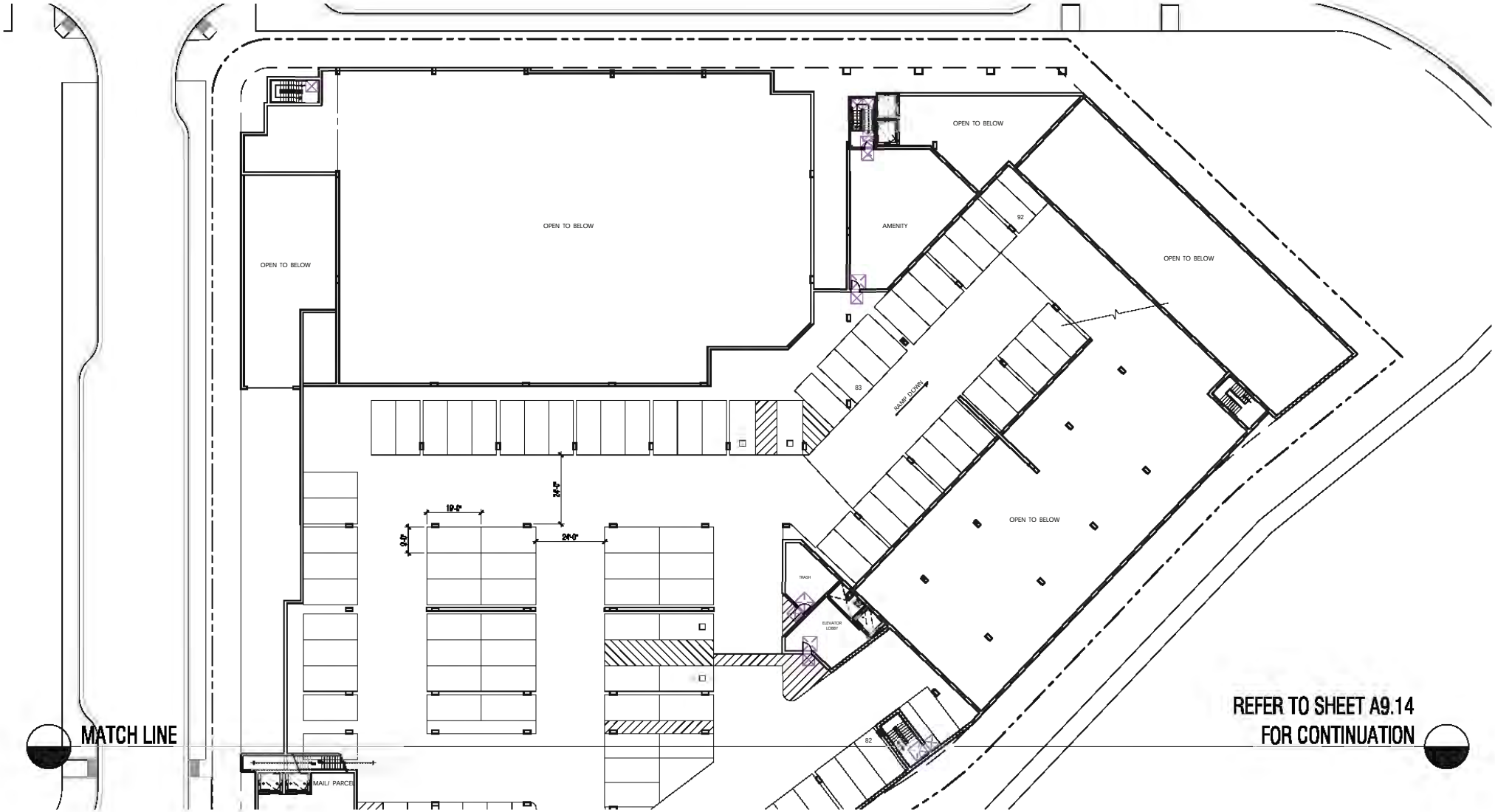
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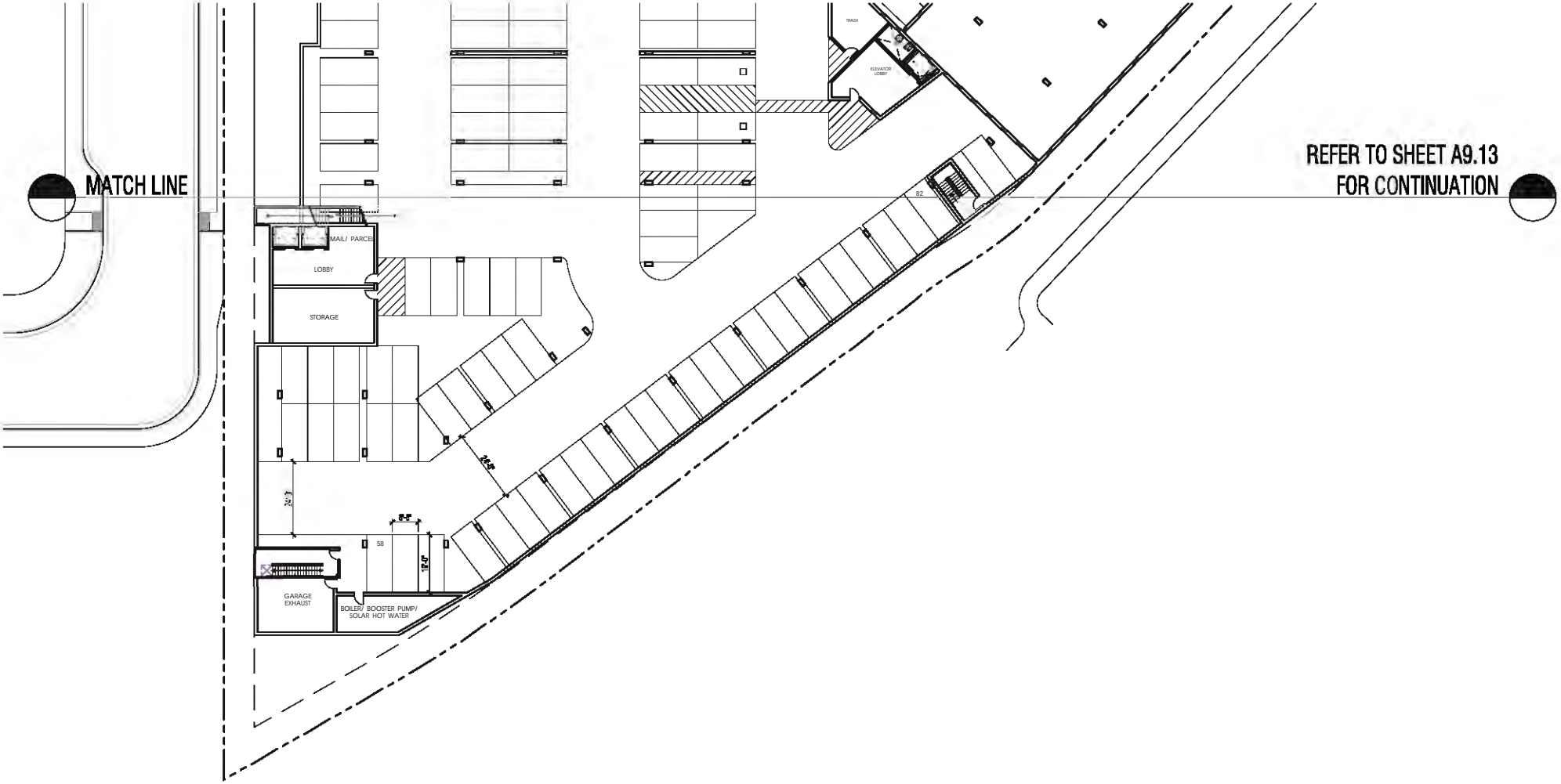
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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
MEZZANINE PARKING LEVEL - NORTH

A9-15

CONCEPT DESIGN



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
MEZZANINE PARKING LEVEL - SOUTH

A9-16

CONCEPT DESIGN

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EXHIBIT C



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PODIUM FLOOR PLAN - NORTH

A9-17

CONCEPT DESIGN

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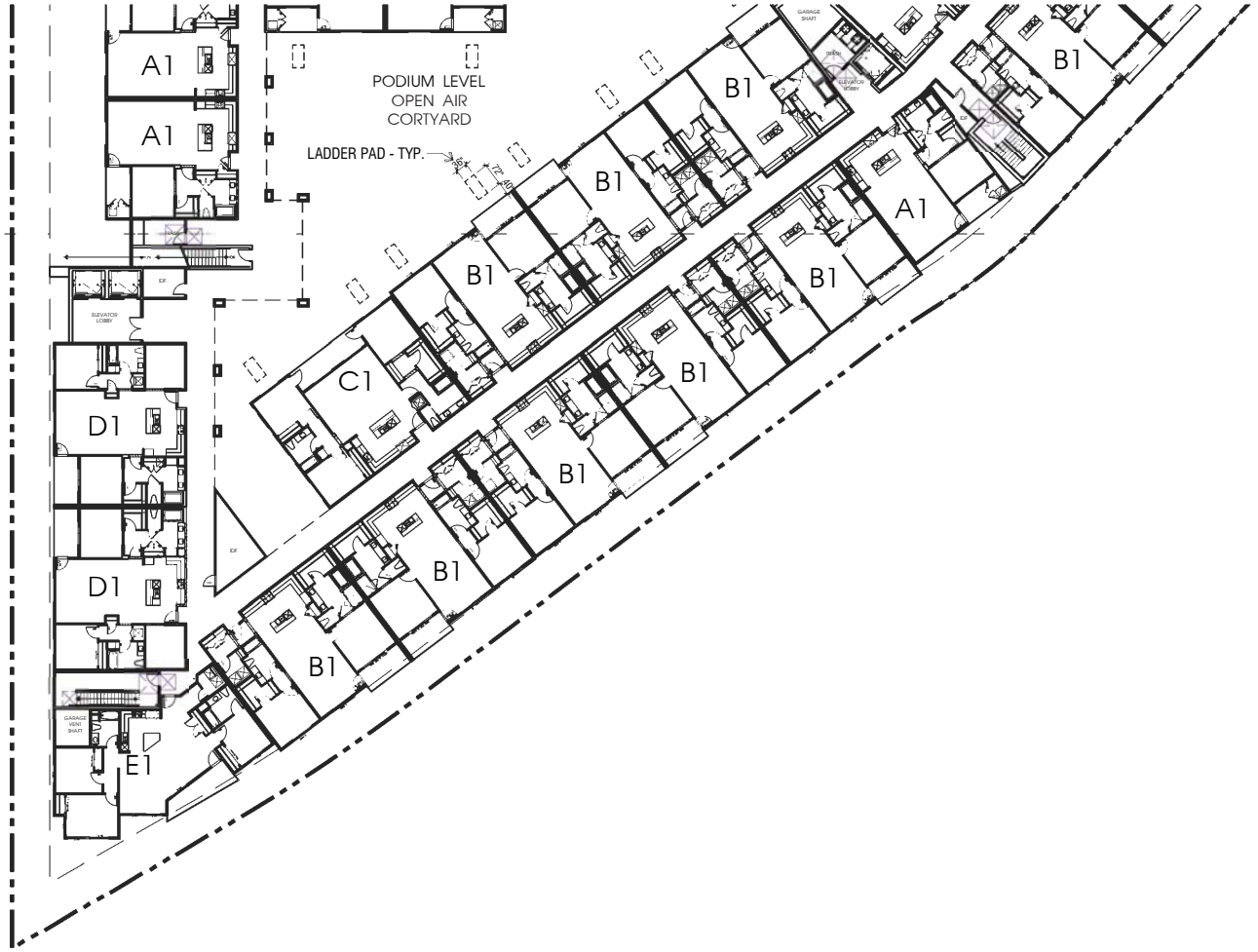
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MATCH LINE

REFER TO SHEET A9.15
FOR CONTINUATION



PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
PODIUM FLOOR PLAN - SOUTH

A9-18

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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
LEVELS 3-6 PLAN - NORTH

A9-19

CONCEPT DESIGN

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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
LEVELS 3-6 PLAN - SOUTH

A9-20

CONCEPT DESIGN

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WHA.

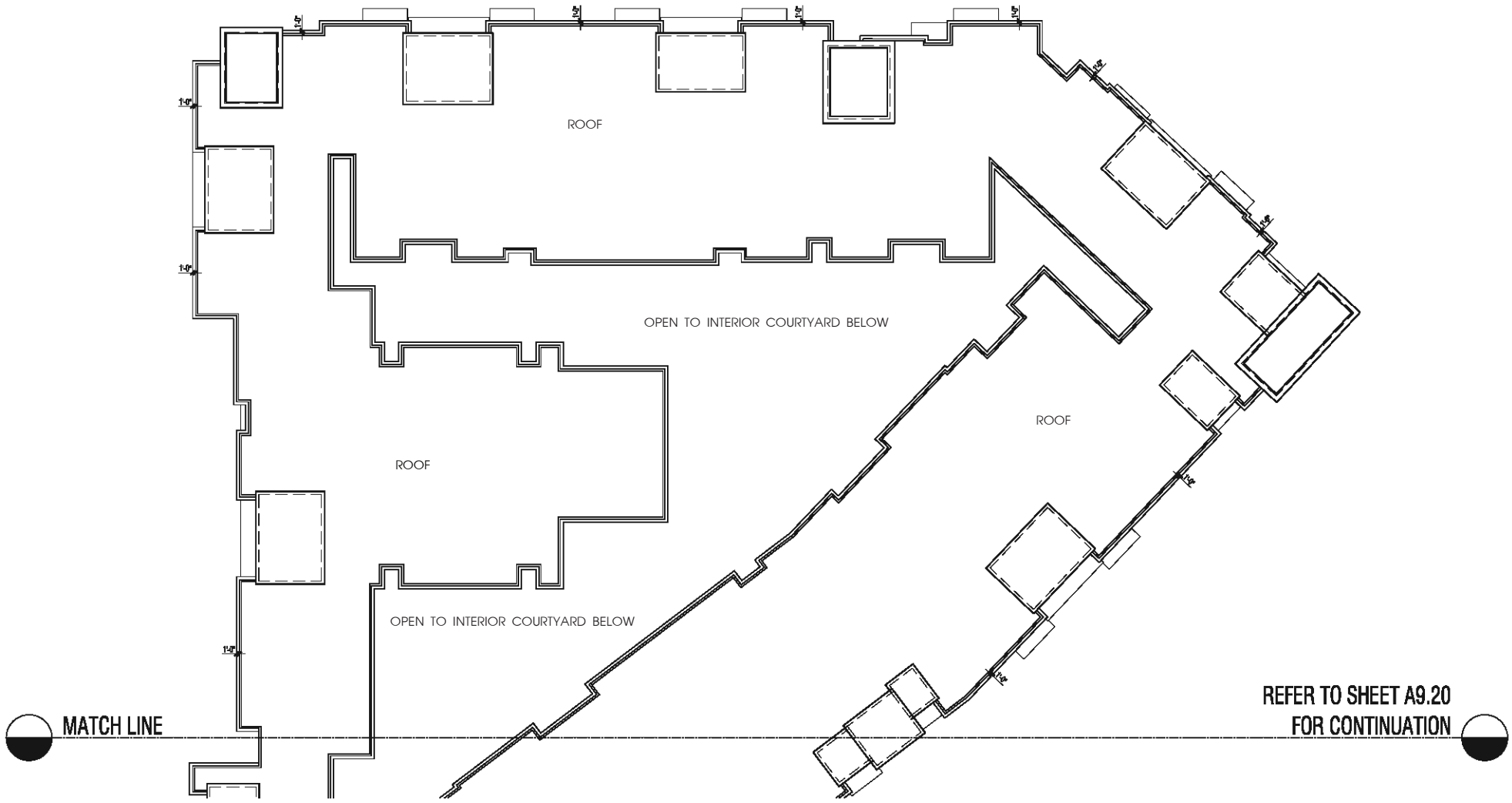
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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
ROOF PLAN - NORTH

A9-21

CONCEPT DESIGN

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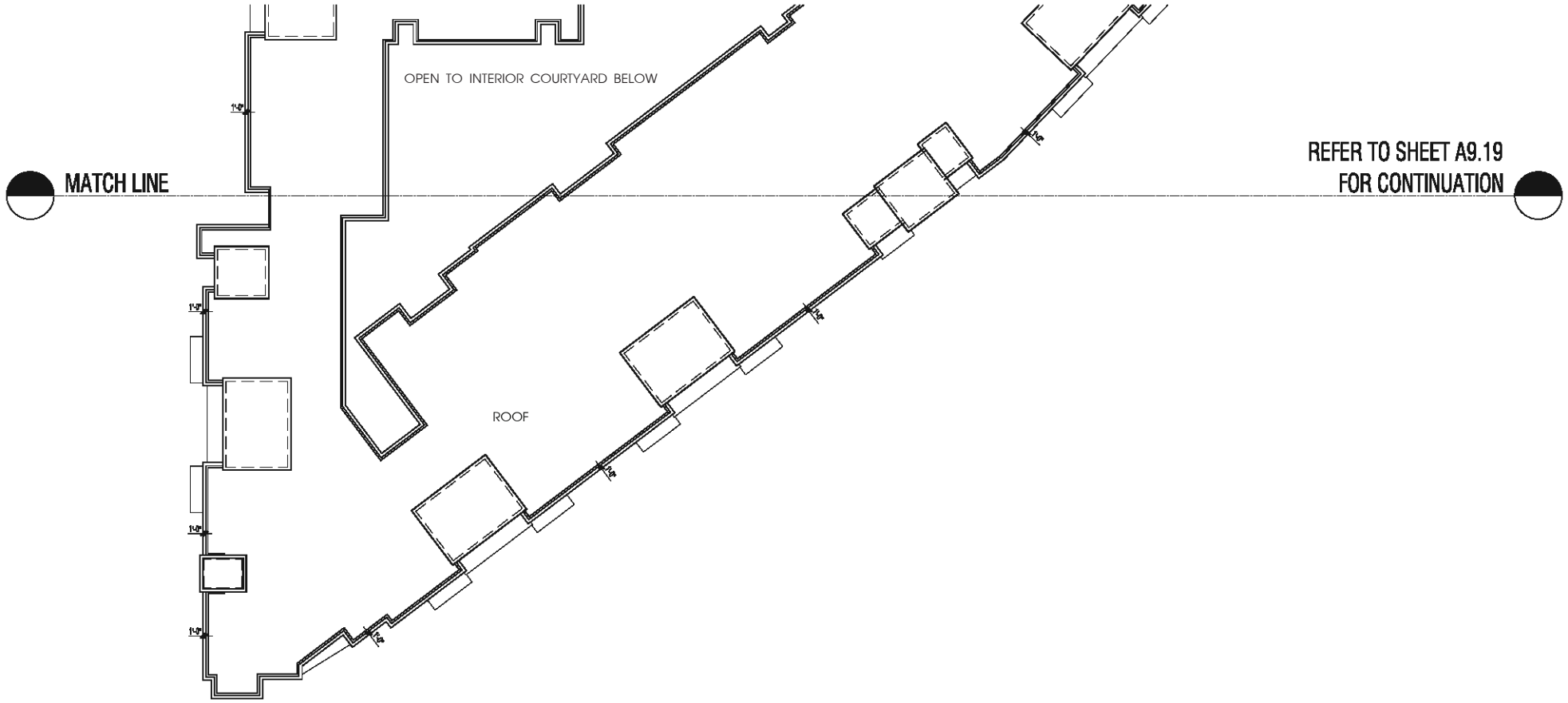
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PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
ROOF PLAN - SOUTH

A9-22

CONCEPT DESIGN

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WHA

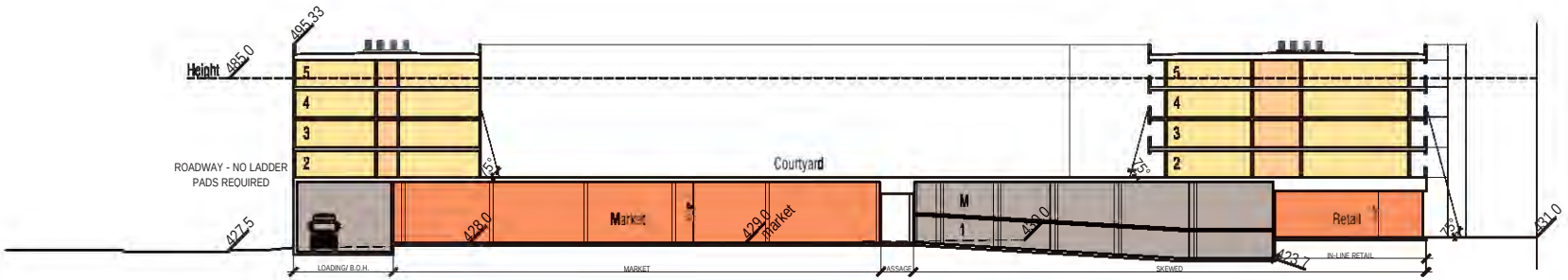
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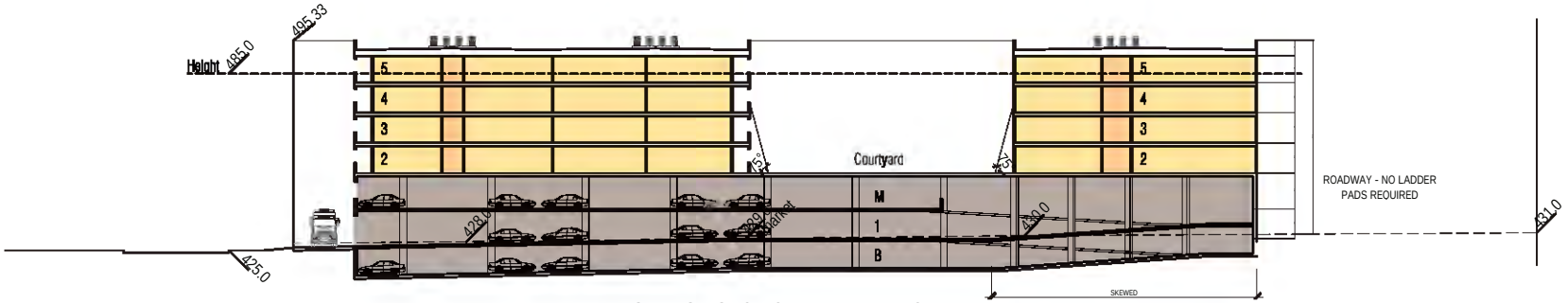
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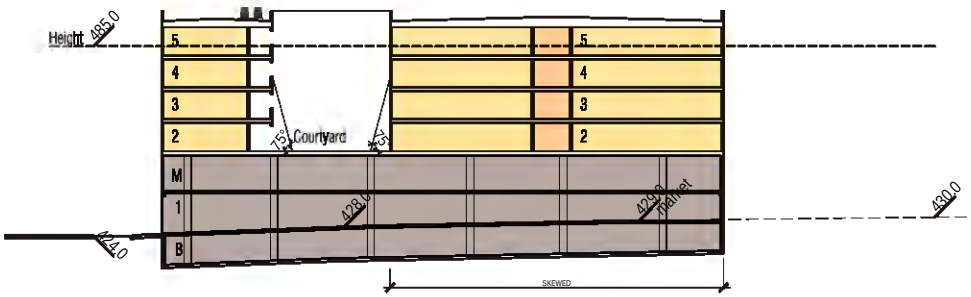
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TRANSVERSE SECTION AT RETAIL



TRANSVERSE SECTION AT PARKING



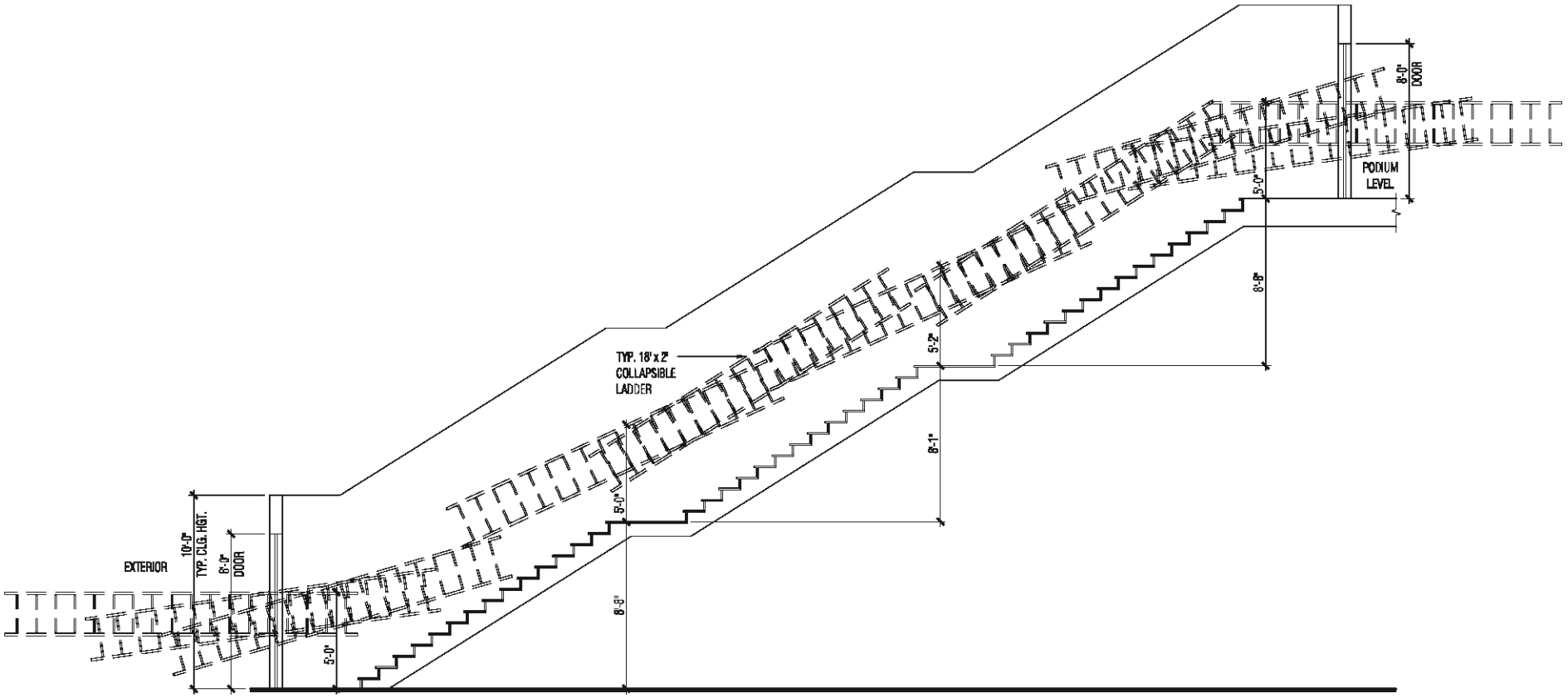
CROSS SECTION AT BASEMENT

PRODUCT 9 [PARCEL S1] - TYPE V STACKED FLAT CONDOS OVER GROCERY
CROSS SECTIONS

A9-23

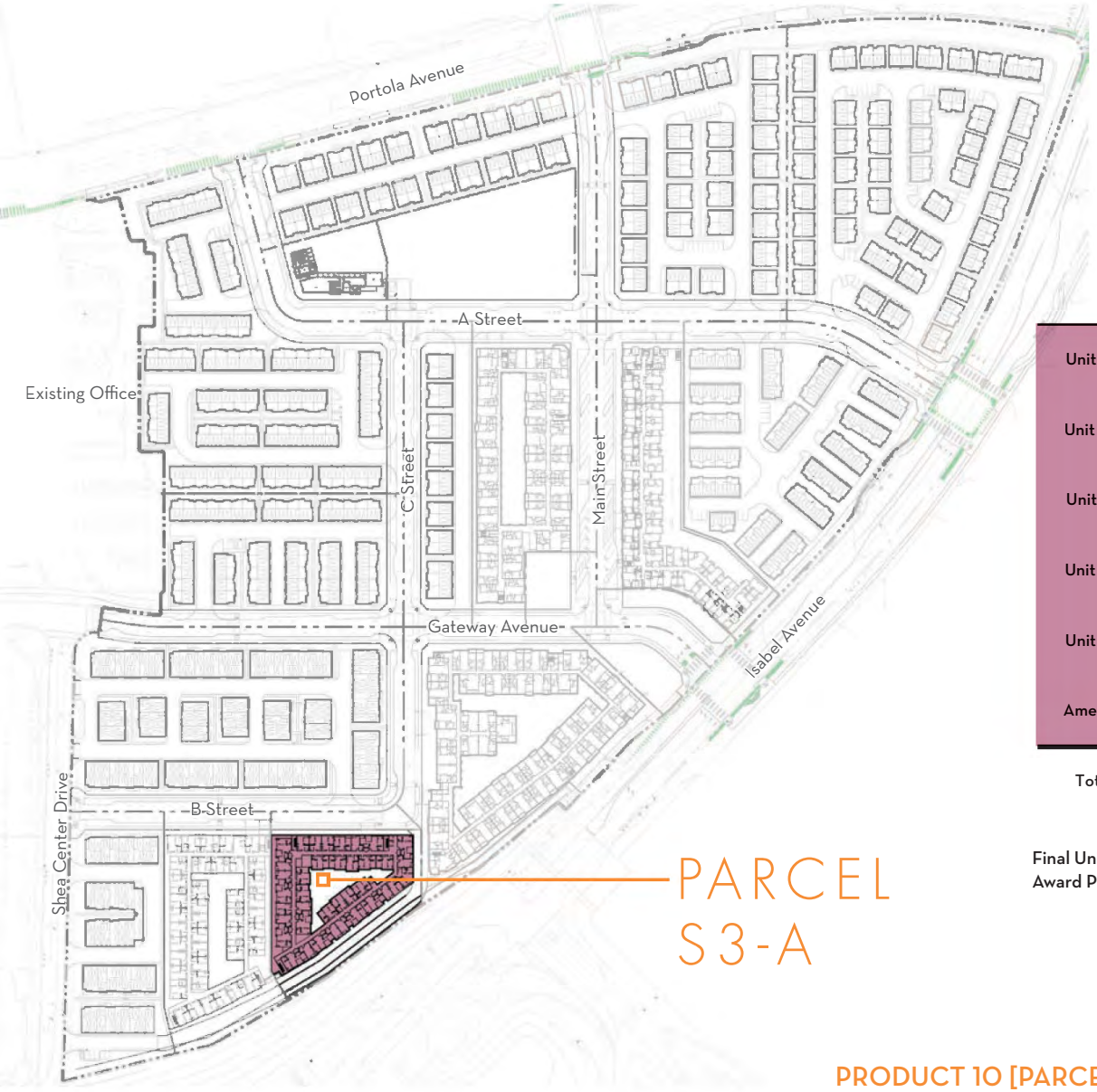
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FIREMAN'S STAIR SECTION

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	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	453	Studio	1.0	40	18,120
Unit A-2	533	1	1.0	32	17,056
Unit B-1	710	2	1.0	27	19,170
Unit B-2	786	2	1.0	13	10,218
Unit C-1	1,007	3	2.0	40	40,280
Amenity					2,442
Total				152	107,286

Final Unit Mix To Be Determined With TCAC Application and Award Process.

Height Limit: 485'*

Building Height: 491.0 MSL

min ± 47'-8"- max ± 54'-8"

Stories: 4 Stories over 2 Above Grade Levels of Parking.

See section for more information.

*Height above MSL

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW) PRODUCT ALLOCATION

A10-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.12 ACRES (NET)
TOTAL UNITS: 114
DENSITY: 102.2 UNITS/ ACRE

PRODUCT 10 - SITE S3-A

CO 3 STORIES OVER TWO LEVELS OF PARKING
LEVELS 1-2: TYPE I-A PODIUM
LEVELS 3-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM
MIXED USE OCCUPANCY: R-2, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

114 TOTAL UNITS
- 30 STUDIO; ONE BATH
- 24 ONE-BEDROOM; ONE BATH
- 30 TWO-BEDROOM; ONE BATH
- 30 THREE-BEDROOM; TWO BATH

AVERAGE UNIT SIZE: 691 S.F.

BUILDING AREA
- 70,849 SF. PARKING
- 2,442 AMENTIY
- 105,501 RESIDENTIAL
- 178,791 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 13,714 SF = 90 SF/UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING

MINIMUM PARKING SPACES: **	172 TOTAL SPACES
REQUIRED RESIDENTIAL:	(172) MIN
REQUIRED GUEST:	(0)
	** AB2345 STATE DENSITY BONUS LAW
PROVIDED PARKING SPACES:	178 TOTAL SPACES
PROVIDED RESIDENTIAL:	(174) SPACES
	(4) ADA SPACES
	(1) ADA VAN SPACE
	(71) RES 40% LP LEV 2
	(18) RES 10% LEV 2
	(4) VAN ACCESS
ON STREET PARKING:	(4) SPACES

BICYCLE PARKING

CENTER/CORE
REQUIRED
TOTAL REQUIRED SPACES = 76
.25/BEDROOM RESIDENTIAL SPACES = 68
.05/UNITS VISTOR SPACES = 8

PROVIDED
76 TOTAL SPACES PROVIDED IN SECURED AREA
(68) RESIDENTIAL SPACES
(8) VISITOR SPACES

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
SITE PLAN

A10-2

CONCEPT DESIGN

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Key Map

CONCEPT DESIGN For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW) PERSPECTIVE

A10-3

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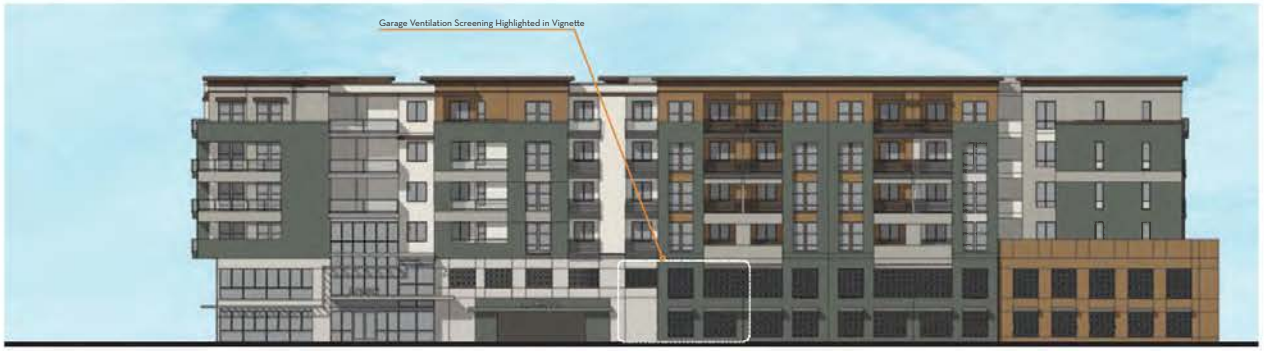
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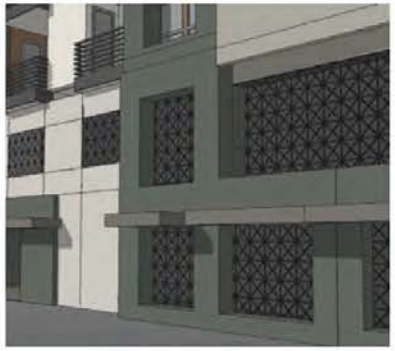
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NORTH ELEVATION



PARKING GARAGE VENTILATION SCREENING





SOUTH ELEVATION

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
NORTH & SOUTH ELEVATIONS

A10-4

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WEST ELEVATION





EAST ELEVATION

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
EAST & WEST ELEVATIONS

A10-5

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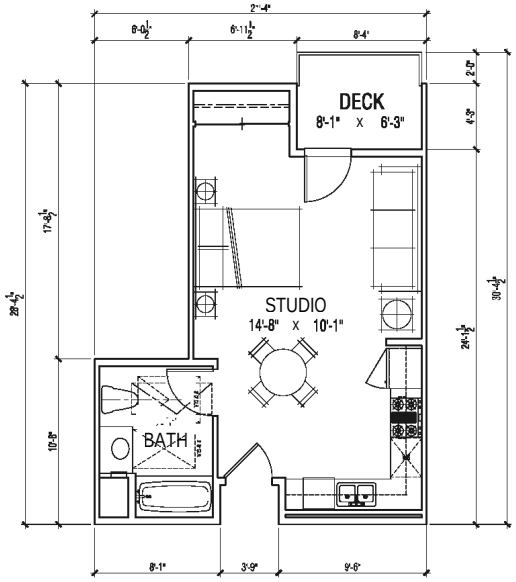
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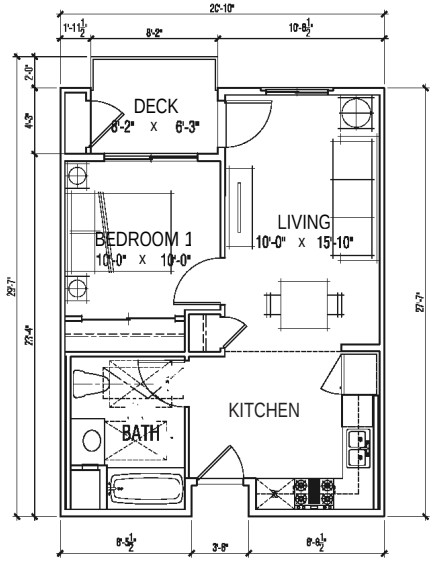
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UNIT A-1

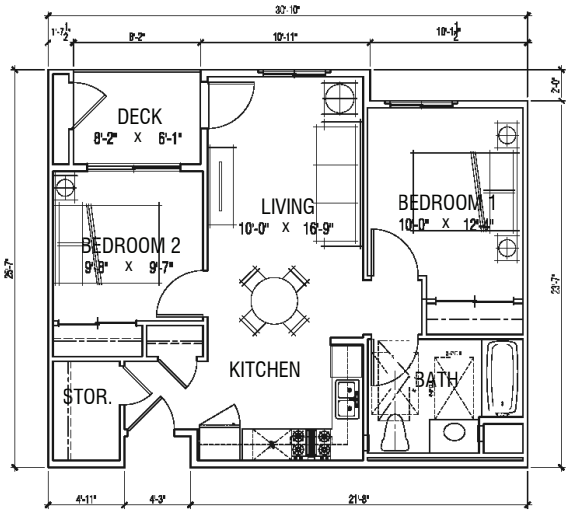
Studio
Unit: 453 sf
Deck: 50 sf



UNIT A-2

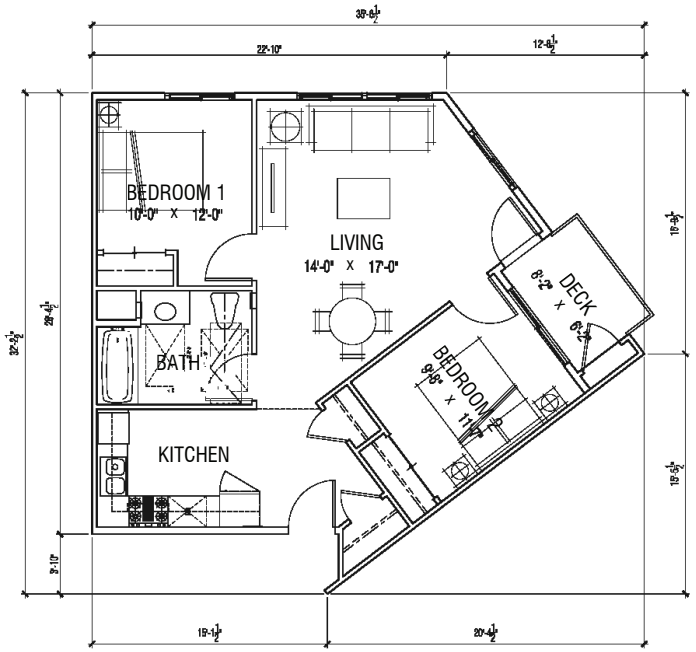
1 Bdrm | 1 Bath
Unit: 533 sf
Deck: 50 sf

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UNIT B-1

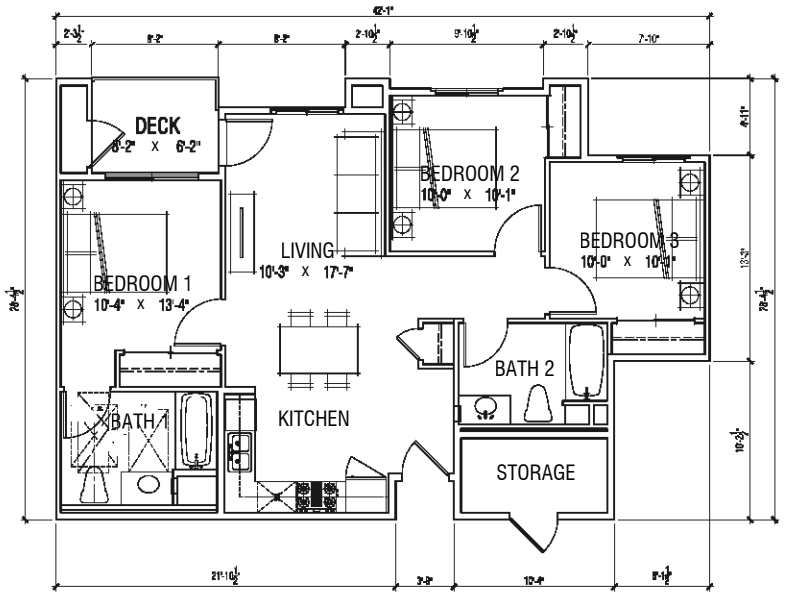
2 Bdrm | 1 Bath
Unit: 710 sf
Deck: 50 sf



UNIT B-2

2 Bdrm | 1 Bath
Unit: 786 sf
Deck: 50 sf

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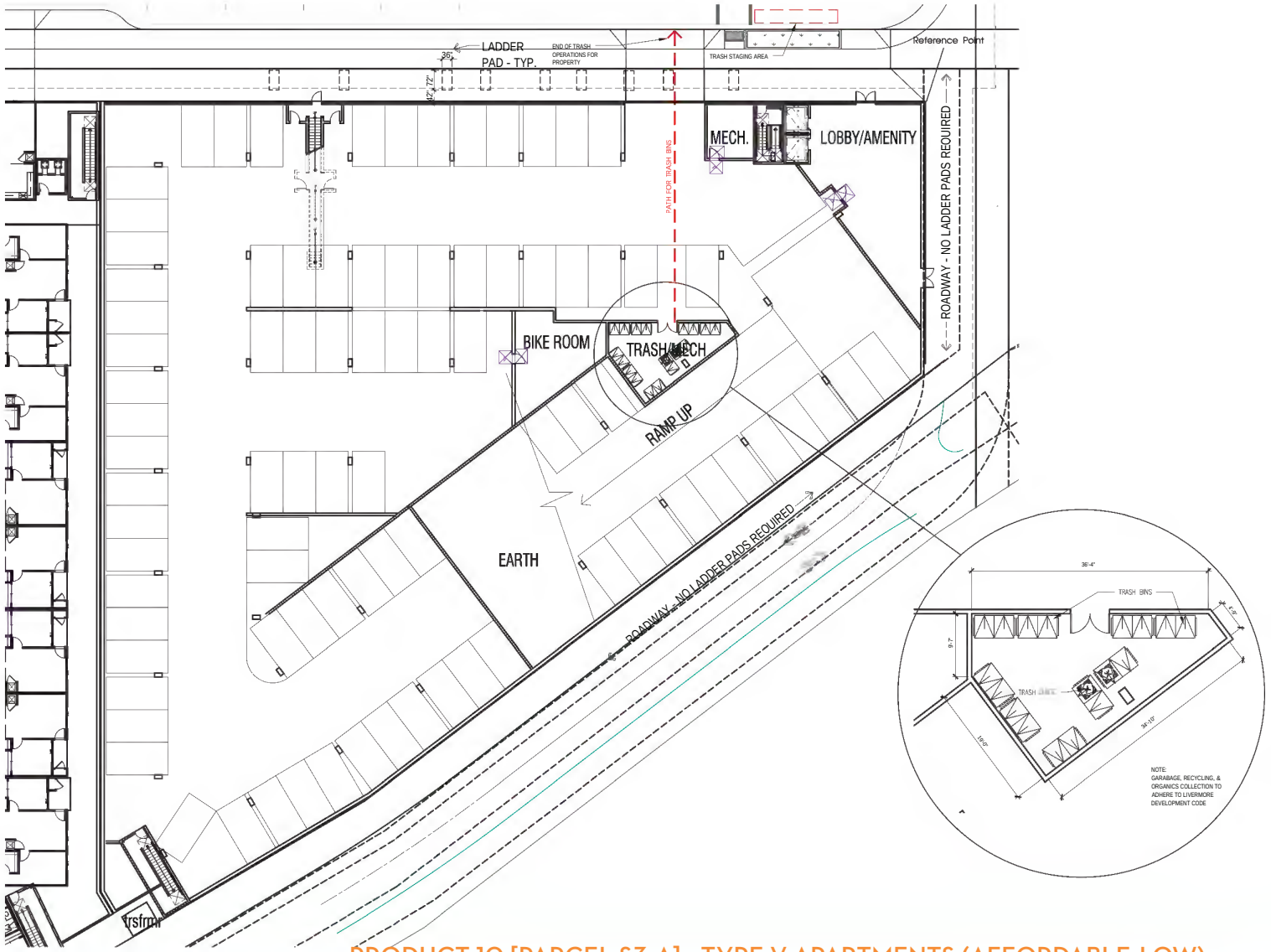


UNIT C-1

3 Bdrm | 2 Bath
Unit: 1007 sf
Deck: 50 sf

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EXHIBIT C



PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
GROUND LEVEL PLAN

A10-9

CONCEPT DESIGN

ISABEL PORTOLA
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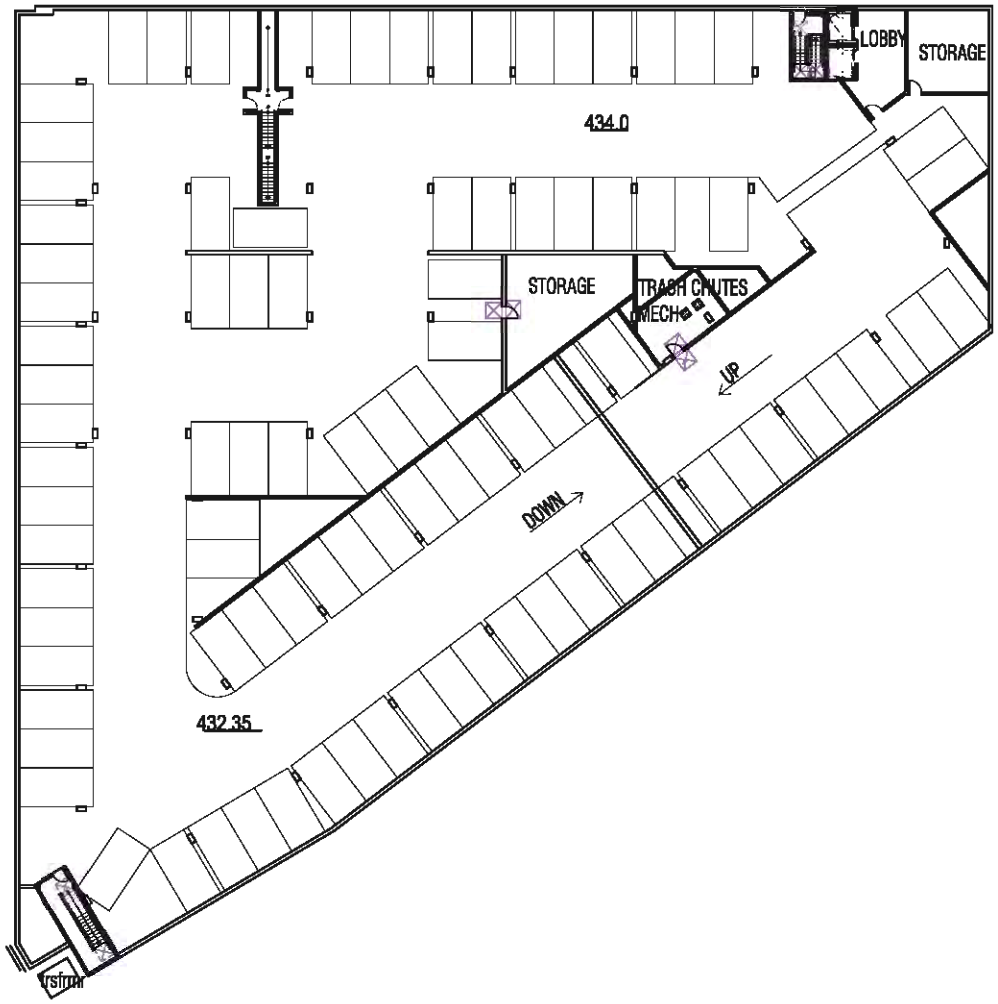
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PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
UPPER PARKING LEVEL

A10-10

CONCEPT DESIGN

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PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
PODIUM LEVEL PLAN

A10-11

CONCEPT DESIGN

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PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
LEVELS 3 - 5 FLOOR PLAN

A10-12

CONCEPT DESIGN

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OWNER, LLC

WHA.

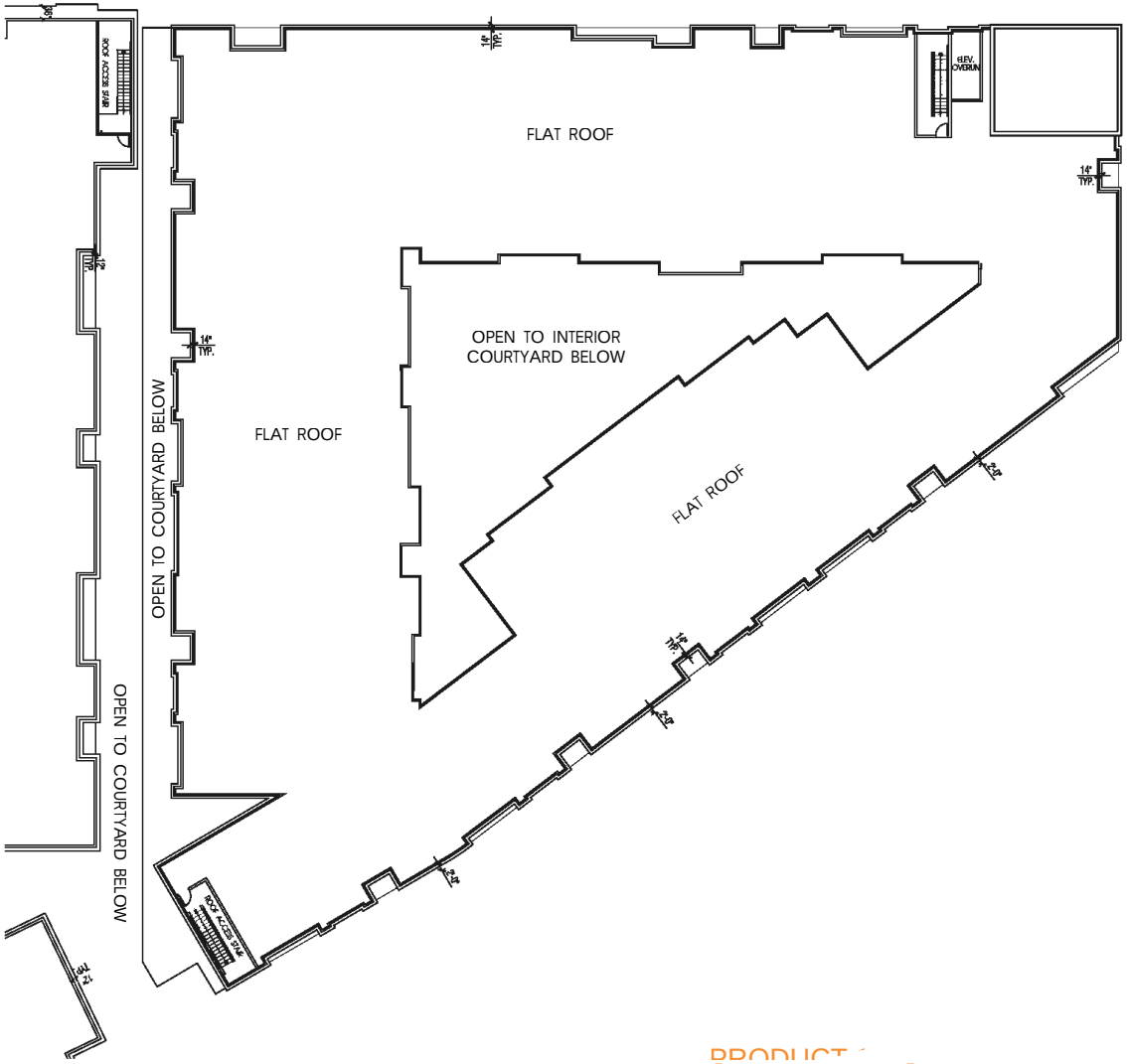
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2653



PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)

ROOF PLAN

A10-13

CONCEPT DESIGN

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WHA

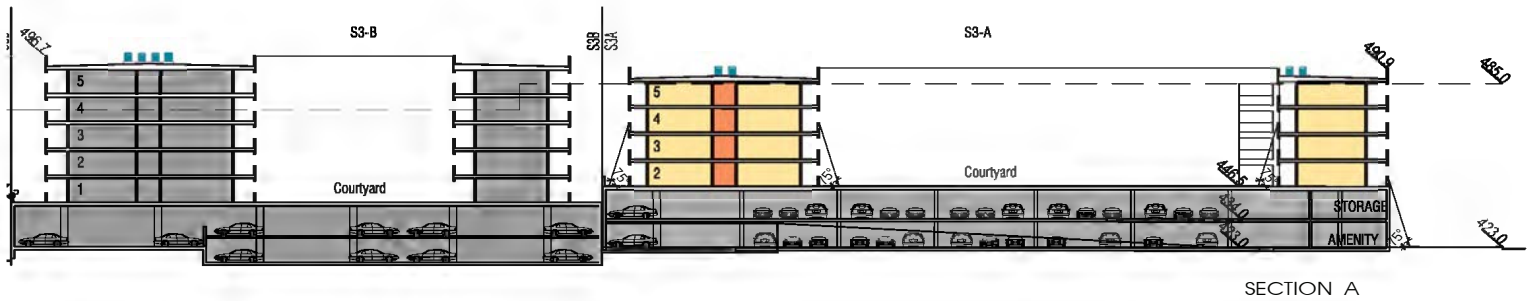
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SECTION A

CROSS SECTION AT COURTYARD

CONCEPT DESIGN

PRODUCT 10 [PARCEL S3-A] - TYPE V APARTMENTS (AFFORDABLE-LOW)
CROSS SECTION

A10-14

ISABEL PORTOLA
OWNER, LLC

WHA

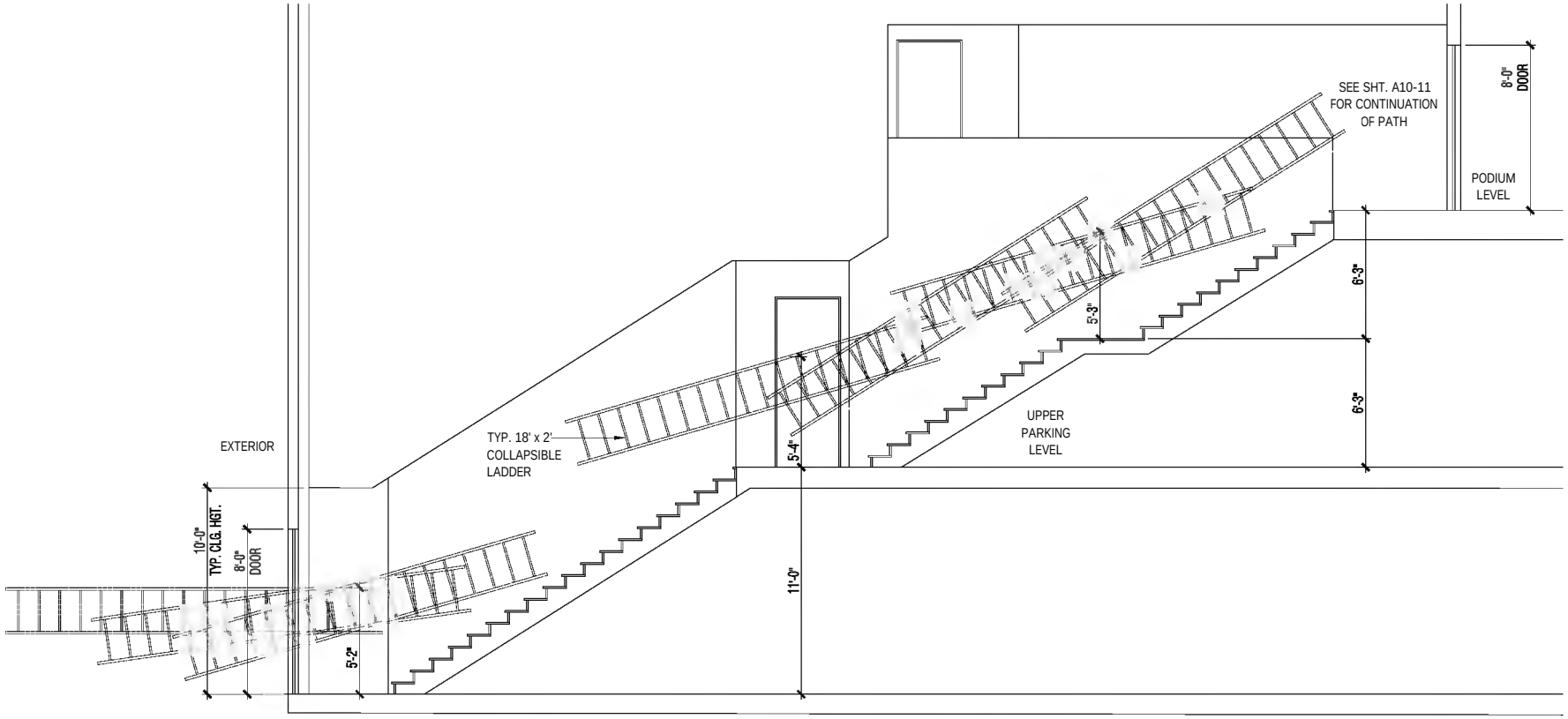
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FIREMAN'S STAIR SECTION

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	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	727	1	1.0	120	87,240
Unit B-1	950	2	2.0	80	76,000
Amenity					5,093
Total				200	168,333

Height Limit: 475' to 485'*

Building Height: 495.5 MSL
68'-5"to ± 83'

Stories: 5 Stories over 2' Levels of Parking

*Height above MSL

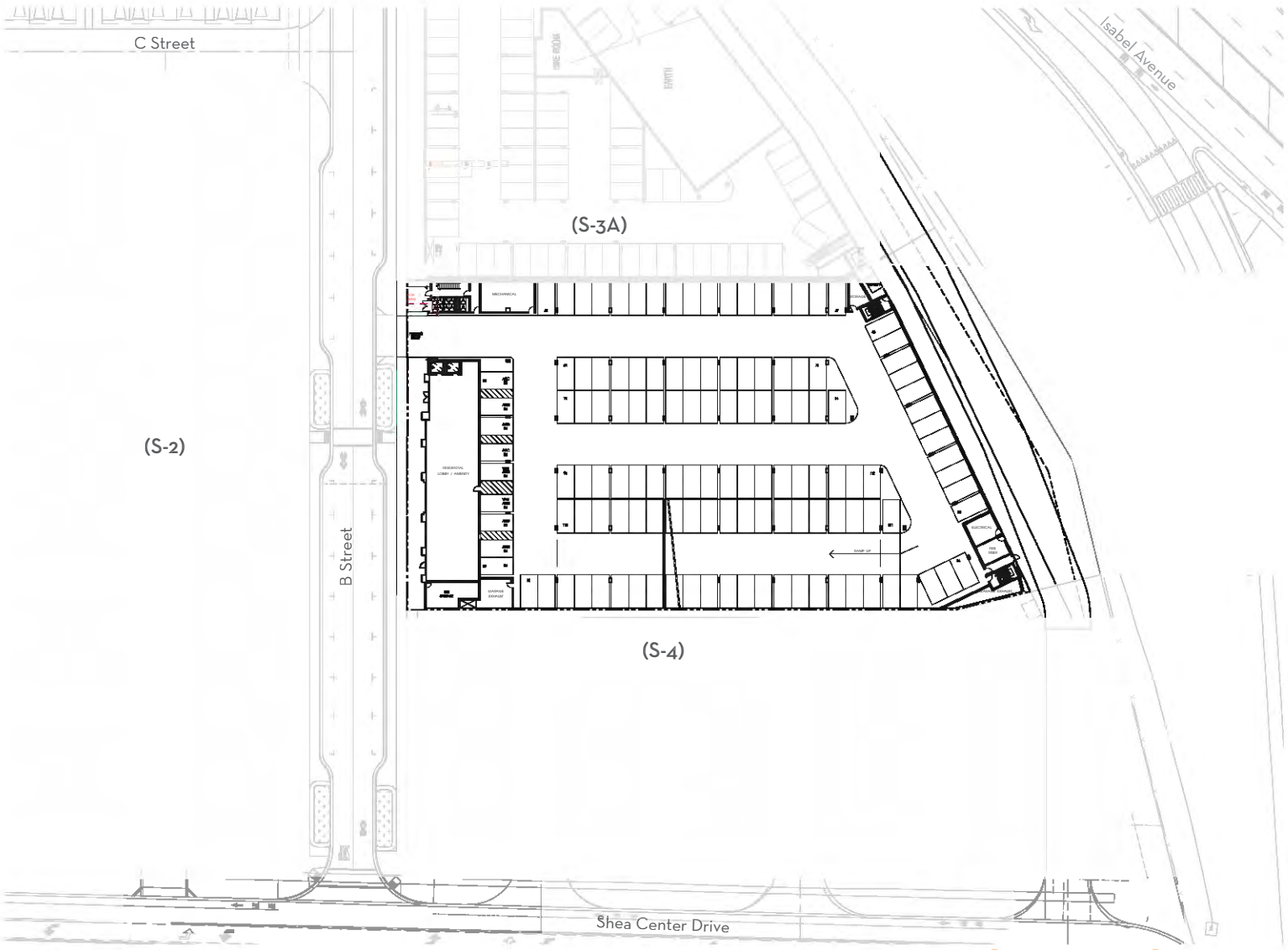
CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III APARTMENTS
PRODUCT ALLOCATION

A12-1

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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.38 ACRES (NET)
TOTAL UNITS: 200
DENSITY: 144.9 UNITS/ ACRE

PRODUCT 12 - SITE S3-B

5 STORIES OVER 2 LEVELS OF PARKING
LEVEL 1-2: TYPE I-A PODIUM
LEVEL 3-7: TYPE III-A (NO FIRE LADDER STAIRS REQ'D)
NFPA 13 SPRINKLER SYSTEM
MIXED USE OCCUPANCY: R-2, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

200 TOTAL UNITS

- 120 ONE-BEDROOM; ONE BATH
- 80 TWO-BEDROOM; TWO-BATH

AVERAGE UNIT SIZE: 816 S.F.

BUILDING AREA
- 105,273 SF PARKING
- 5,093 AMENTIY
- 214,395 RESIDENTIAL
- 324,761 TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 23,075 SF = 115 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING
- MINIMUM REQUIRED:
- 220 RESIDENTIAL SPACES
- 25 GUEST SPACES

- 245 TOTAL REQUIRED SPACES

- PROVIDED:
- 220 RESIDENTAL SPACES
  - (5) ADA SPACES
  - (1) ADA VAN SPACE
  - (98) EV RESIDENTIAL - 40% LP LEV 2
  - (25) EV RESIDENTIAL - 10% LEV 2
    - (5) VAN EV ACCESS

- 25 GUEST PARKING
  - (3) ON STREET PARKING
  - (2) ADA SPACES
  - (1) ADA VAN SPACE

- 245 TOTAL PROVIDED SPACES

BICYCLE PARKING

- REQUIRED:
  - .25/BEDROOM RESIDENTIAL SPACES = 70
  - .05/UNITS VISITOR SPACES = 10

- PROVIDED:
  - 80 TOTAL SPACES PROVIDED IN SECURED AREA
    - (70) RESIDENTIAL SPACES
    - (10) VISTOR SPACES

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
SITE PLAN

A12-2

CONCEPT DESIGN

ISABEL PORTOLA
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WHA

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
PERSPECTIVE LOOKING NORTH WEST

A12-3

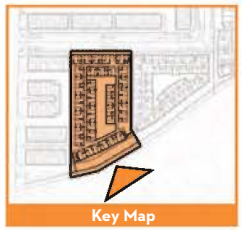
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SOUTH ELEVATION





NORTH ELEVATION



BRICK DETAILING

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
NORTH & SOUTH ELEVATIONS

A12-4

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EAST ELEVATION



WEST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
EAST & WEST ELEVATIONS

A12-5

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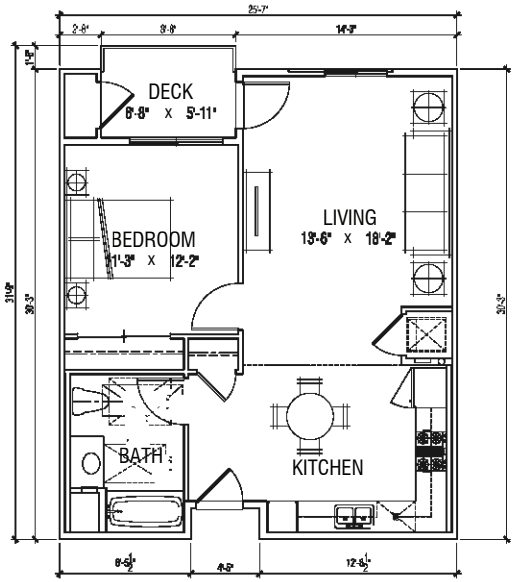
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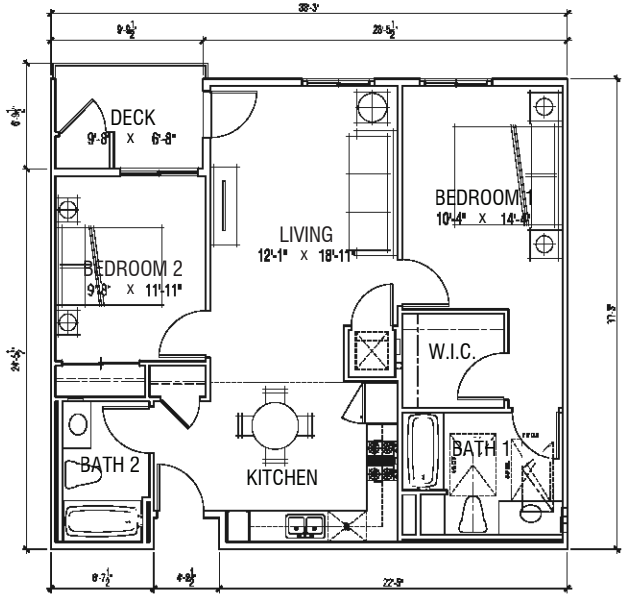
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UNIT A-1

1 Bdrm | 1 Bath
Unit: 727 sf
Deck: 50 sf

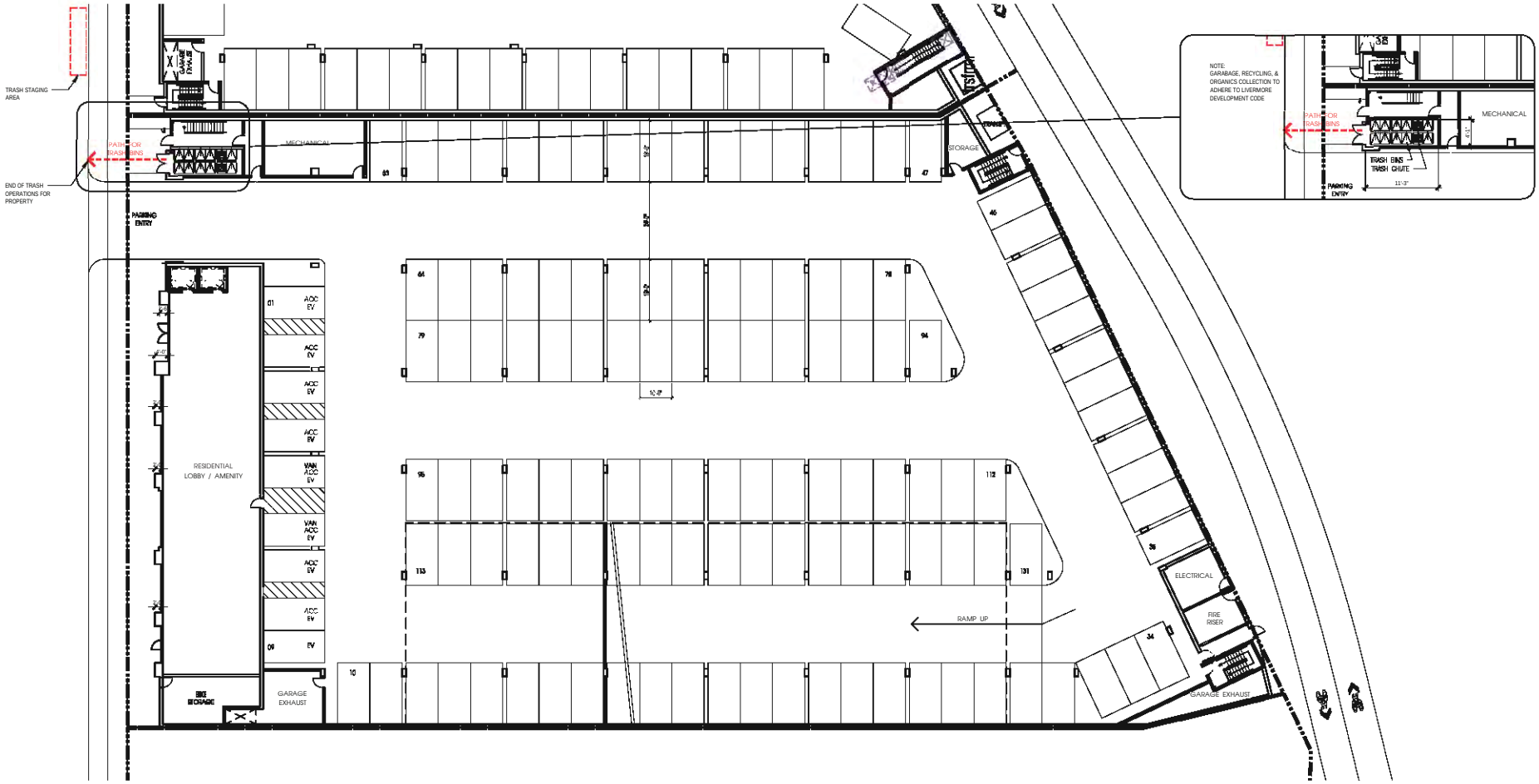


UNIT B-1

2 Bdrm | 2 Bath
Unit: 950 sf
Deck: 56 sf

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EXHIBIT C



PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
GROUND FLOOR LEVEL

A12-7

CONCEPT DESIGN

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OWNER, LLC

WHA

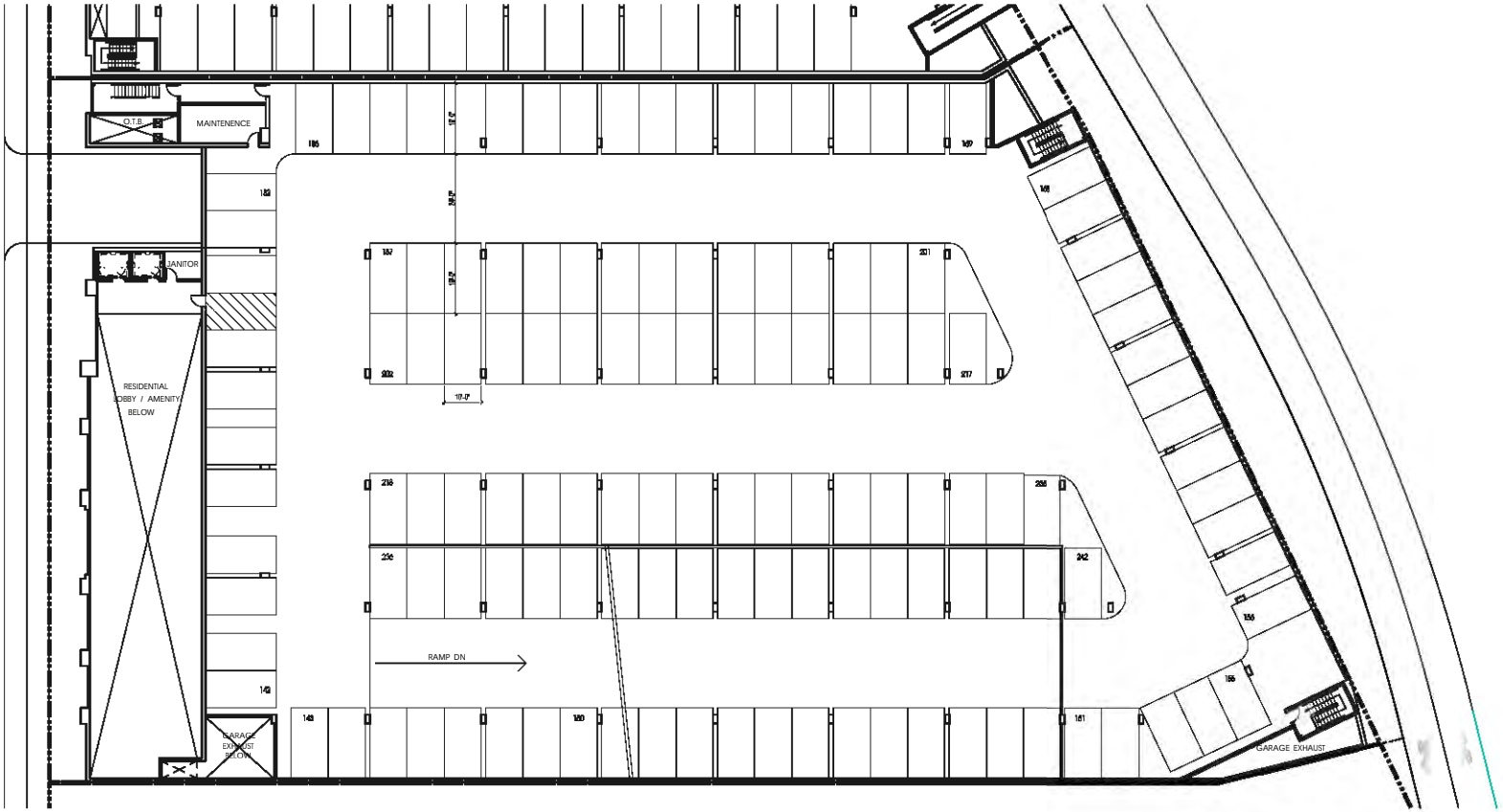
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PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
SECOND LEVEL PARKING PLAN

A12-8

CONCEPT DESIGN

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WHA.

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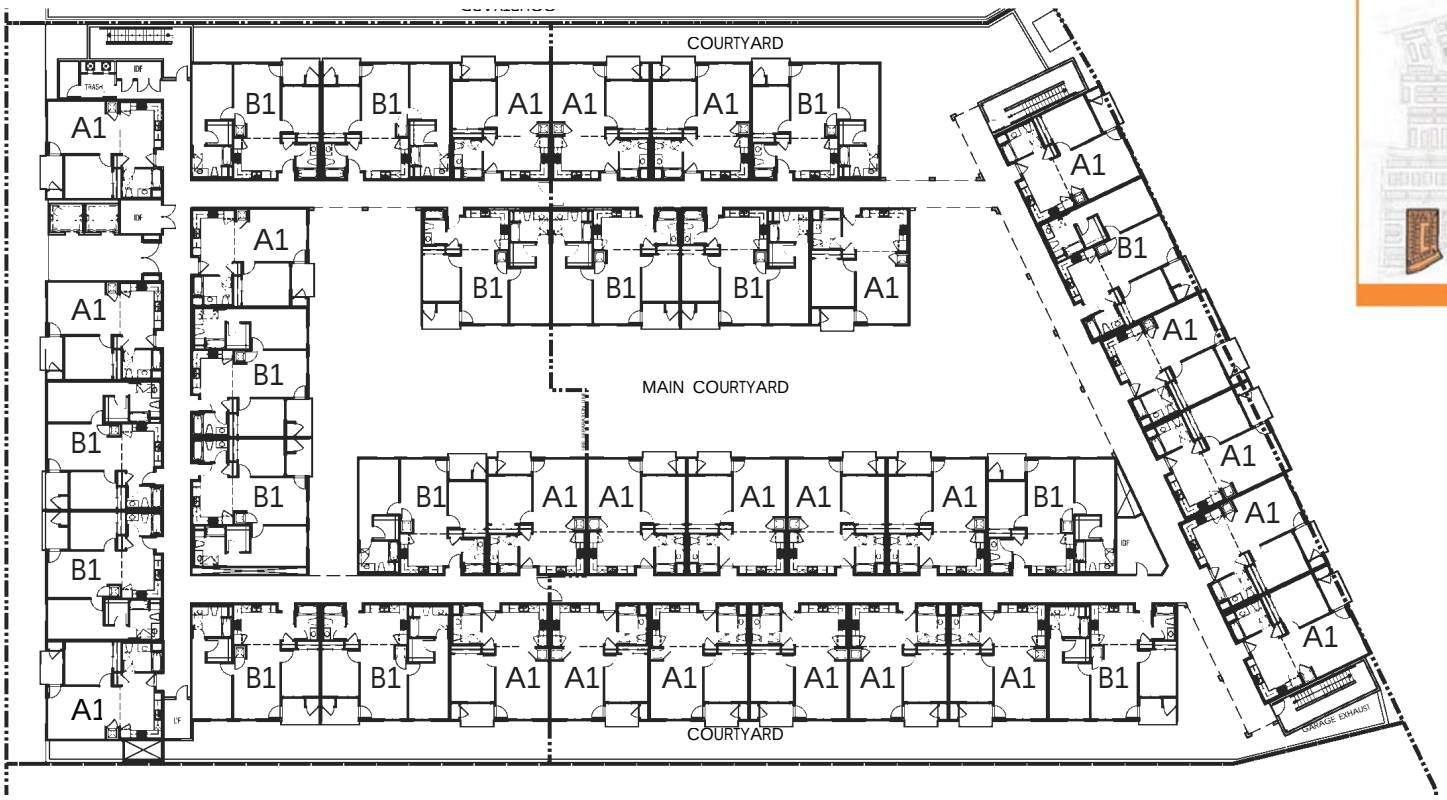
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EXHIBIT C





CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
PODIUM LEVEL PLAN

A12-9

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WHA.

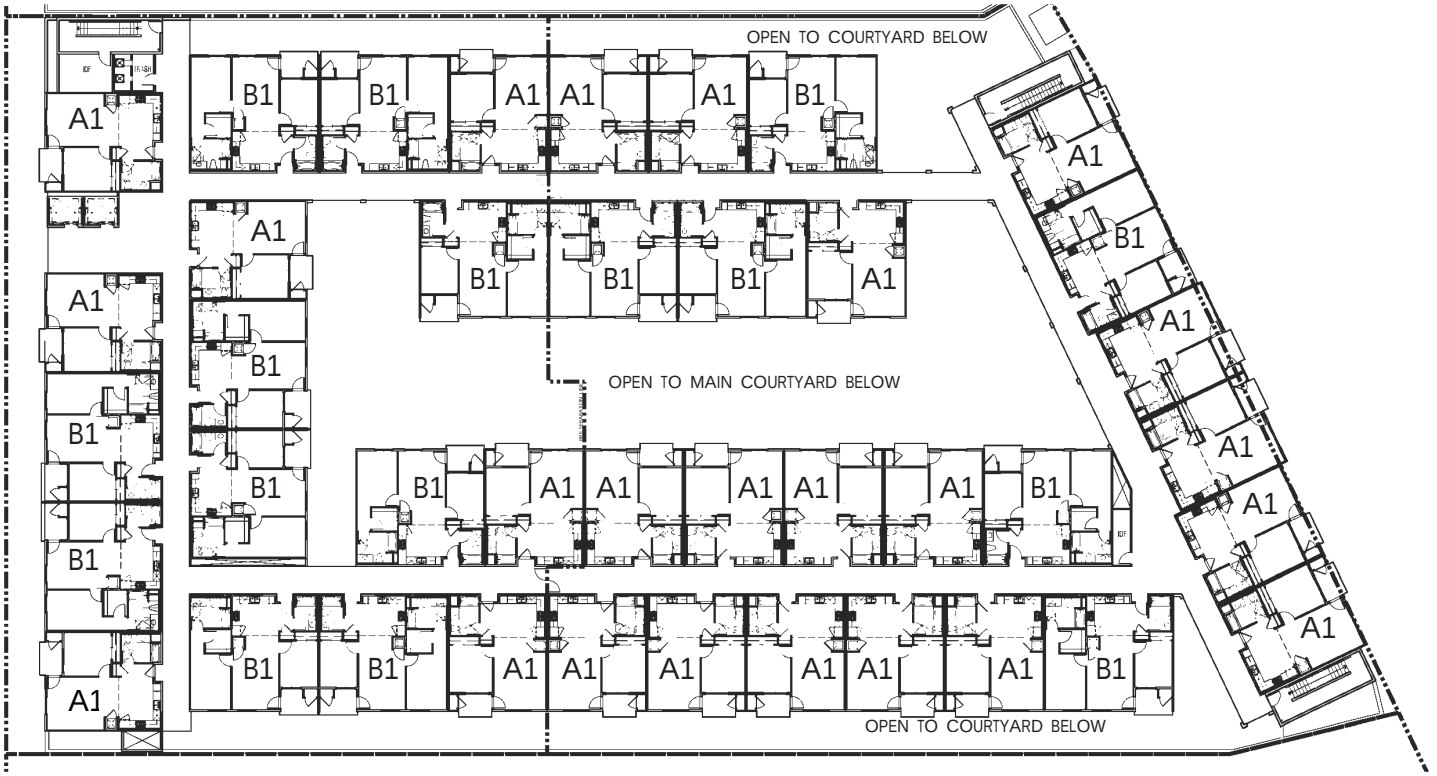
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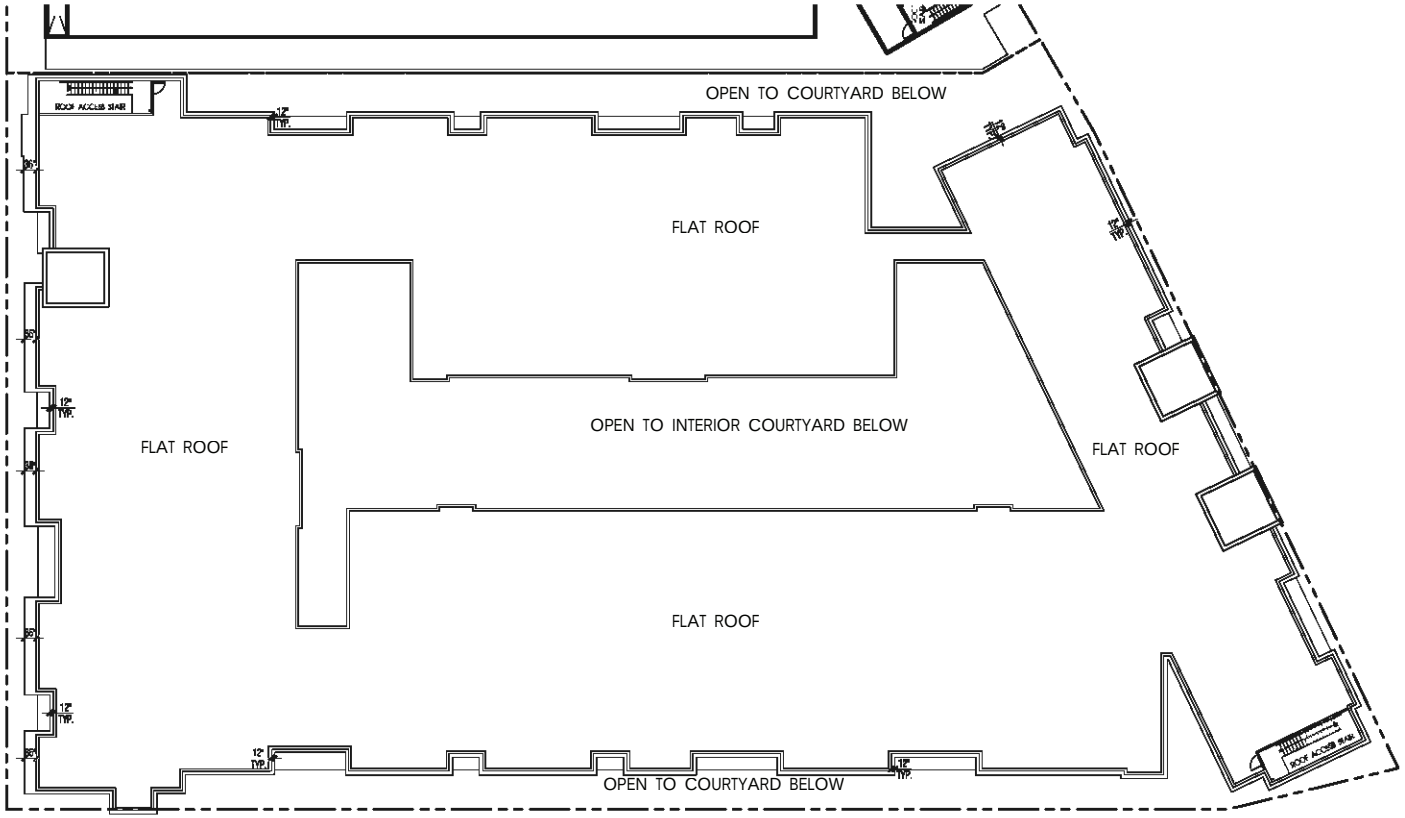


PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
LEVELS 4-7 FLOOR PLAN

A12-10

CONCEPT DESIGN

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CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
ROOF PLAN

A12-11

ISABEL PORTOLA
OWNER, LLC

WHA

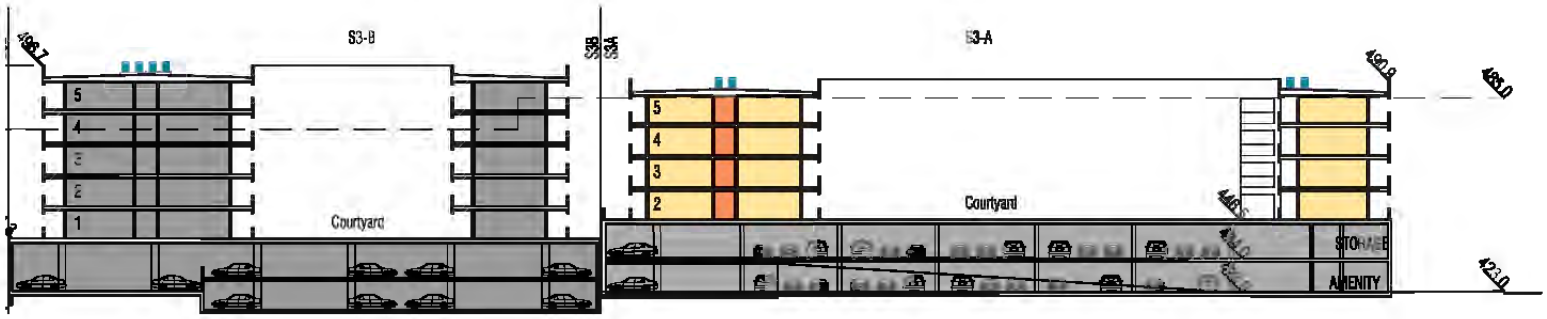
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SECTION A

CROSS SECTION AT COURTYARD

CONCEPT DESIGN

PRODUCT 12 [PARCEL S3-B] - TYPE III PODIUM APARTMENTS
CROSS SECTION

A12-12

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OWNER, LLC

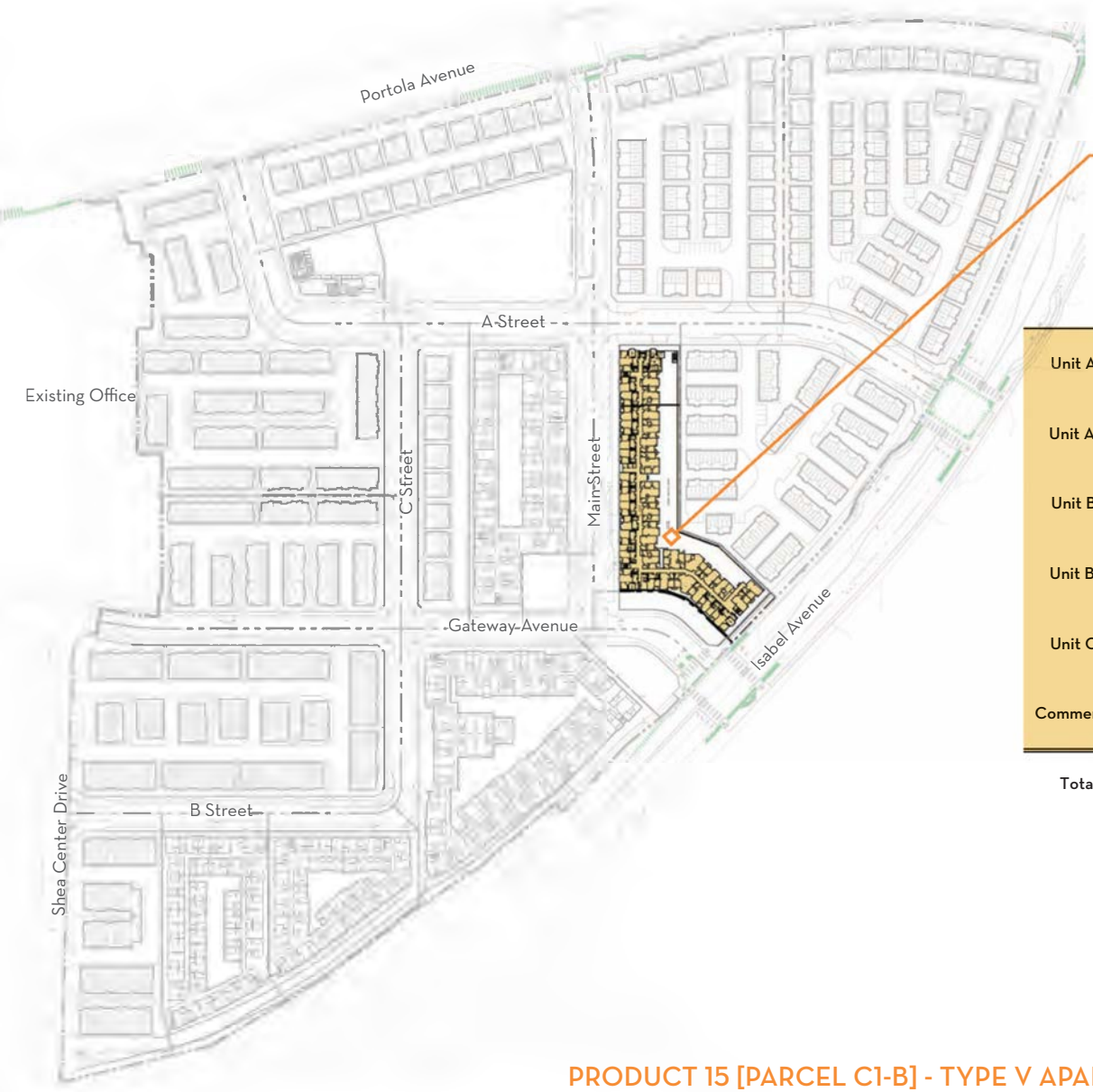
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PARCEL C1-B

	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	731	1	1.0	63	46,053
Unit A-2	1,005	1	1.0	3	3,015
Unit B-1	950	2	2.0	24	22,800
Unit B-2	1,148	2	2.5	3	3,444
Unit C-1	1,241	3	2.5	21	26,061
Commercial					19,294
Total				114	120,667

Height Limit: 495'*

Building Height: 488.9 MSL ± 57' to ± 62'

Stories: 3 Stories over 1 + Partial Basement

Retail Floor Ceiling: >14' Avg. Ground (Sloping Site)

*Height above MSL

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE) PRODUCT ALLOCATION

A15-1

CONCEPT DESIGN

ISABEL PORTOLA OWNER, LLC

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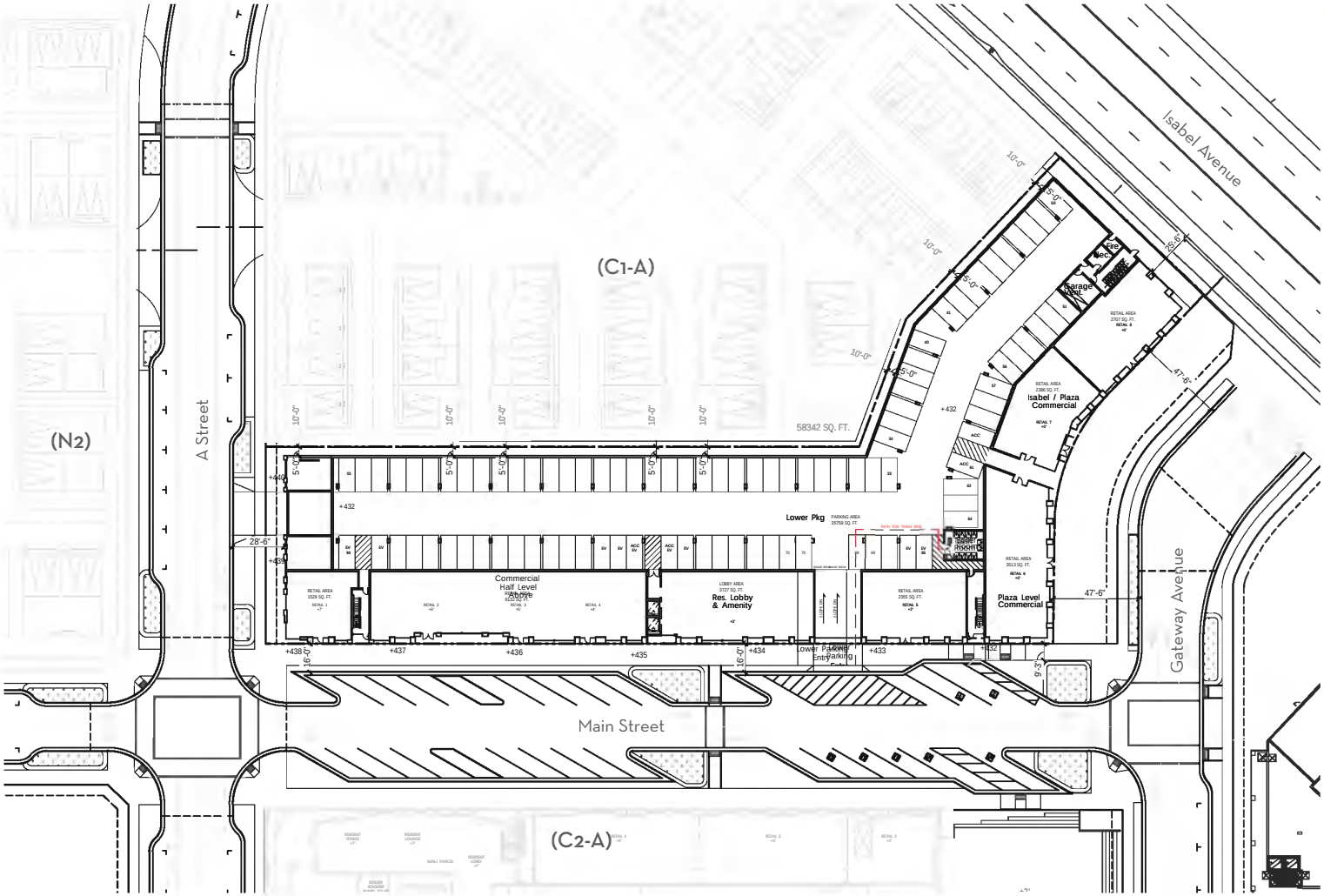
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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.49 ACRES (NET)
TOTAL UNITS: 114
DENSITY: 76.6 UNITS PER ACRE

3 STORIES OVER 1 + PARTIAL BASEMENT
LEVEL 1-2: TYPE I-A PODIUM
LEVEL 3-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

114 TOTAL UNITS
- 66 ONE-BEDROOM; ONE-BATH
- 27 TWO-BEDROOM ; TWO-BATH
- 21 THREE-BEDROOM ; TWO-BATH

AVERAGE UNIT SIZE: 889 SF

BUILDING AREA
- 72,655 SF PARKING
- 19,294 SF COMMERCIAL
- 3,226 SF AMENITY
- 127,143 SF RESIDENTIAL
- 222,318 SF TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 14,618 SF = 128 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING

MINIMUM REQUIRED:
- 127 RESIDENTIAL SPACES
- 14 GUEST SPACES
- 33 COMMERCIAL

174 TOTAL REQUIRED SPACES

PROVIDED:
158 RESIDENTAL SPACES
- (4) ADA SPACES
- (1) ADA VAN SPACE

14 GUEST PARKING
- (1) ADA SPACES
- (1) ADA VAN SPACE

33 COMMERICAL PARKING
- (13) ON STREET SPACES
- (2) ADA SPACES
- (1) ADA VAN SPACE

205 TOTAL PROVIDED SPACES
- (8) EV COMMERCIAL "CAPABLE"
  - (2) EVSE
  - (1) ADA VAN
  - (1) ADA STD
- (69) EV RESIDENTIAL 40% LP LEV 2
- (17) EV RESIDENTIAL 10% LEV 2
  - (4) VAN ACCESS

BICYCLE PARKING

CENTER/CORE
REQUIRED
- TOTAL REQUIRED SPACES = 69
- .25/BEDROOM RESIDENTIAL SPACES = 46
- .05/UNITS VISTOR SPACES = 6
- NBHD COMMERCIAL & GROUND FLOOR FLEX REQUIRED: 1:1400 SF = 17

PROVIDED
69 TOTAL SPACES PROVIDED IN SECURED AREA
- (46) RESIDENTIAL SPACES
- (6) VISITOR SPACES
- (17) NBHD COMMERCIAL & GROUND FLOOR FLEX SPACES

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
SITE PLAN

A15-2

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

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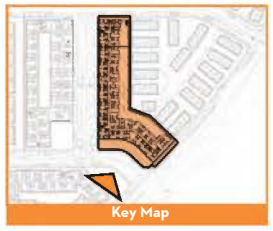
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Key Map

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PERSPECTIVE

A15-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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CONCEPT DESIGN

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PERSPECTIVE | MAIN ENTRY VIEW

A15-4

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SOUTH ELEVATION



BRICK DETAILING AT LOBBY ENTRANCE



WEST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
SOUTH & WEST ELEVATIONS

A15-5

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PARKING GARAGE VENTILATION SCREENING

NORTH ELEVATION



EAST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
NORTH & EAST ELEVATIONS

A15-6

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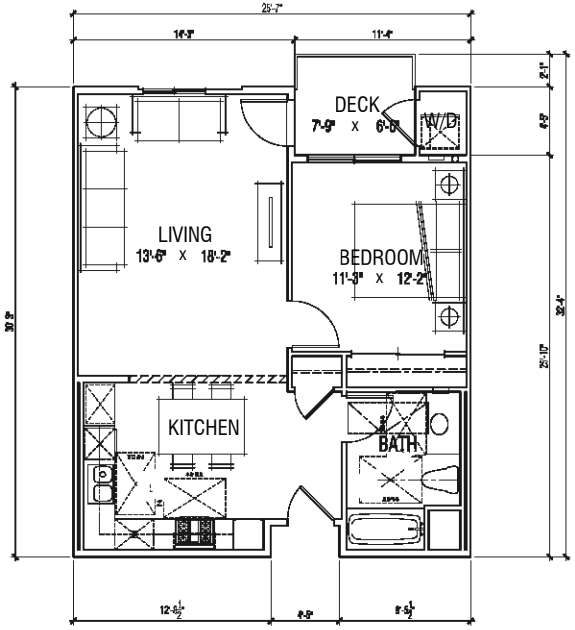
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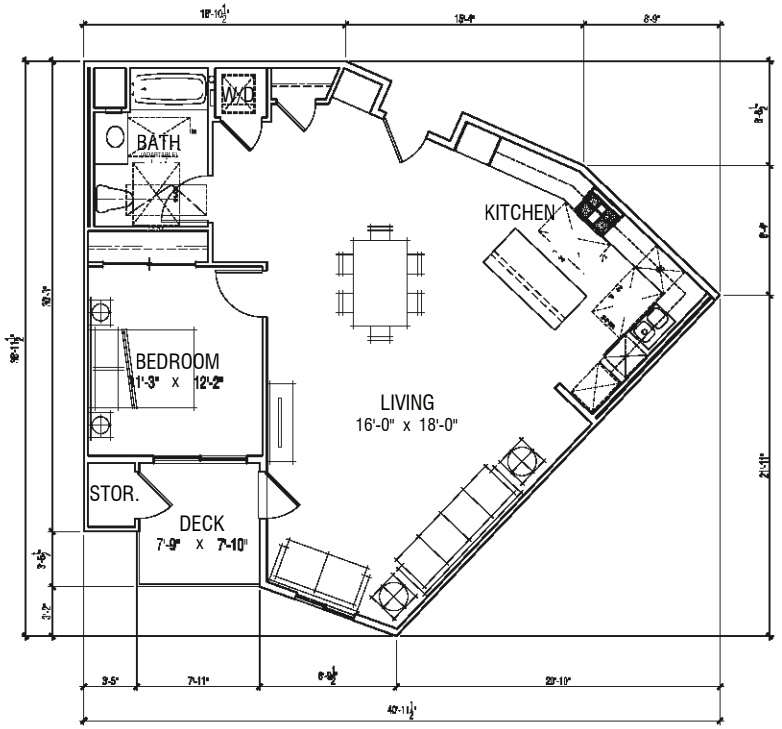
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UNIT A-1

1 Bdrm | 1 Bath
Unit: 731 sf
Deck: 50 sf

UNIT A-2

1 Bdrm | 1 Bath
Unit: 1005 sf
Deck: 62 sf

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
A-1, A-2 UNIT FLOOR PLANS

A15-7

CONCEPT DESIGN

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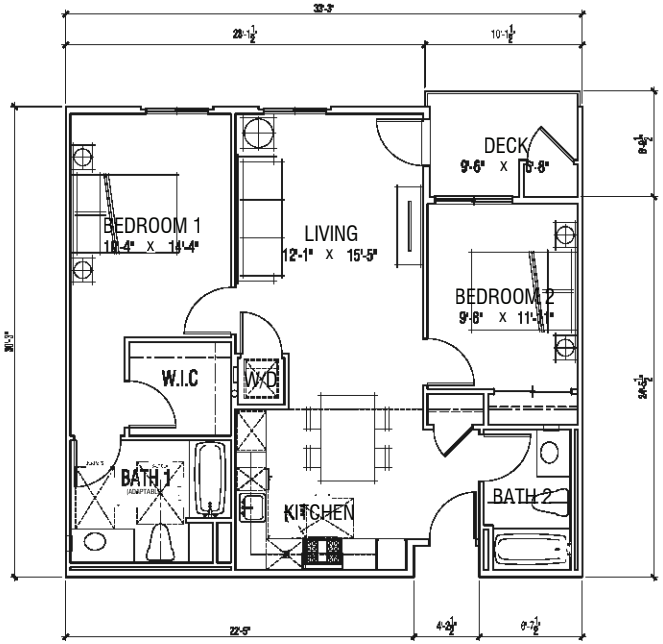
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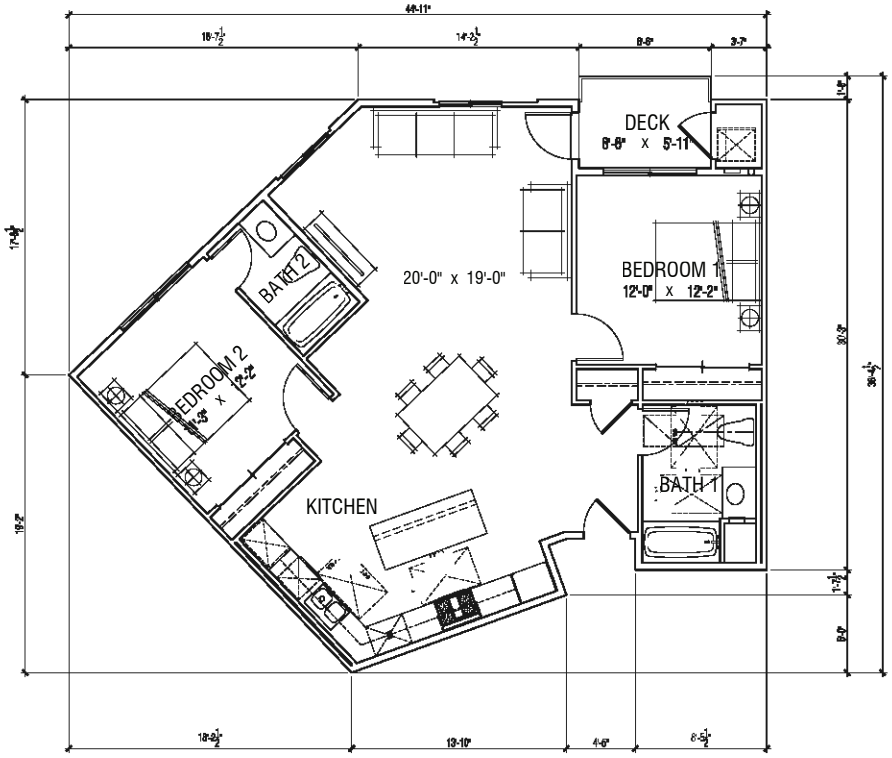
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UNIT B-1

2 Bdrm | 2 Bath
Unit: 950 sf
Deck: 54 sf

UNIT B-2

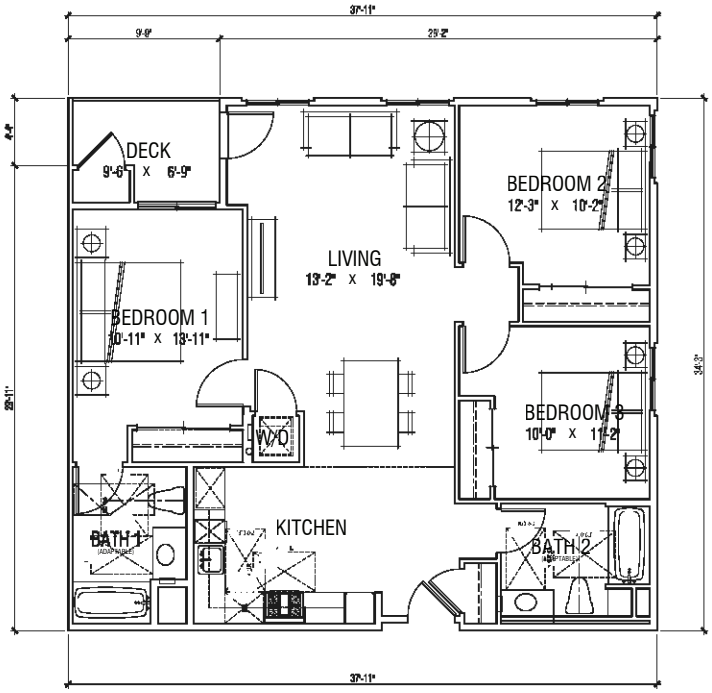
2 Bdrm | 2 Bath
Unit: 1,148 sf
Deck: 50 sf

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
B-1, B-2 UNIT FLOOR PLANS

A15-8

CONCEPT DESIGN

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UNIT C-1

3 Bdrm | 2 Bath
Unit: 1,241 sf
Deck: 54 sf

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EXHIBIT C



Note: Subject to change at Final Site & Design Review

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
LOWER PARKING LEVEL PLAN

A15-10

CONCEPT DESIGN

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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
UPPER PARKING LEVEL PLAN

A15-11

CONCEPT DESIGN

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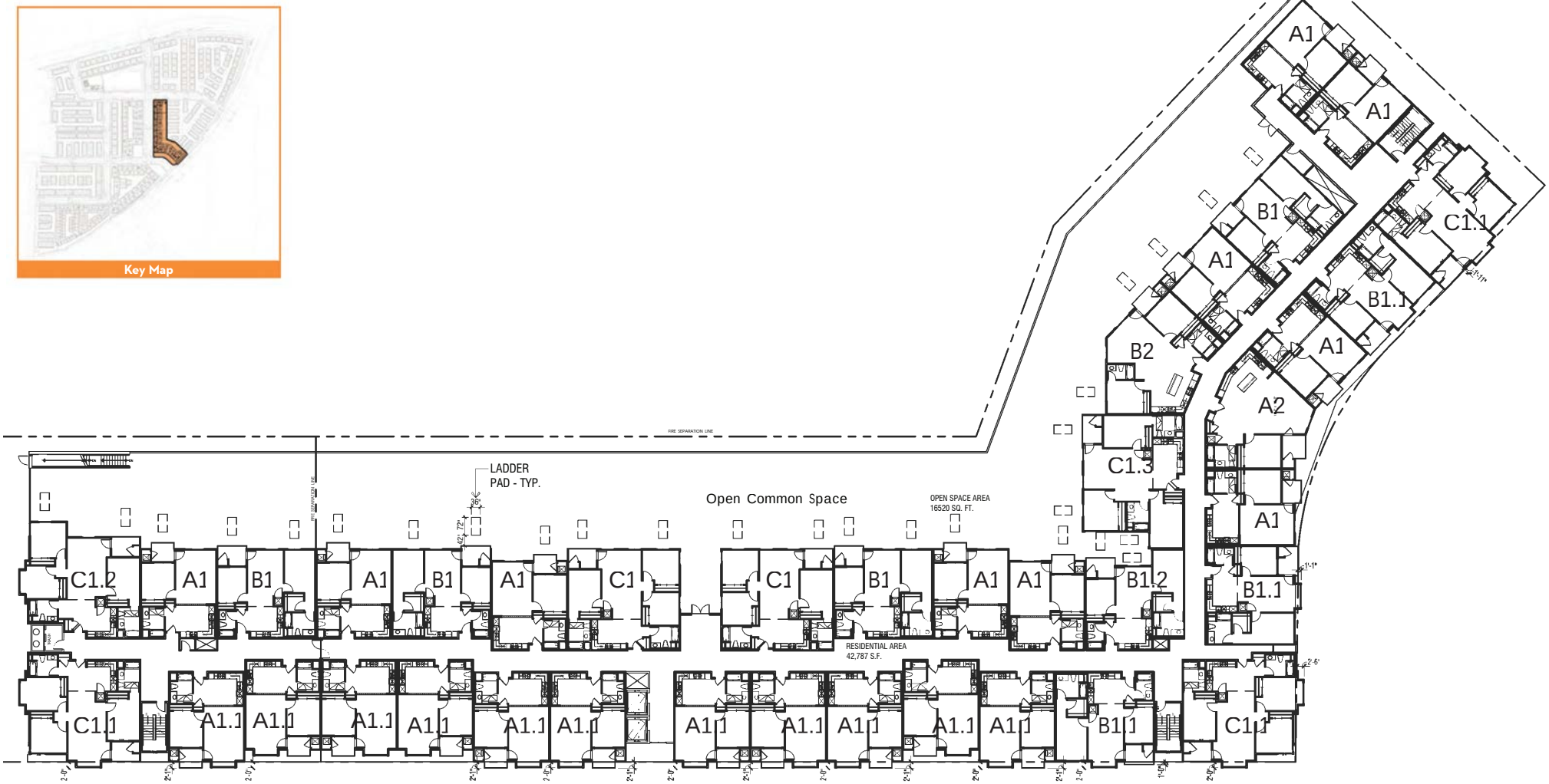
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
PODIUM LEVEL PLAN

A15-12

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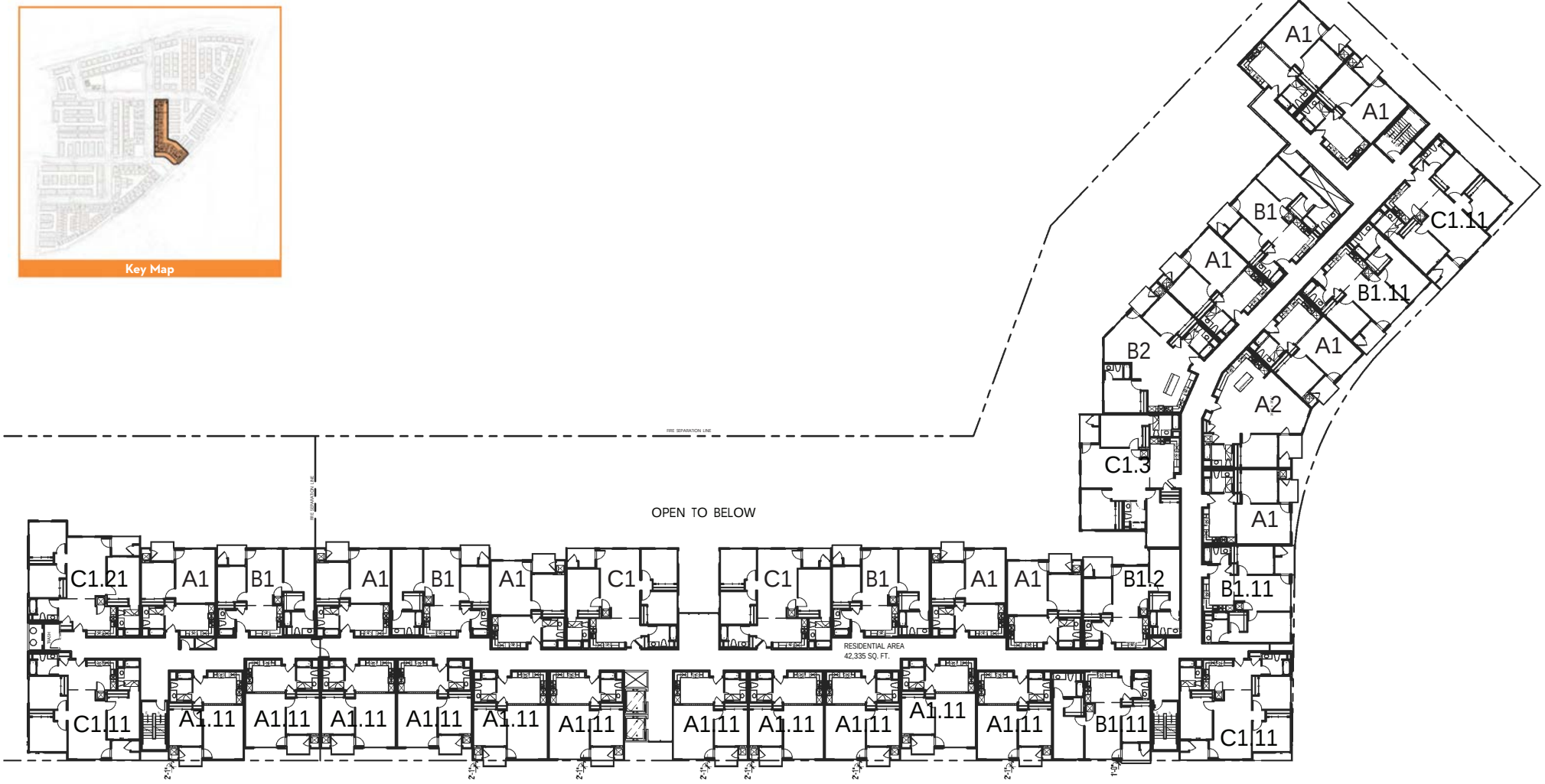
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
LEVELS 4-5 FLOOR PLAN

A15-13

CONCEPT DESIGN

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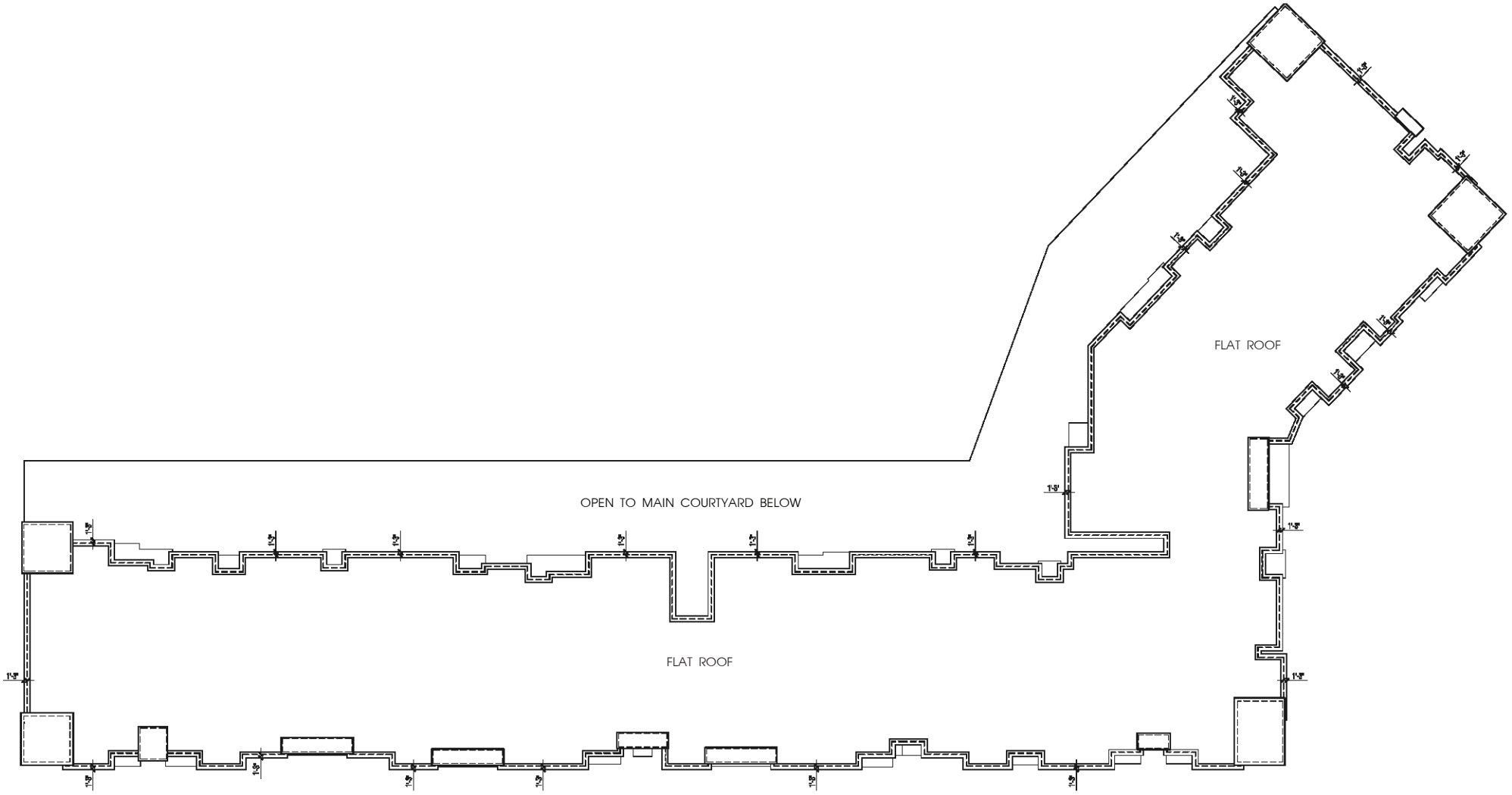
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EXHIBIT C



PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
ROOF PLAN

A15-14

CONCEPT DESIGN

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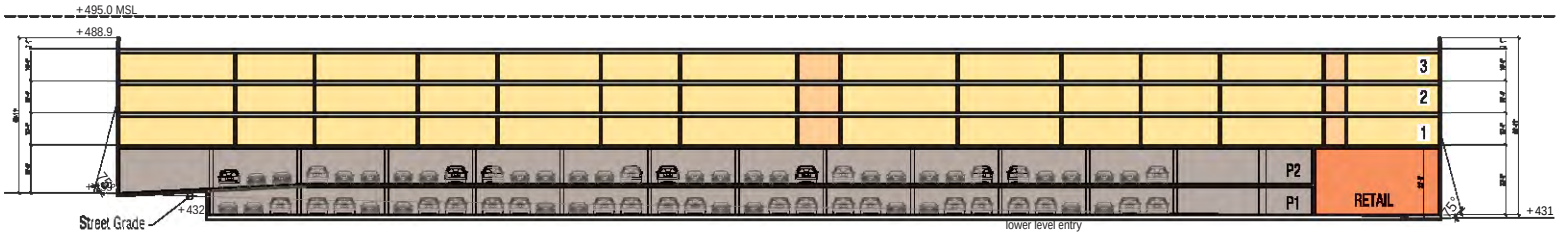
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TRANSVERSE SECTION AT COMMERCIAL

CONCEPT DESIGN

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
TRANSVERSE SECTIONS

A15-15

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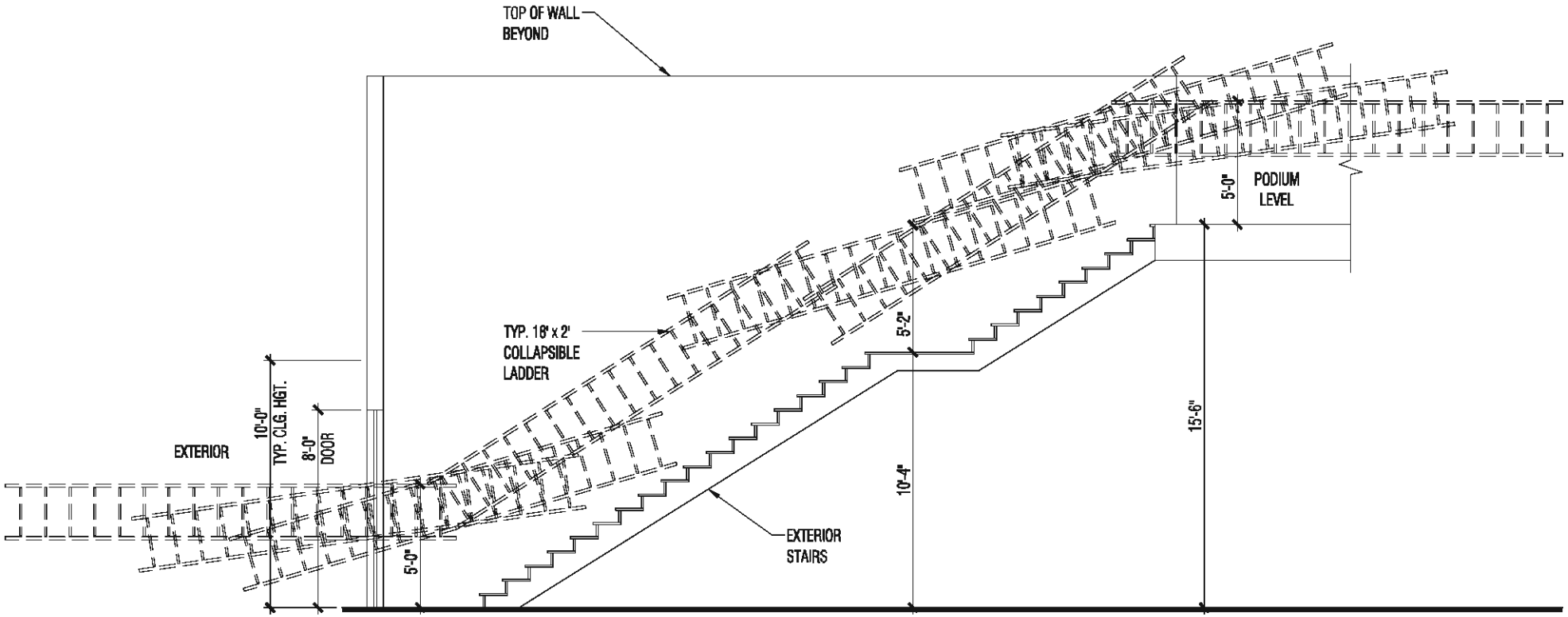
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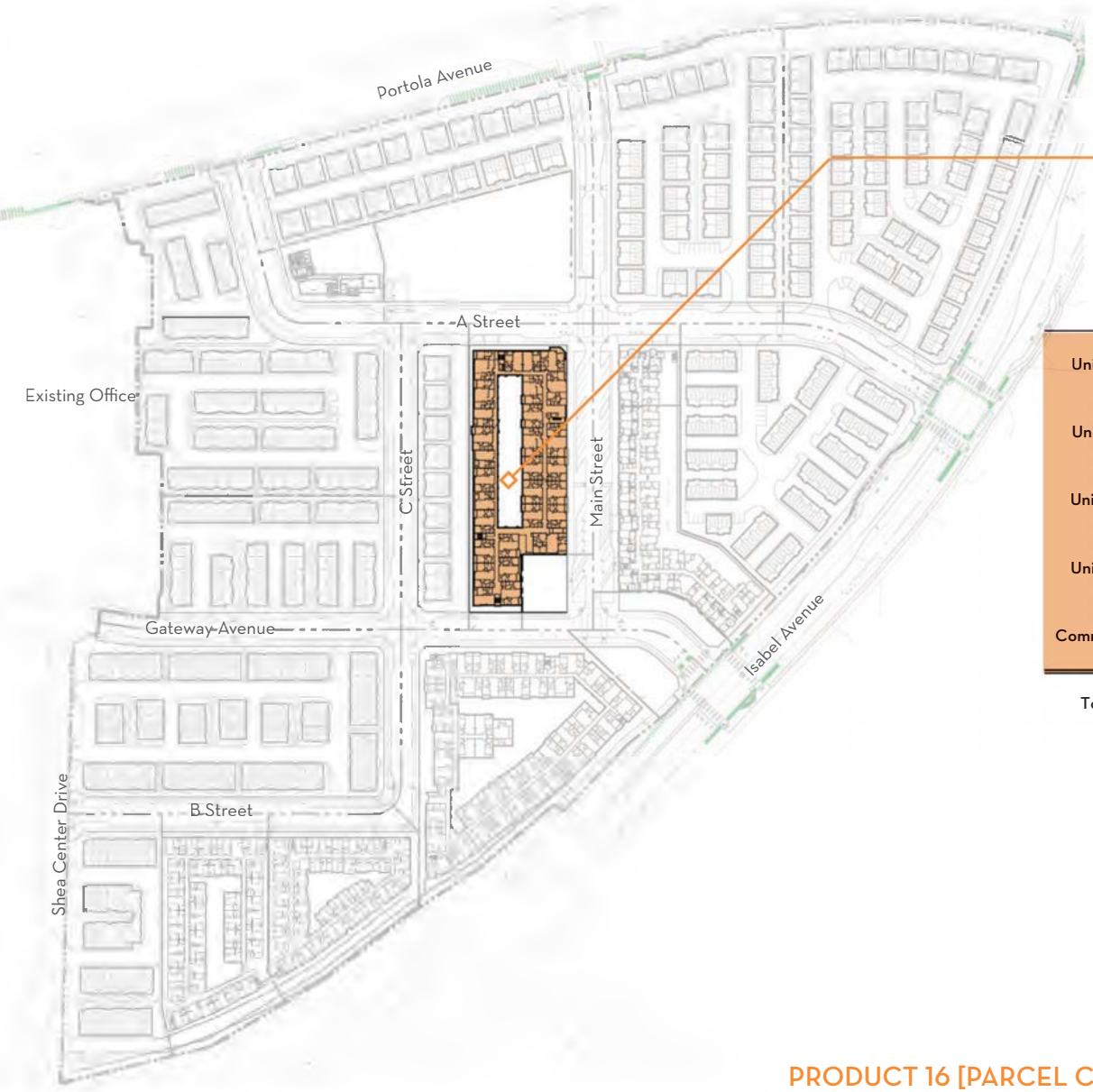
FIREMAN'S STAIR SECTION

PRODUCT 15 [PARCEL C1-B] - TYPE V APARTMENTS OVER RETAIL (AFFORDABLE - MODERATE)
FIRE LADDER PATH STUDY - SECTION

A15-16

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PARCEL C2-A

	Unit Size (SQFT)	Bed	Bath	Total Units	Total SQFT
Unit A-1	949	1	1.0	24	22,776
Unit B-1	1,373	2	2.0	64	87,872
Unit B-2	1,685	2	2.0	16	26,960
Unit C-1	2,006	3	2.5	12	24,072
Commercial					24,690
Total				**116**	**186,370**

Height Limit: 490' to 500'*

Building Height: 498.2 MSL

Excedes at North End by ± 8.5'

± 62'-6" to ± 67'-6"

4 Stories over 1 + Partial Basement

Note: Average Retail Ceiling Height > 14'

***Height above MSL**

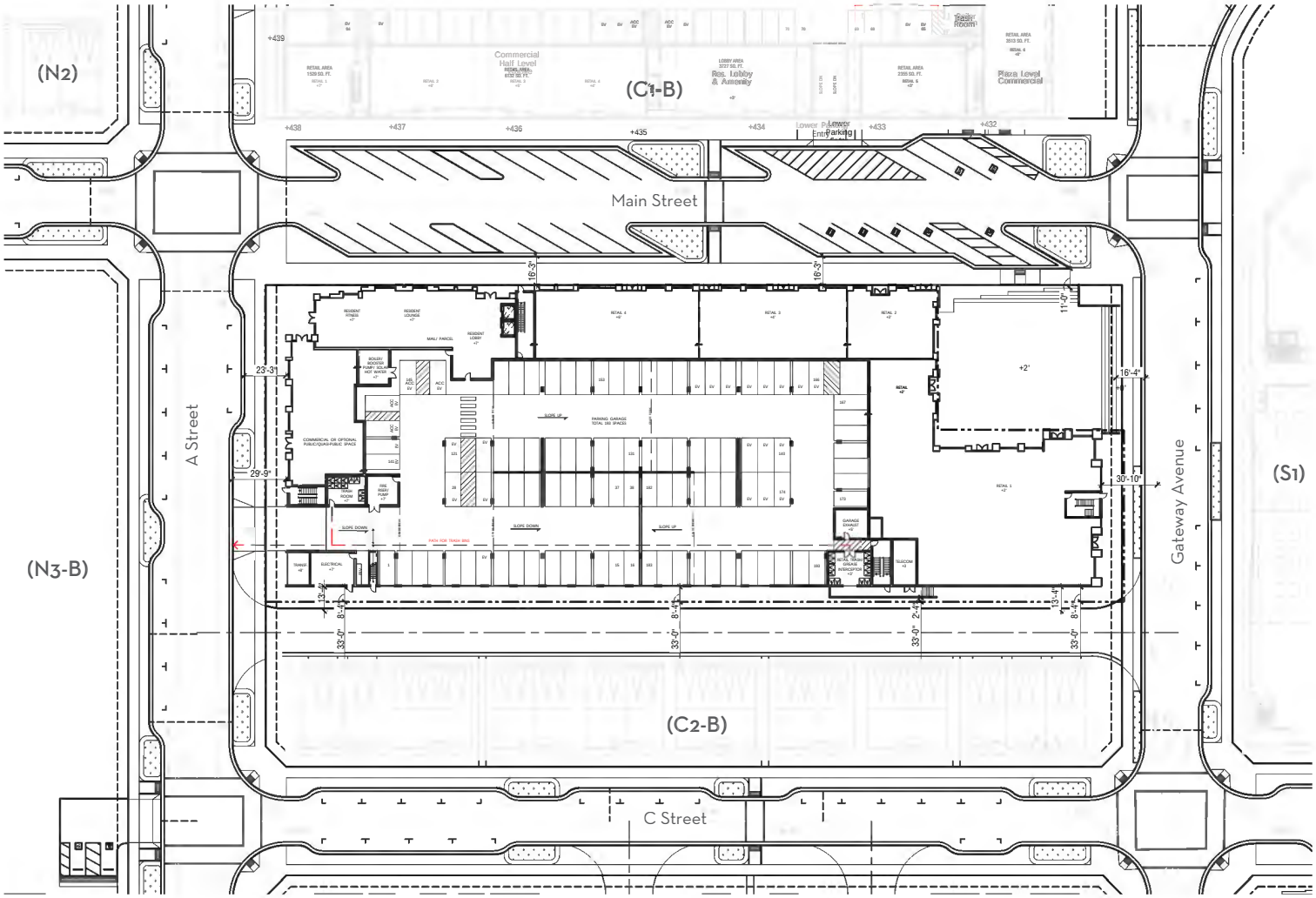
PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PRODUCT ALLOCATION

A16-1

CONCEPT DESIGN

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EXHIBIT C



BUILDING INFORMATION

LOT SIZE: 1.72 ACRES (NET)
TOTAL UNITS: 116
DENSITY: 67.5
4 STORIES OVER 1 + PARTIAL BASEMENT
BASEMENT AND LEVEL 1: TYPE I-A PODIUM
LEVEL 2-5: TYPE V-A
NFPA 13 SPRINKLER SYSTEM

MIXED USE OCCUPANCY: R-2, M, A-2, S-2
ENCLOSED, MECHANICALLY VENTILATED GARAGE

116 TOTAL UNITS
- 24 ONE-BEDROOM; ONE BATH
- 64 TWO-BEDROOM; TWO-BATH
- 16 TWO-BEDROOM; DEN; TWO AND ONE-HALF BATH
- 12 THREE-BEDROOM; DEN; TWO AND ONE-HALF BATH

AVERAGE UNIT SIZE: 1,396 S.F.

BUILDING AREA
- 75,661 SF PARKING
- 24,690 SF COMMERCIAL
- 3,228 SF AMENITY
- 219,996 SF RESIDENTIAL
- 323,575 SF TOTAL CONSTRUCTION AREA

OPEN SPACE
- REQUIRED COMMON: 75 SF/ UNIT
- REQUIRED PRIVATE: 50 SF/ UNIT
- PROVIDED COMMON: 11,887 SF = 102 SF/ UNIT
- PROVIDED PRIVATE: 50 SF/ UNIT AVE.

PARKING

MINIMUM REQUIRED:
139 RESIDENTIAL SPACES
15 GUEST SPACES
42 COMMERCIAL

196 TOTAL REQUIRED SPACES

PROVIDED:
181 RESIDENTAL SPACES
- (4) ADA SPACES
- (1) ADA VAN SPACE

15 GUEST PARKING
- (1) ADA SPACES
- (1) ADA VAN SPACE

42 COMMERCIAL PARKING
- (18) ON STREET SPACES
- (2) ADA SPACES
- (1) ADA VAN SPACE

238 TOTAL PROVIDED SPACES
- (8) EV COMMERCIAL "CAPABLE"
  - (2) EVSE
  - (1) ADA VAN
  - (1) ADA STD
- (78) EV RESIDENTIAL 40% LP LEV 2
- (20) EV RESIDENTIAL 10% LEV 2
  - (4) VAN ACCESS

BICYCLE PARKING

CENTER/CORE
REQUIRED
TOTAL REQUIRED SPACES = 81
.25/BEDROOM RESIDENTIAL SPACES = 55
.05/UNITS VISTOR SPACES = 6
NBHD COMMERCIAL & GROUND FLOOR FLEX
REQUIRED: 1:1400 SF = 20

PROVIDED
81 TOTAL SPACES PROVIDED IN SECURED AREA
(55) RESIDENTIAL SPACES
(6) VISITOR SPACES
(20) NBHD COMMERCIAL & GROUND FLOOR FLEX SPACES

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
SITE PLAN

A16-2

CONCEPT DESIGN

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PERSPECTIVE | LOOKING NORTHEAST AT PLAZA

A16-3

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PERSPECTIVE | MAIN ENTRY VIEW

A16-4

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SOUTH ELEVATION



BRICK COURSEWORK DETAILING



EAST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
SOUTH & EAST ELEVATIONS

A16-5

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NORTH ELEVATION



PARKING GARAGE VENTILATION SCREENING



WEST ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
NORTH & WEST ELEVATIONS

A16-6

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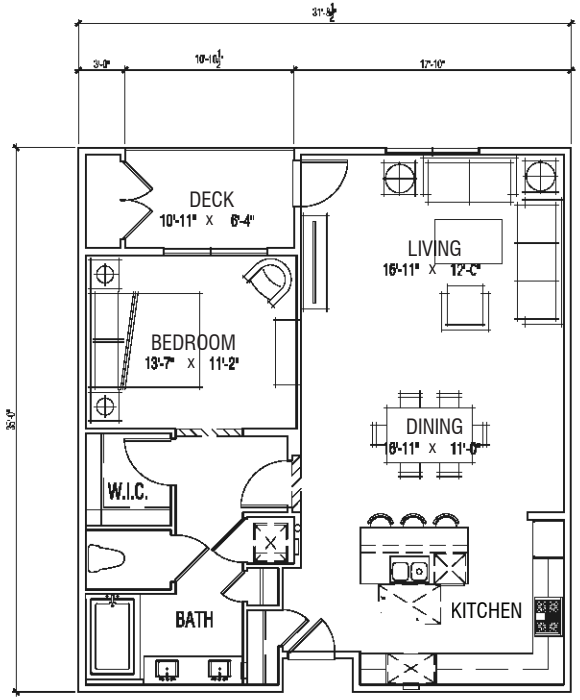
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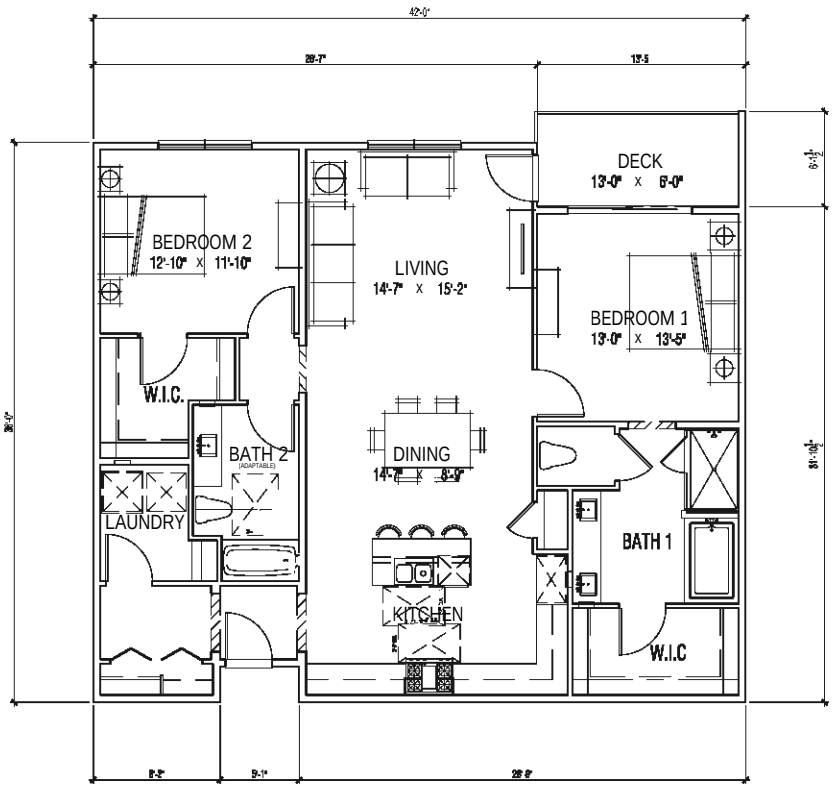
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UNIT A-1

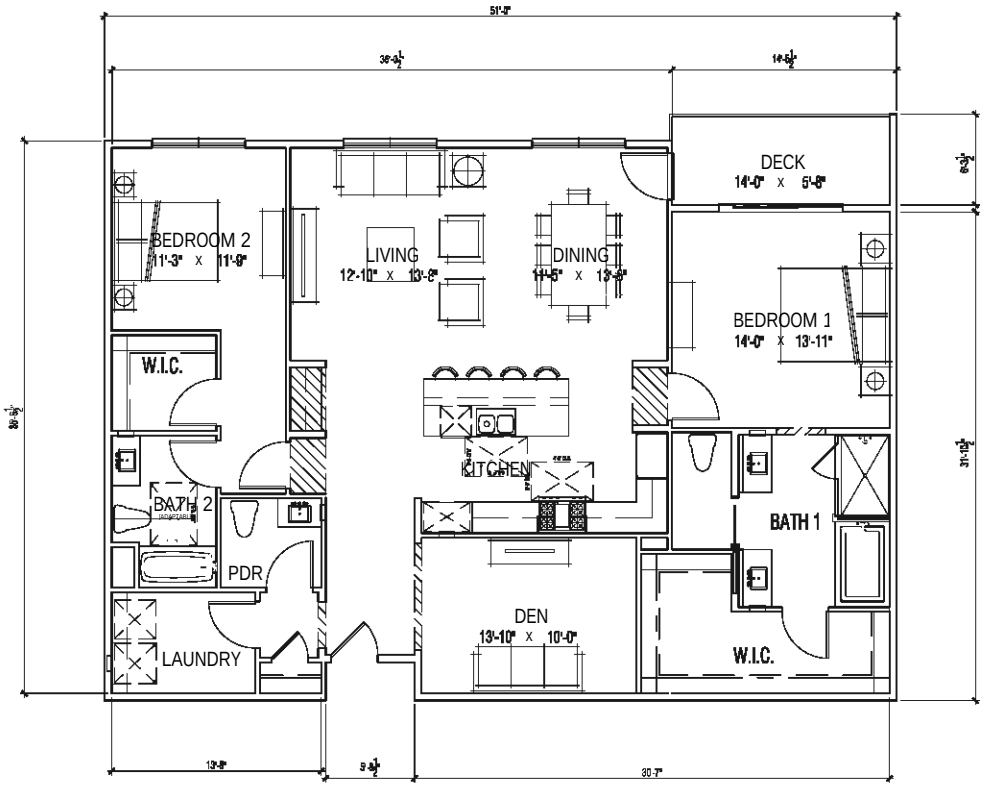
1 Bdrm | 1 Bath
Unit: 949 sf
Deck: 69 sf

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UNIT B-1

2 Bdrm | 2 Bath
Unit: 1,373 sf
Deck: 77 sf



UNIT B-2

2 Bdrm | 2.5 Bath | Den
Unit: 1,685 sf
Deck: 79 sf

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
B-1, B-2 UNIT FLOOR PLANS

A16-8

CONCEPT DESIGN

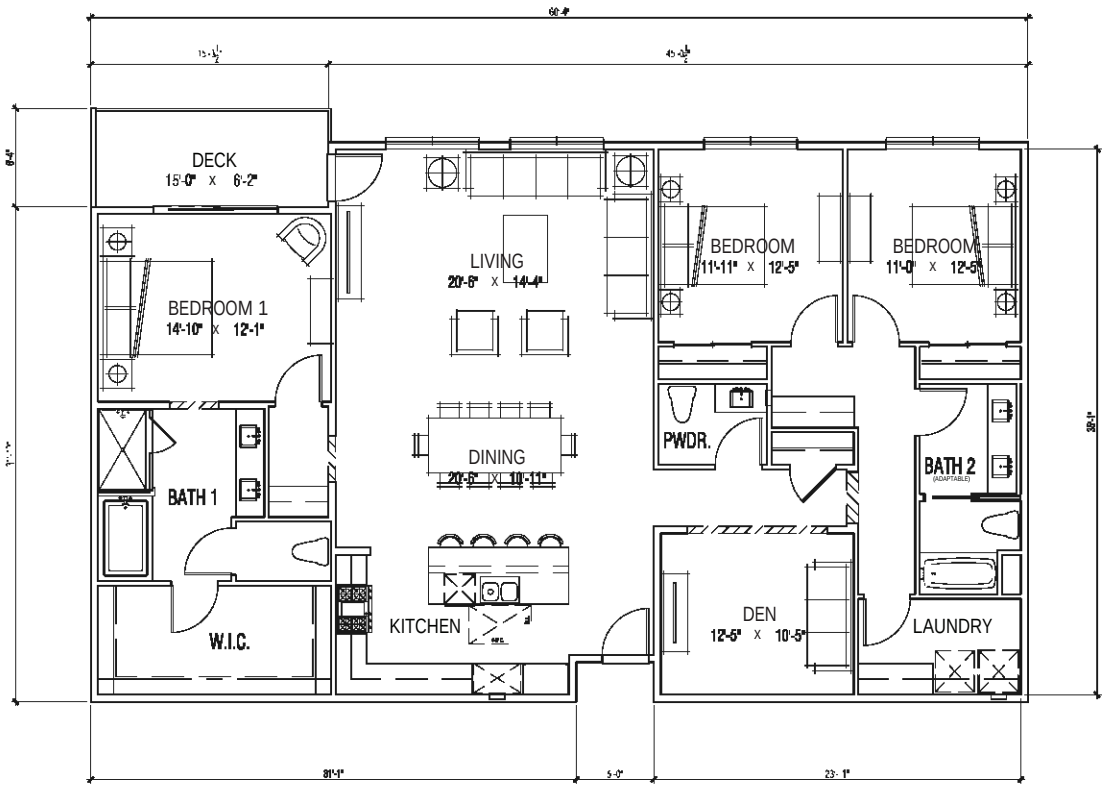
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UNIT C-1

3 Bdrm | 2.5 Bath | Den
Unit: 2,006 sf
Deck: 92 sf

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
C-1 UNIT FLOOR PLAN

A16-9

CONCEPT DESIGN

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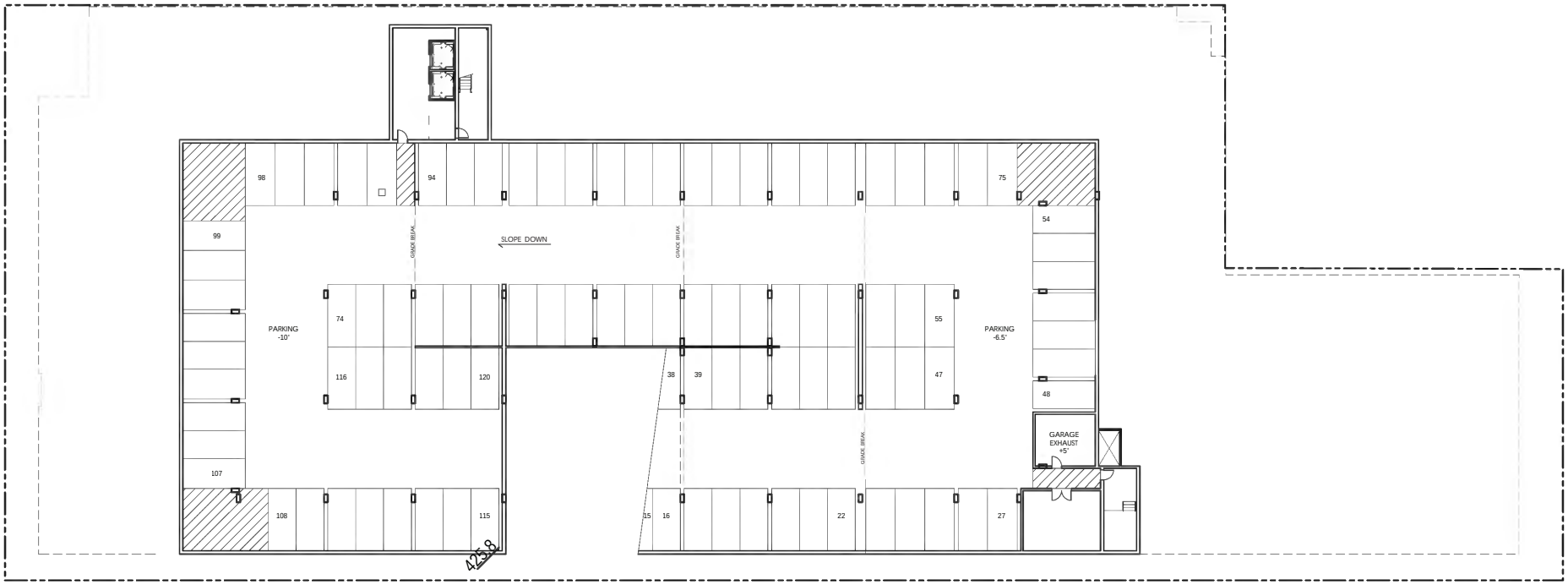
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CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
LOWER LEVEL PLAN

A16-10

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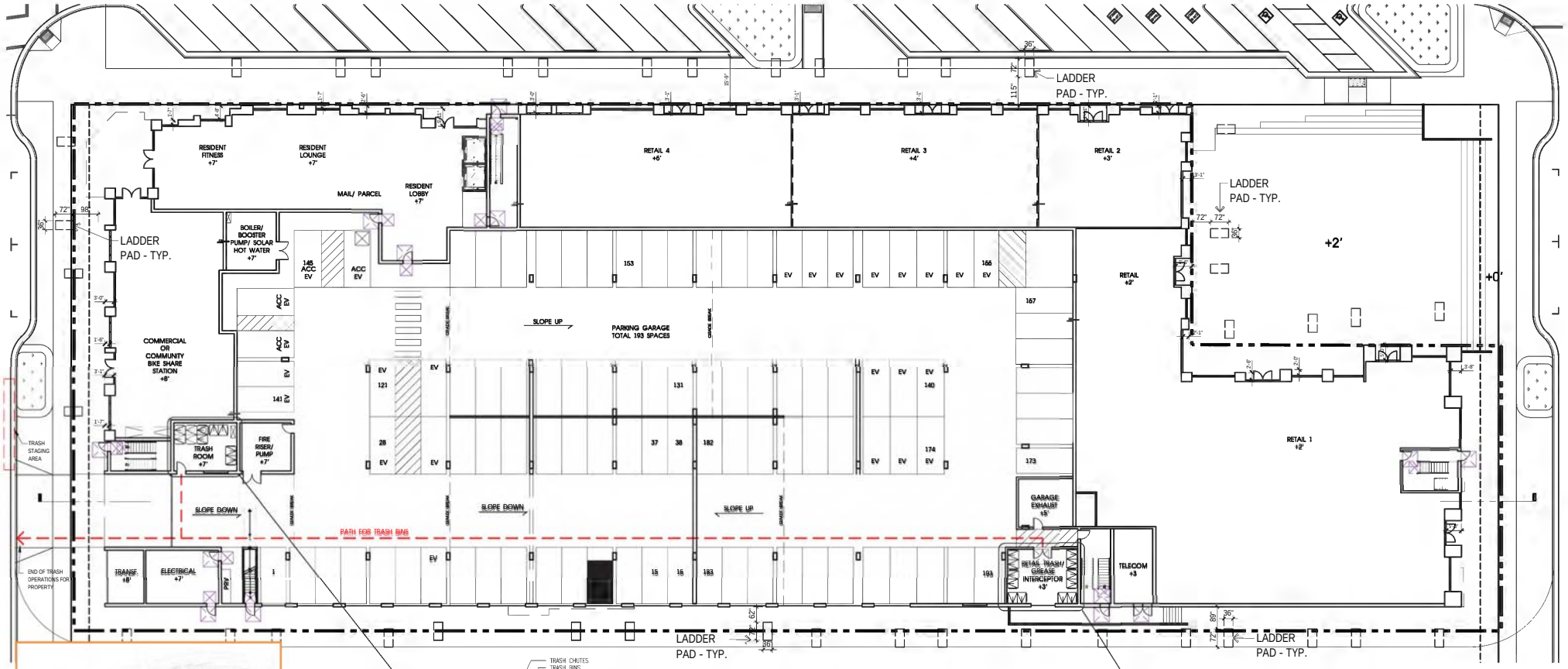
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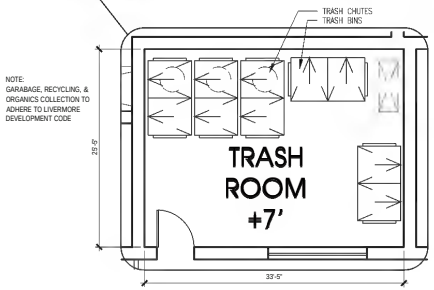
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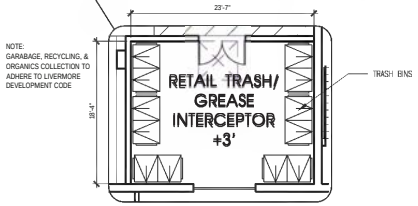
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CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13D AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R3 / U - DUPLEX AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN CLOSET OR DUCTLESS MINI SPLIT SYSTEM

CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
FIRST LEVEL PLAN

A16-11

ISABEL PORTOLA OWNER, LLC

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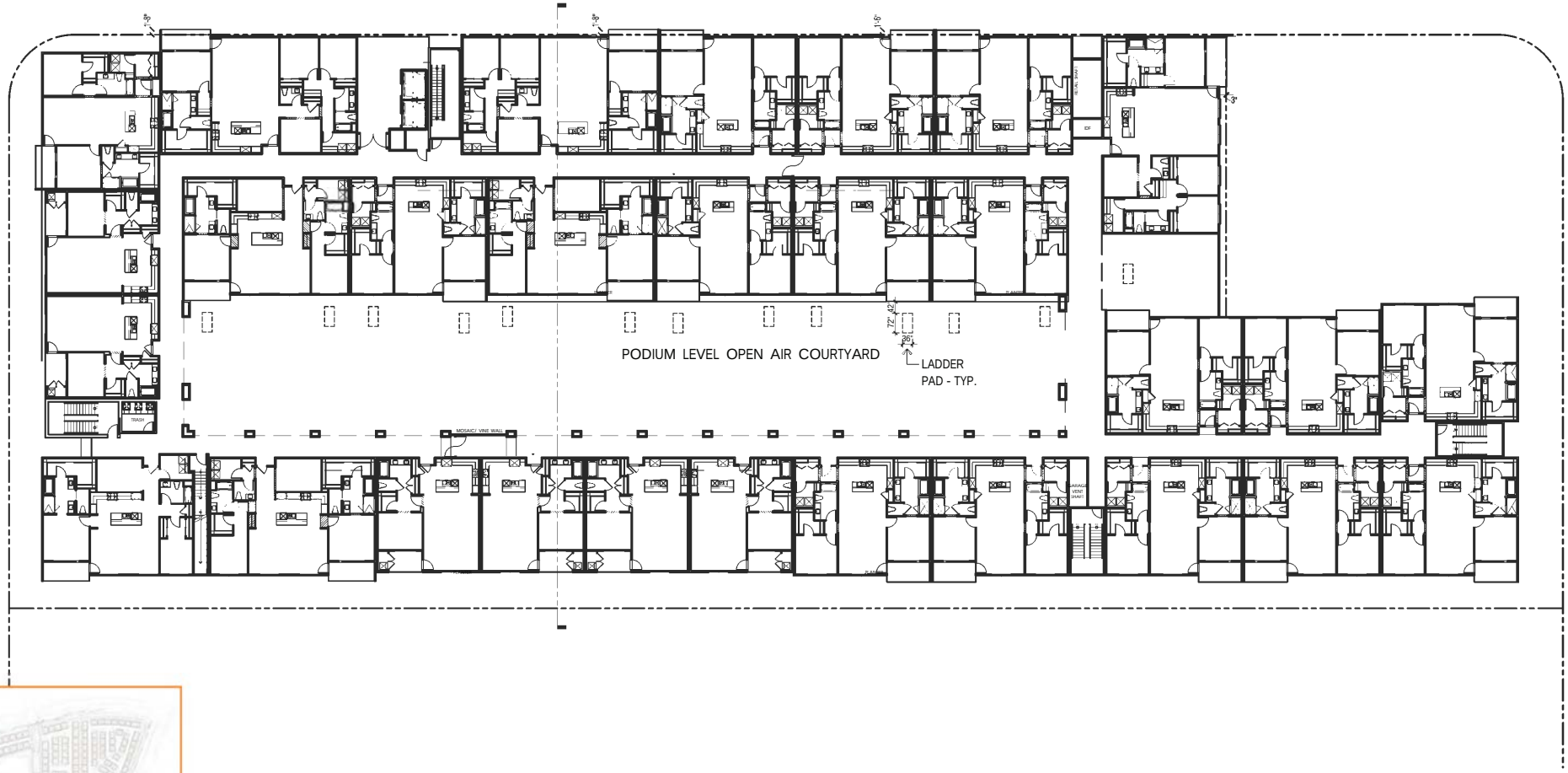
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CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
PODIUM LEVEL PLAN

A16-12

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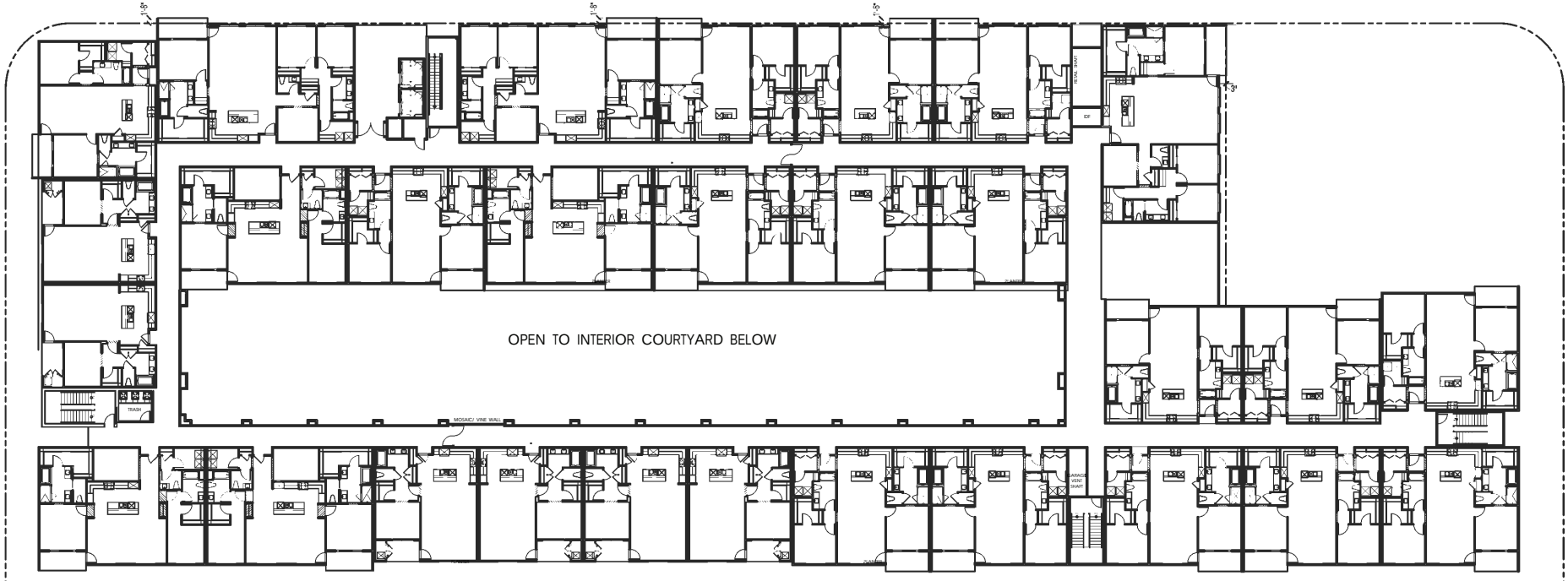
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0 8 16 32

06-07-24 | 2023114





CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
LEVELS 3-5 FLOOR PLAN

A16-13

ISABEL PORTOLA
OWNER, LLC

WHA.

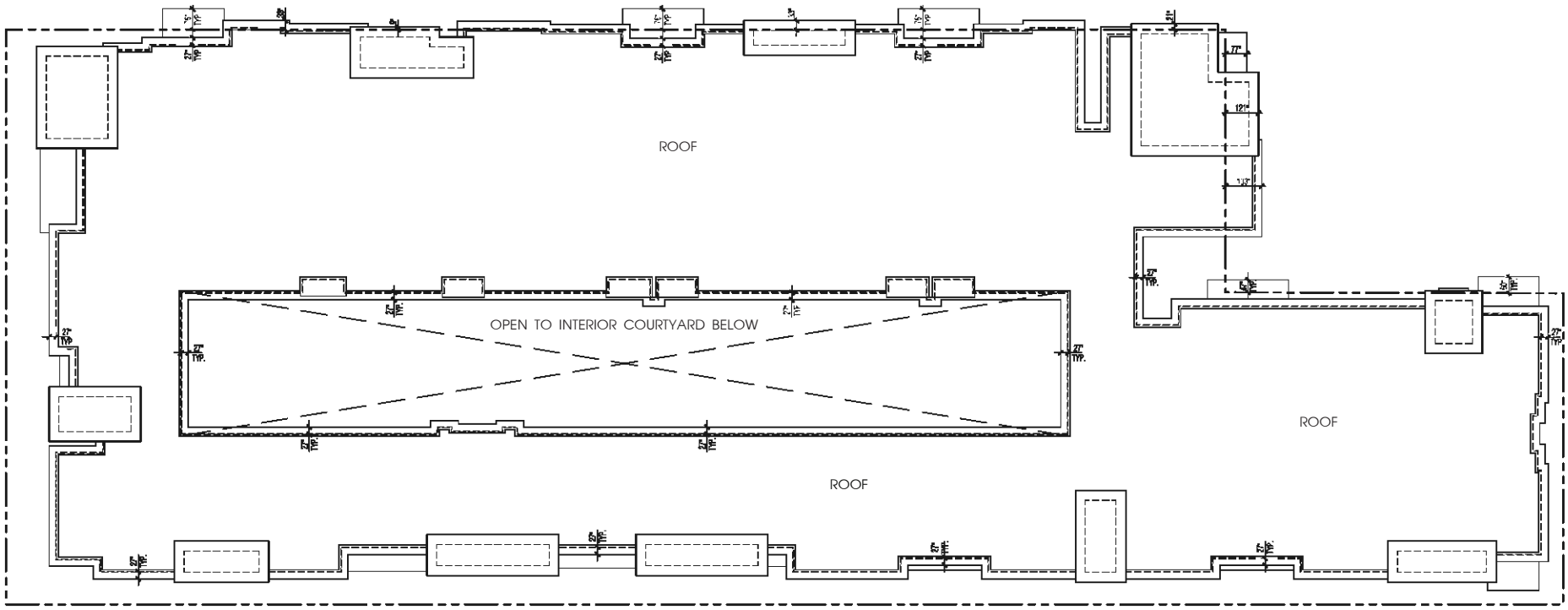
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2697



CONCEPT DESIGN

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
ROOF PLAN

A16-14

ISABEL PORTOLA
OWNER, LLC

WHA.

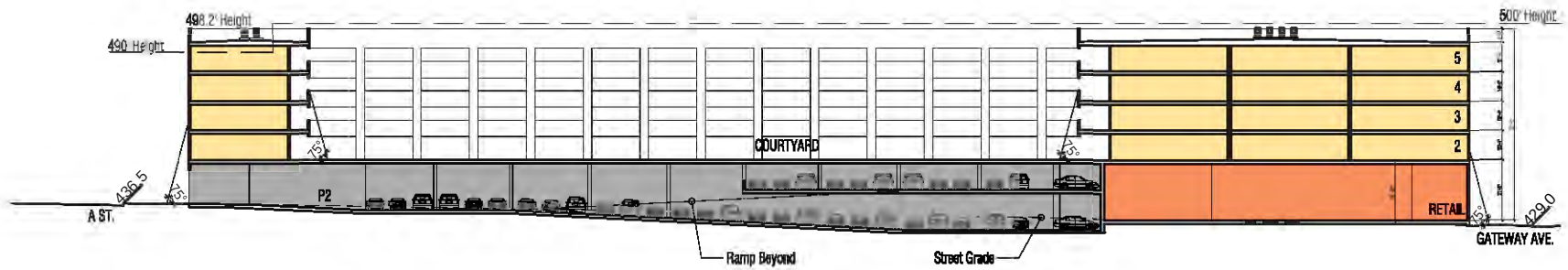
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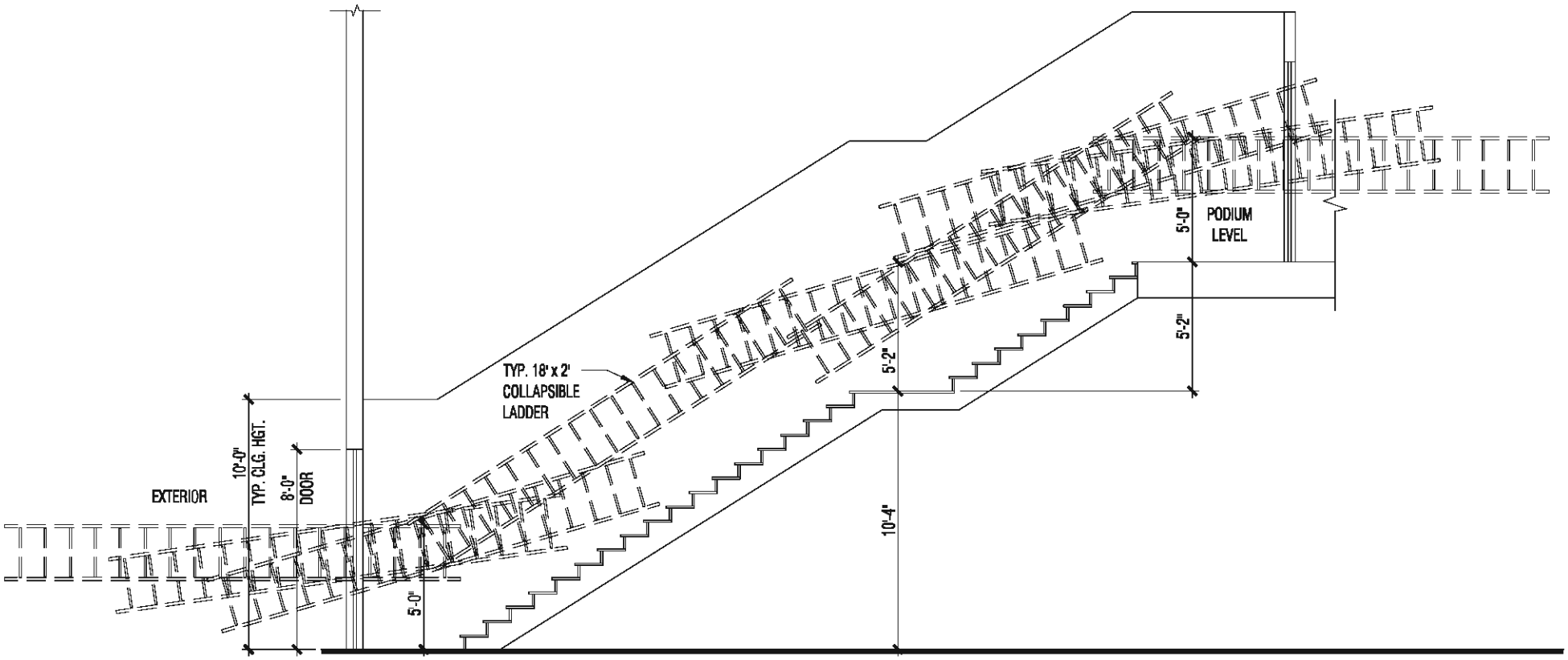
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2698



TRANSVERSE SECTION AT COMMERCIAL

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FIREMAN'S STAIR SECTION

PRODUCT 16 [PARCEL C2-A] - TYPE V STACKED FLAT CONDOS OVER RETAIL
FIRE LADDER PATH STUDY - SECTION

A16-16

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA

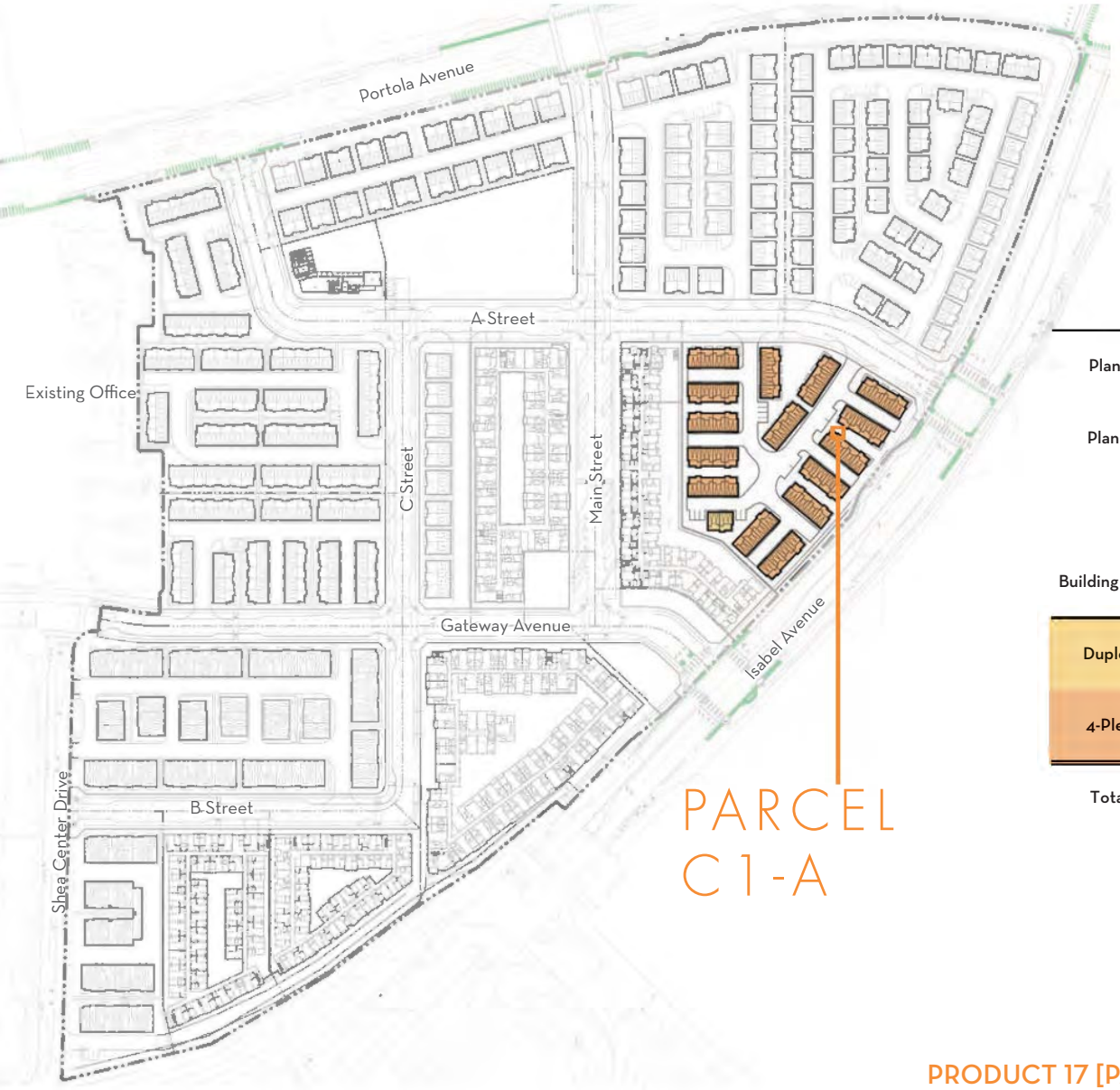
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EXHIBIT C



	Unit Size (SQFT)	Bed	Bath
Plan 1	1,613	3	2.5
Plan 2	1,847	4	3.0

Building Type	Plan 1	Plan 2	Total Units	Total SQFT
Duplex	1	1	2	3,460
4-Plex	30	30	60	103,800
Total	**31**	**31**	**62**	**107,260**

Height Limit:	**495' to 500'***
Max. Height:	**483.3 MSL**
Building Height:	**± 38'-3"**
Stories:	**3**

*Height above MSL

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) PRODUCT ALLOCATION

A17-1

ISABEL PORTOLA OWNER, LLC

WHA

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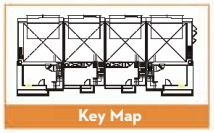
LIVERMORE ISABELCROSSING
LIVERMORE, CALIFORNIA

0 50 100 200

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2701





A - CONTEMPORARY

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | PERSPECTIVES A

A17-2

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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ENHANCED LEFT



A - FRONT



RIGHT



REAR

A - CONTEMPORARY

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | ELEVATIONS A

A17-3

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

WHA

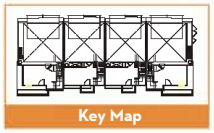
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ISABELCROSSING
LIVERMORE, CALIFORNIA

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B - TRADITIONAL

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX BUILDING | PERSPECTIVE B

A17-4

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

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WHA.

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ENHANCED LEFT



B - FRONT



RIGHT



REAR

B - TRADITIONAL

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
4-PLEX BUILDING | ELEVATIONS B

A17-5

CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

ISABEL PORTOLA
OWNER, LLC

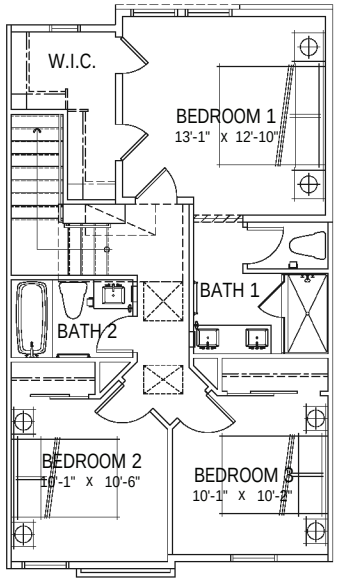
WHA.

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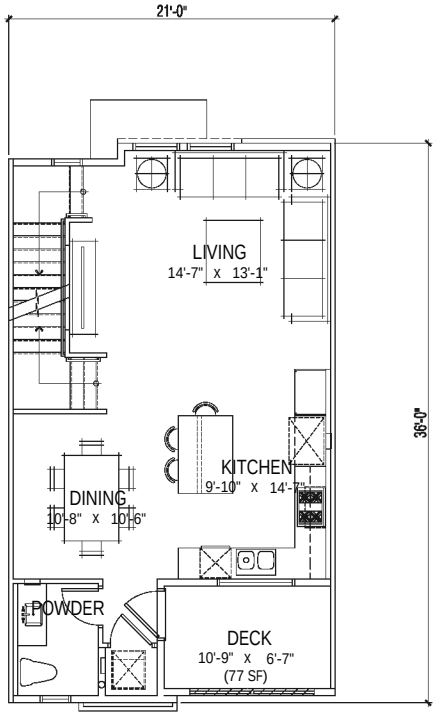
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LIVERMORE, CALIFORNIA

0 2 4 8

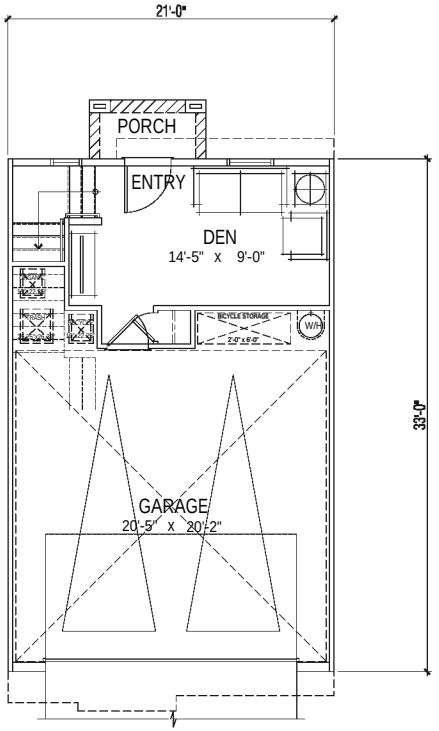
06-07-24 | 2023108



Third Floor



Second Floor



First Floor

PLAN 1

3 Bdrm | 2.5 Bath | Den |
2- Bay Garage
1,613 S.F.

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 1 FLOOR PLAN

A17-6

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

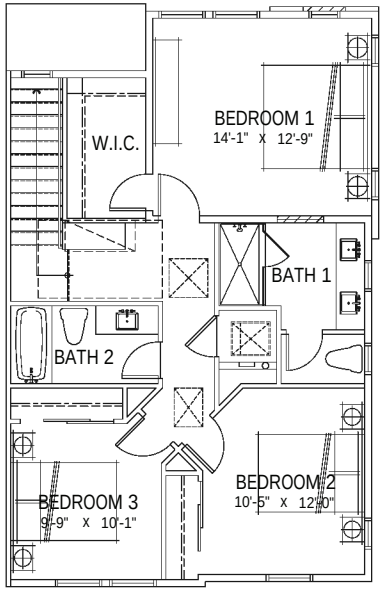
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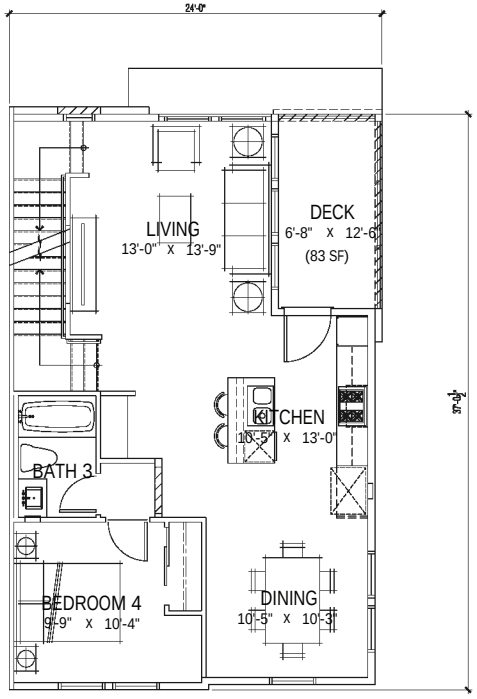
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06-07-24 | 202308

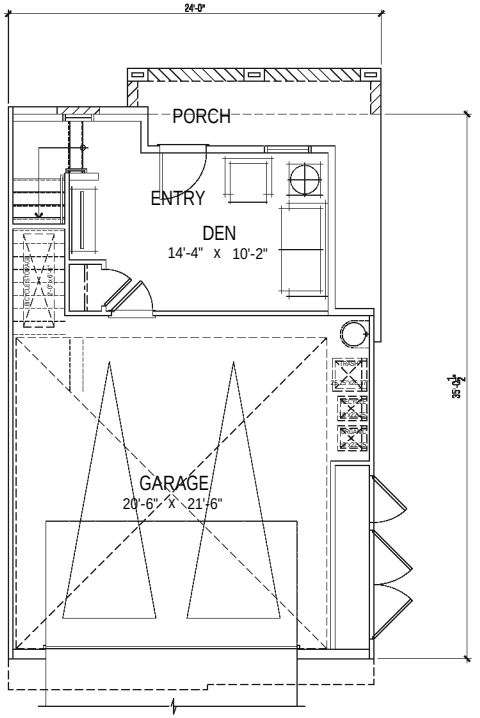
2706



Third Floor



Second Floor



First Floor

PLAN 2

4 Bdrm | 3 Bath | Den |
2- Bay Garage
1,847 S.F.

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE)
PLAN 2 FLOOR PLAN

A17-7

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

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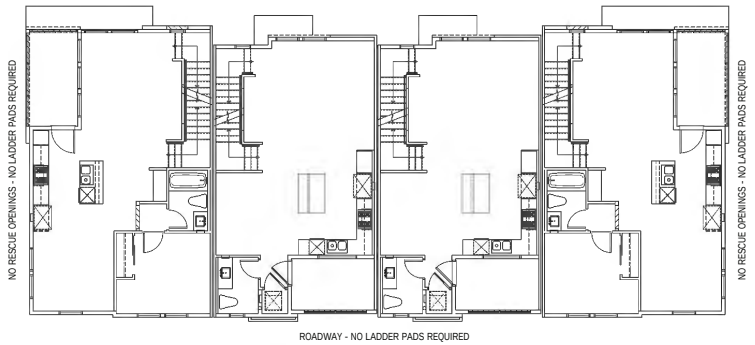
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LIVERMORE, CALIFORNIA

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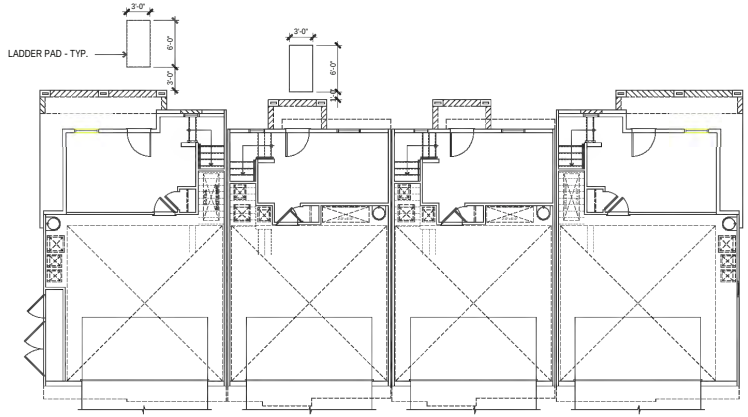
2707





SECOND FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2



FIRST FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U - CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX | FIRST & SECOND FLOOR PLAN

A17-8

ISABEL PORTOLA OWNER, LLC

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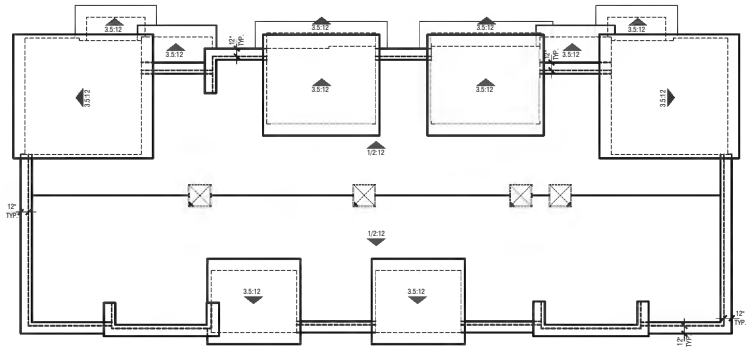
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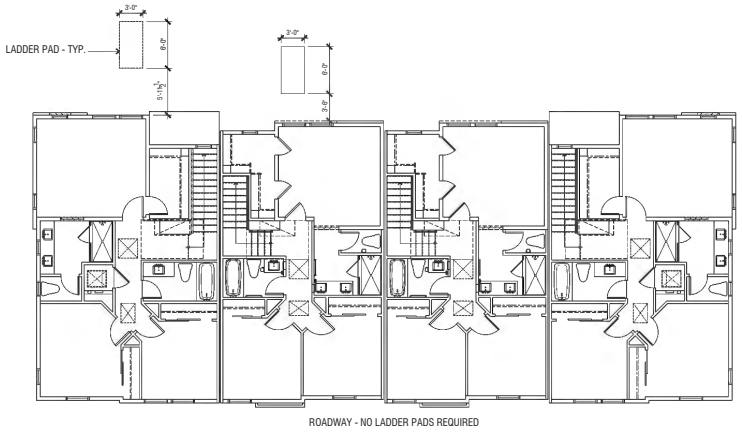
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ROOF PLAN



THIRD FLOOR

UNIT 2R | UNIT 1 | UNIT 1 | UNIT 2

CONSTRUCTION INFORMATION:

- 3-STORY ON GRADE
- NFPA-13 AUTOMATIC SPRINKLER SYSTEM
- TYPE VB NON-RATED WOOD CONSTRUCTION
- OCCUPANCY R2 / U - CONDOMINIUM AND PRIVATE GARAGES
- FORCED AIR UNIT LOCATED IN ATTIC

CONCEPT DESIGN

PRODUCT 17 [PARCEL C1-A] - 3-STORY ATTACHED (TOWNHOUSE) 4-PLEX | THIRD FLOOR & ROOF PLAN

A17-9

ISABEL PORTOLA OWNER, LLC

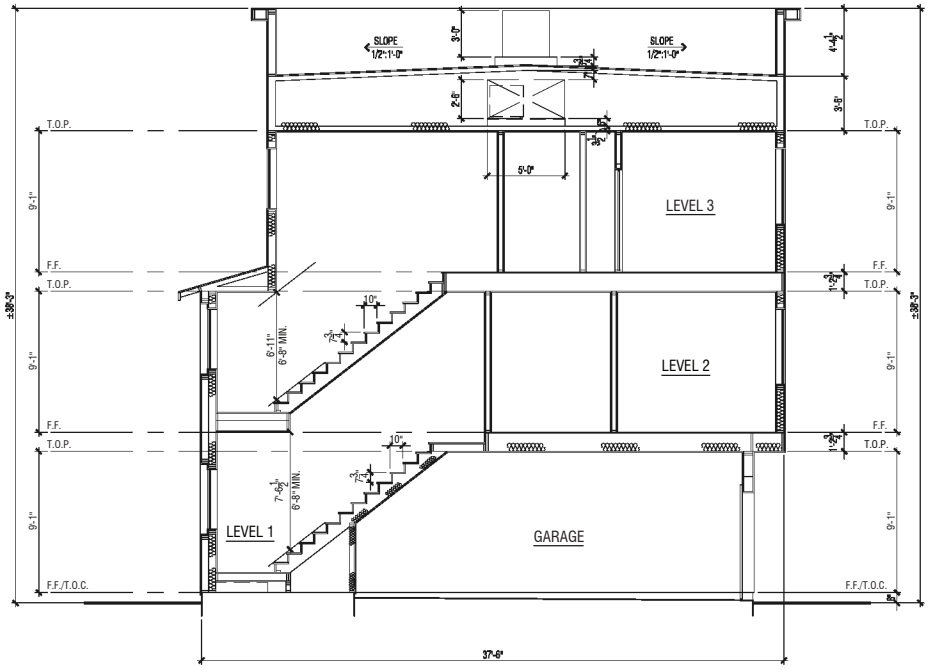
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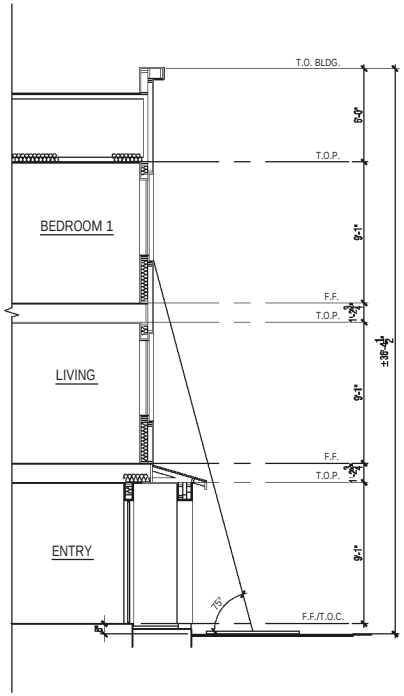
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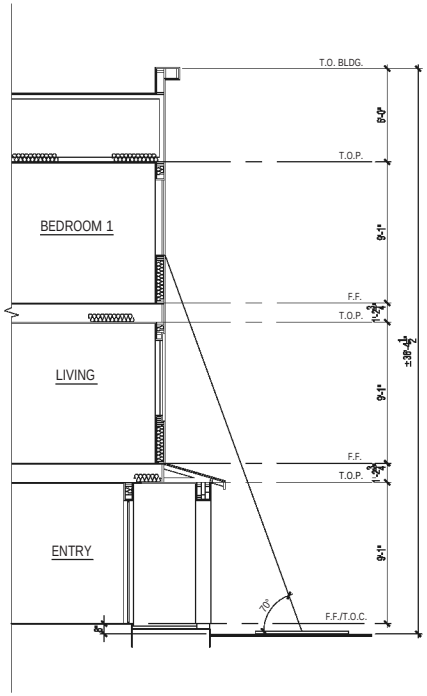


Building Section

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Unit 1



Unit 2

Ladder Pad Sections

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	Total SQFT
Rec Building (Private)	8,575
Total	8,575

Height Limit: 485' to 490'*

Building Height: 468.2 MSL

± 29'- 3"

Stories: 2

*Height above MSL

CONCEPT DESIGN

PRIVATE RECREATION CENTER [PARCEL N3-C] PRODUCT ALLOCATION

R-1



CONCEPT DESIGN

PRIVATE RECREATION CENTER [PARCEL N3-C]
SITE PLAN

R-2

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CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

PRIVATE RECREATION CENTER [PARCEL N3-C] PERSPECTIVE 1

R-3

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OWNER, LLC

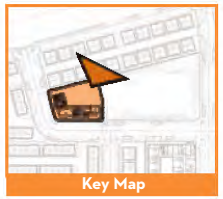
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CONCEPT DESIGN

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PRIVATE RECREATION CENTER [PARCEL N3-C] PERSPECTIVE 2

R-4

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WEST ELEVATION



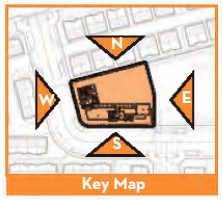
SOUTH ELEVATION



EAST ELEVATION



NORTH ELEVATION



CONCEPT DESIGN

For Color and Materials Palette Applied to Elevations, Please Refer to Page S-2

TRADITIONAL

PRIVATE RECREATION CENTER [PARCEL N3-C] ELEVATIONS

R-5

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OWNER, LLC

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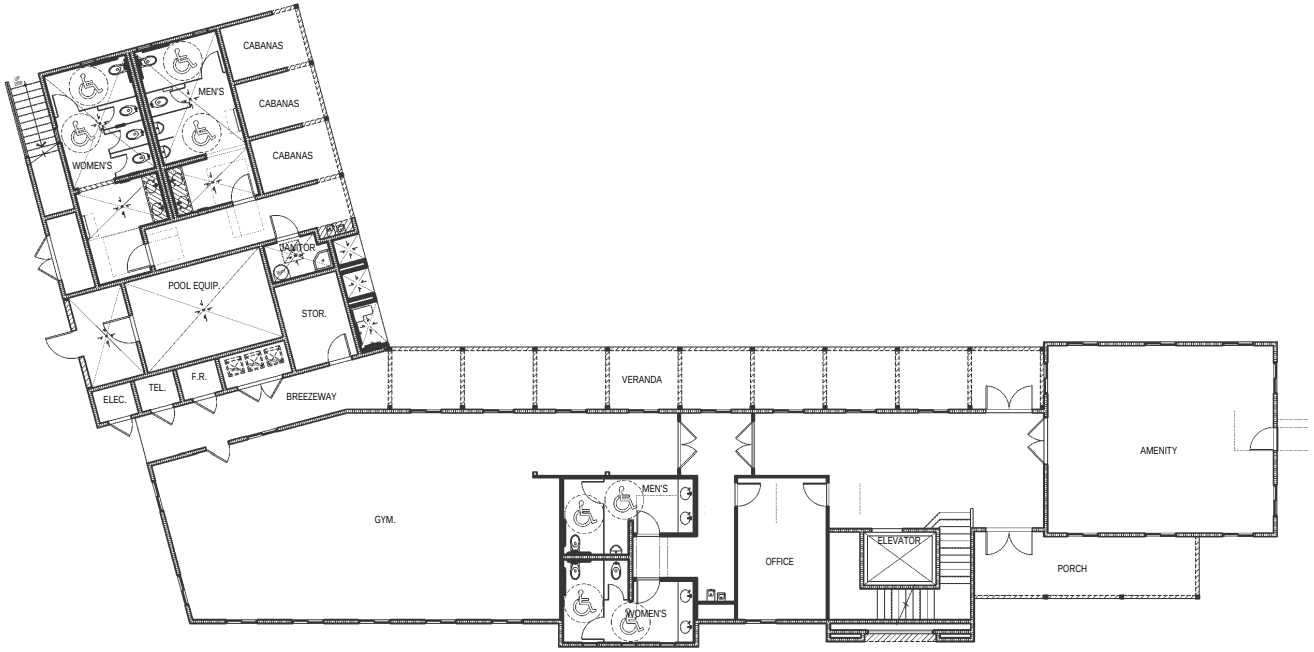
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First Floor

REC. & POOL BUILDING

8,575 S.F.

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | FIRST FLOOR

R-6

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

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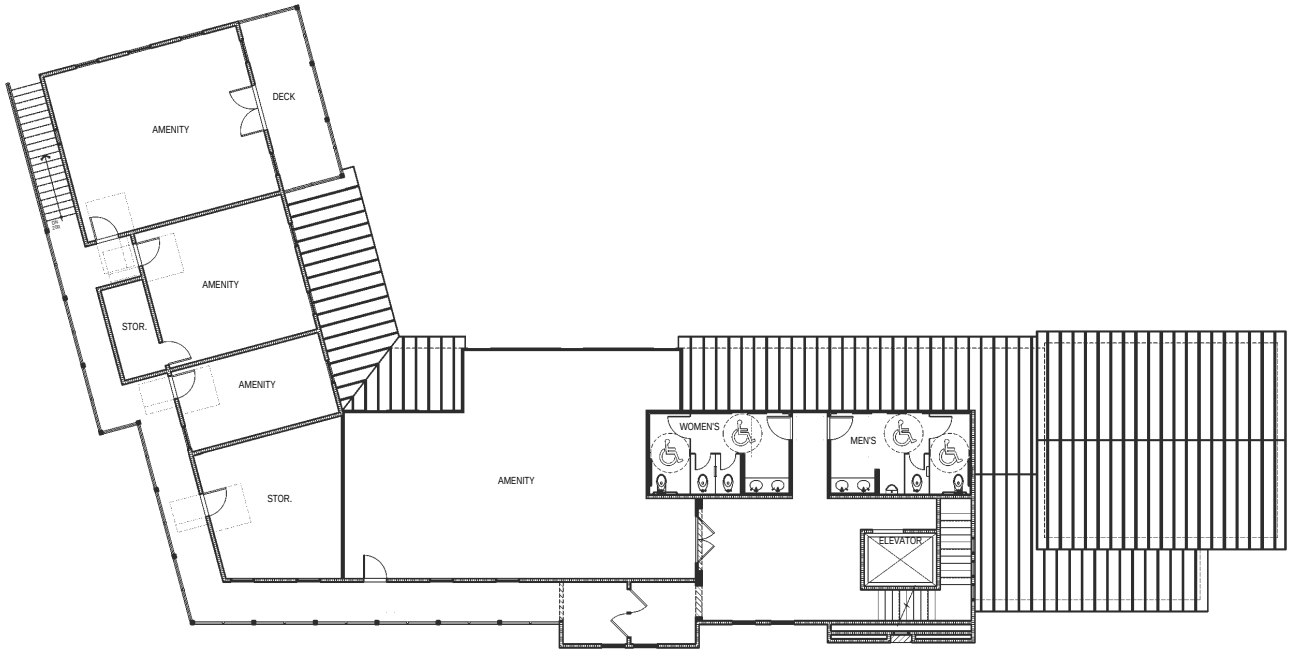
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2717





Second Floor

REC. & POOL BUILDING

8,575 S.F.

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | SECOND FLOOR

R-7

CONCEPT DESIGN

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OWNER, LLC

WHA.

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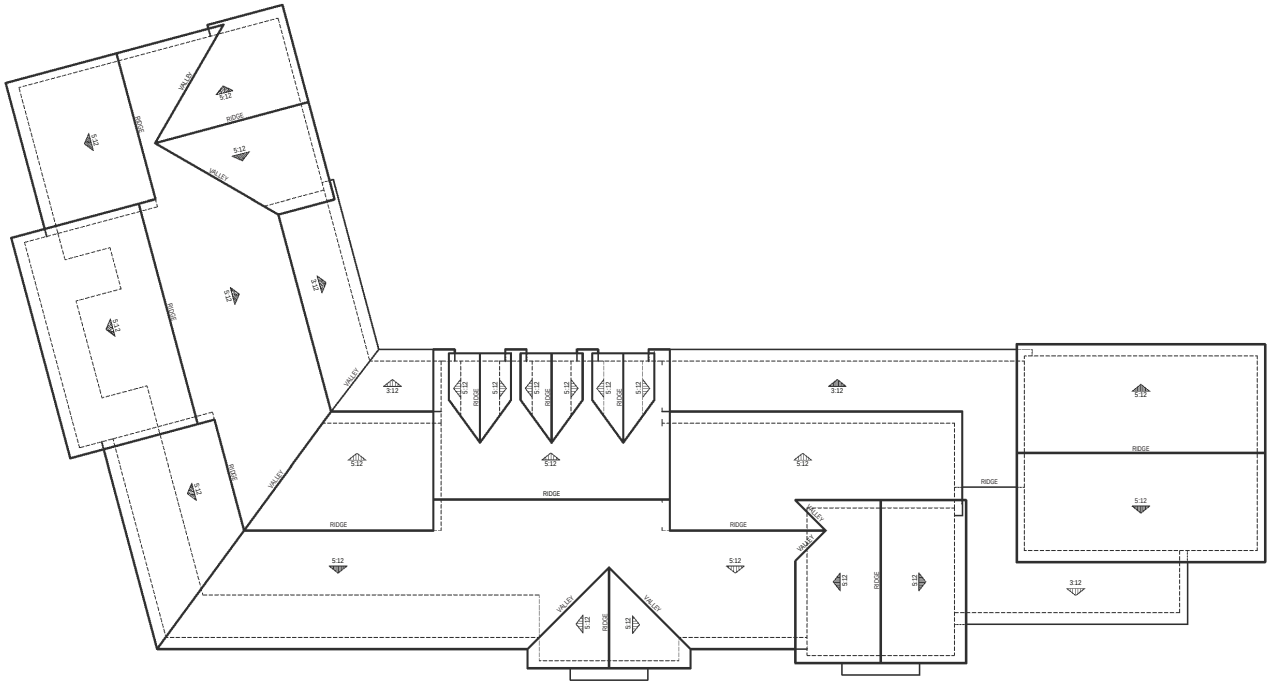
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Roof Plan

REC. & POOL BUILDING

CONCEPT DESIGN

PRIVATE RECREATION CENTER [PARCEL N3-C]
RECREATION BUILDING | ROOF PLAN

R-8

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OWNER, LLC

WHA.

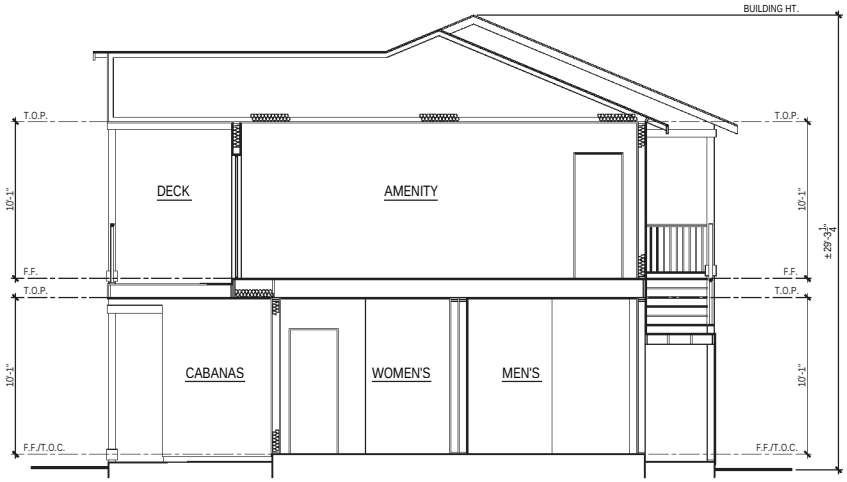
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Building Section

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VIEW #6
Looking South from Portola Ave. and Montage Drive



VIEW #5
Looking South East from Portola Ave.



VIEW #4
Looking North from Shea Center Drive and West Bound 580 On-Ramp



AERIAL SITE MAP



VIEW #1
Looking South West from Portola Ave. and Isabel Ave.



VIEW #2
Looking North West from Isabel Ave. and Gateway Ave.



VIEW #3
Looking North West from Isabel Ave. and 580 Off-Ramp

AERIAL SITE MAP & VIEWS

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EXHIBIT C



CONCRETE ROOF TILE #1
Westlake Royal Roofing - 1FACS 0330 - Appalachian Blend



*CONCRETE ROOF TILE #2
Westlake Royal Roofing - 1FACS 1132 - Charcoal Brown Blend



*CONCRETE ROOF TILE #3
Westlake Royal Roofing - 1FACS 3184 - Rustic Brown Blend



*CONCRETE ROOF TILE #4
Westlake Royal Roofing - 1FBCF 3726 - Hickory



CONCRETE ROOF TILE #5
Westlake Royal Roofing - 1FBCF 1132 - Charcoal Brown Blend



*CONCRETE ROOF TILE #6
Westlake Royal Roofing - 1FBCJ 3184 - Rustic Brown Blend



BRICK #1
H.C. Muddox - Summer Wheat



BRICK #2
H.C. Muddox - Dusty Rose



BRICK #3
H.C. Muddox - Old Town Red



BRICK #4
H.C. Muddox - Monterey Bay Flash, Smooth



METAL ROOF
Custom-Bilt Metals - Zinc Gray



*STUCCO #1
Sherwin Williams - SW 7731 San Antonio Sage



*STUCCO #2
Sherwin Williams - SW 7540 Artisan Tan



STUCCO #3
Sherwin Williams - SW 7549 Studio Taupe



*STUCCO #4
Sherwin Williams - SW 7039 Virtual Taupe



*STUCCO #5
Sherwin Williams - SW 9172 Studio Clay



*STUCCO #6
Sherwin Williams - SW 9131 Cornwall Slate



*SIDING #1
Sherwin Williams - SW 7525 Tree Branch



*SIDING #2
Sherwin Williams - SW 6090 Java



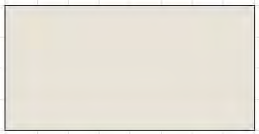
*SIDING #3
Sherwin Williams - SW 6166 Eclipse



*SIDING #4
Sherwin Williams - SW 7061 Night Owl



SIDING #5
Sherwin Williams - SW 7053 Adaptive Shade



*TRIM #1 / STUCCO & SIDING ACCENT
Sherwin Williams - SW 6070 Heron Plume



*TRIM #2
Sherwin Williams - SW 6103 Tea Chest



*TRIM #3
Sherwin Williams - SW 7027 Hickory Smoke



*TRIM #4
Sherwin Williams - SW 7054 Oak Leaf Brown



ACCENT #1 / SIDING #6
Sherwin Williams - SW 2858 Harvest Gold



*ACCENT #2 / SIDING #7
Sherwin Williams - SW 0008 Cajun Red



ACCENT #3 / SIDING #8
Sherwin Williams - SW 0015 Gallery Green



*ACCENT #4 / SIDING #9
Sherwin Williams - SW 6223 Still Water



ACCENT #5
Sherwin Williams - SW 7020 Black Fox

NOTE: *Materials and colors are referenced from Auburn Grove, Livermore, California. This palette is a representative range only; equivalent materials and colors from other manufacturers may be utilized.

CONCEPTUAL MATERIALS & COLOR PALETTE

S-2

CONCEPT DESIGN

ISABEL PORTOLA
OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

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2722








ATTACHED & DETACHED

NOTE: *Wall sconces will be shielded to direct illumination downward and outward.










PODIUM |STORE FRONT

INSPIRATIONAL LIGHTING SELECTION

S-3

CONCEPT DESIGN

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BOARD & BATTS GABLE TRIM





EYEBROW/CANOPIES



BOX WINDOW





DECK & RAILING





COLUMN DETAILS

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CORNICE AT PARCEL S1



CORNICE AT PARCEL S3-A



CORNICE AT PARCEL S3-B

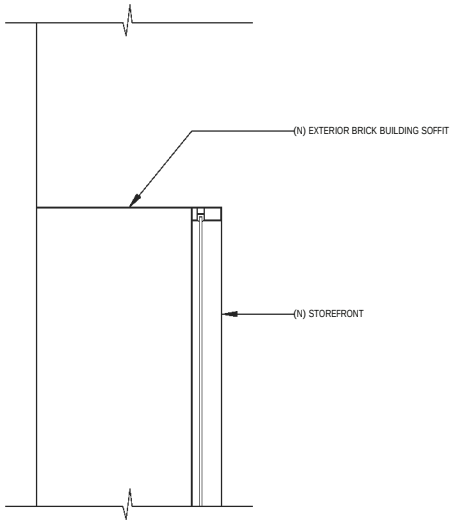


CORNICE AT C1-B

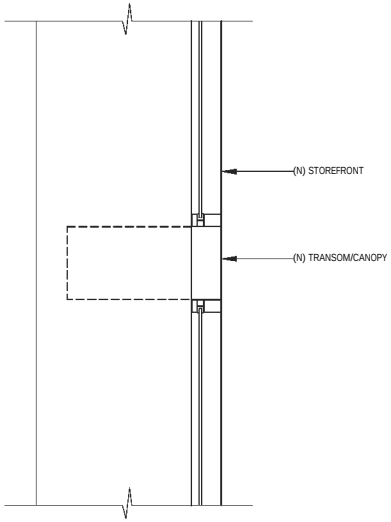


CORNICE AT C2-A

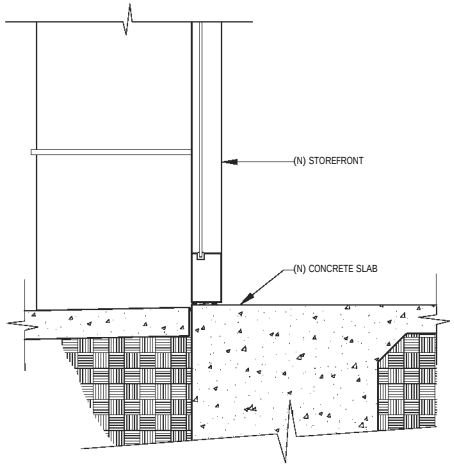
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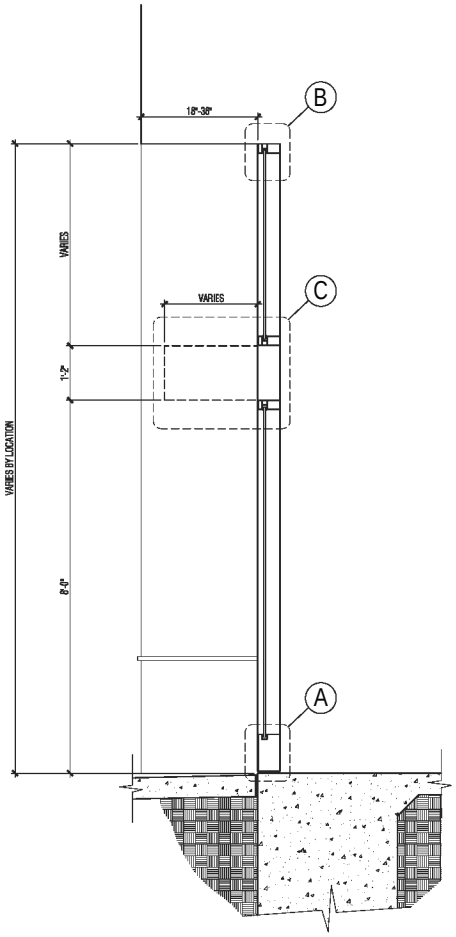
Ⓑ STOREFRONT HEAD DETAIL



Ⓒ STOREFRONT TRANSOM DETAIL



Ⓐ STOREFRONT SILL DETAIL



STOREFRONT SECTION

CONCEPT DESIGN

PODIUM PRODUCTS
TYPICAL DETAILS

S-6

ISABEL PORTOLA
OWNER, LLC

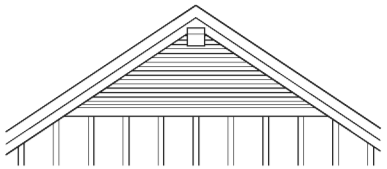
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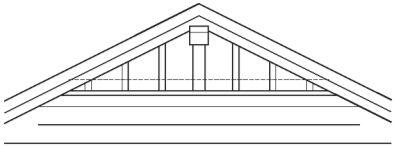
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 2 4 8

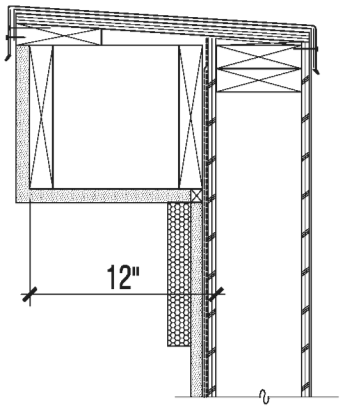
06-07-24 | 2022015



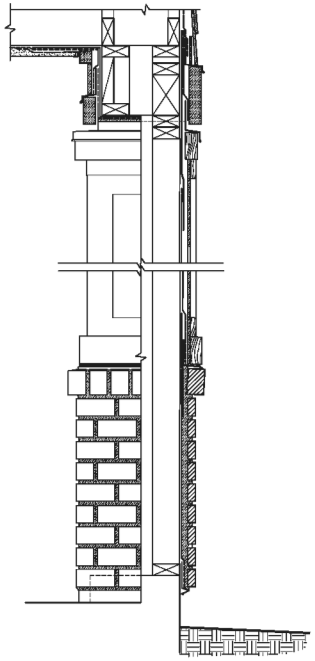
GABLE 'A'



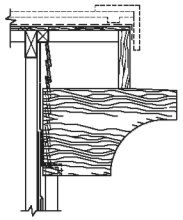
GABLE 'B'



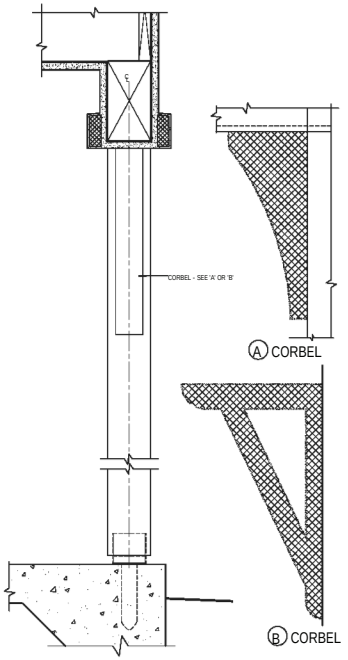
CORNICE/PARAPET DETAIL



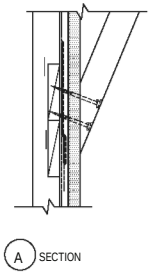
BRICK POST - ELEV/SECTION

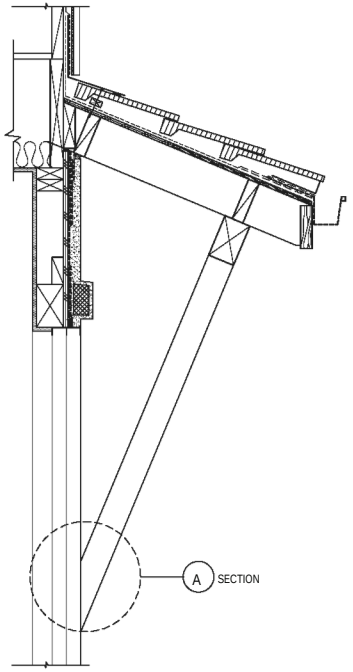


OUTLOOKER



WOOD POST & CORBEL





SHED ROOF

TYPICAL ARCHITECTURAL DETAILS
ALL PRODUCTS

S-7

CONCEPT DESIGN

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OWNER, LLC

WHA.

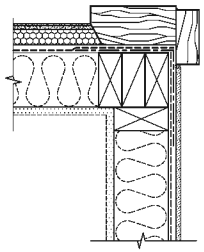
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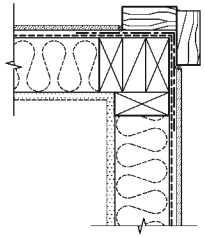
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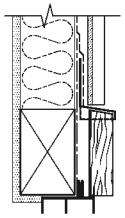
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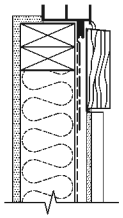
OUTSIDE CORNER
TRIM SIDING/STUCCO



OUTSIDE CORNER
TRIM SIDING/SIDING

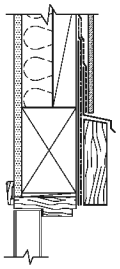


WINDOW HEAD

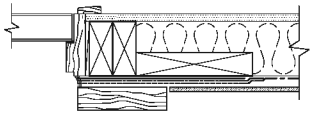


WINDOW SILL

WINDOW DETAIL
AT SIDING

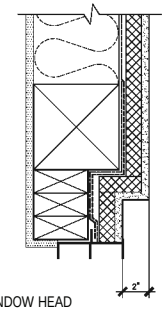


DOOR HEAD

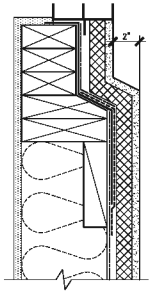


DOOR JAMB

DOOR HEAD/JAMB
DETAIL AT SIDING

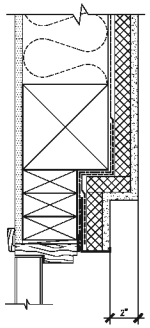


WINDOW HEAD

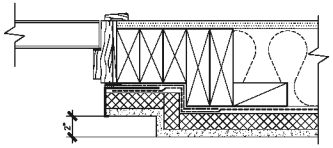


WINDOW SILL

RECESSED WINDOW
DETAIL AT STUCCO



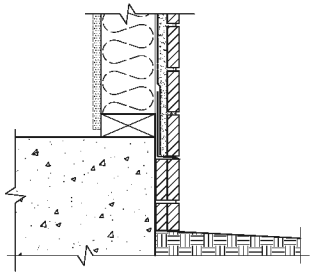
DOOR HEAD



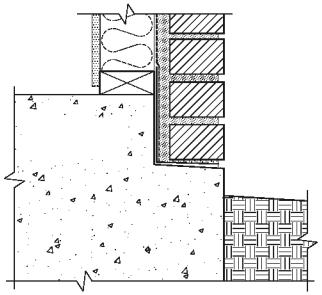
DOOR JAMB

DOOR HEAD/JAMB
DETAIL AT STUCCO

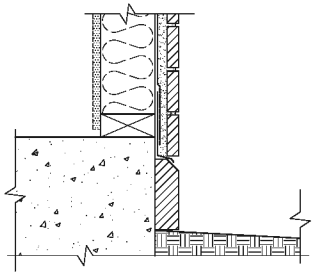
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THIN SET BRICK SCREED
WITH THIN SET BRICK SPACERS



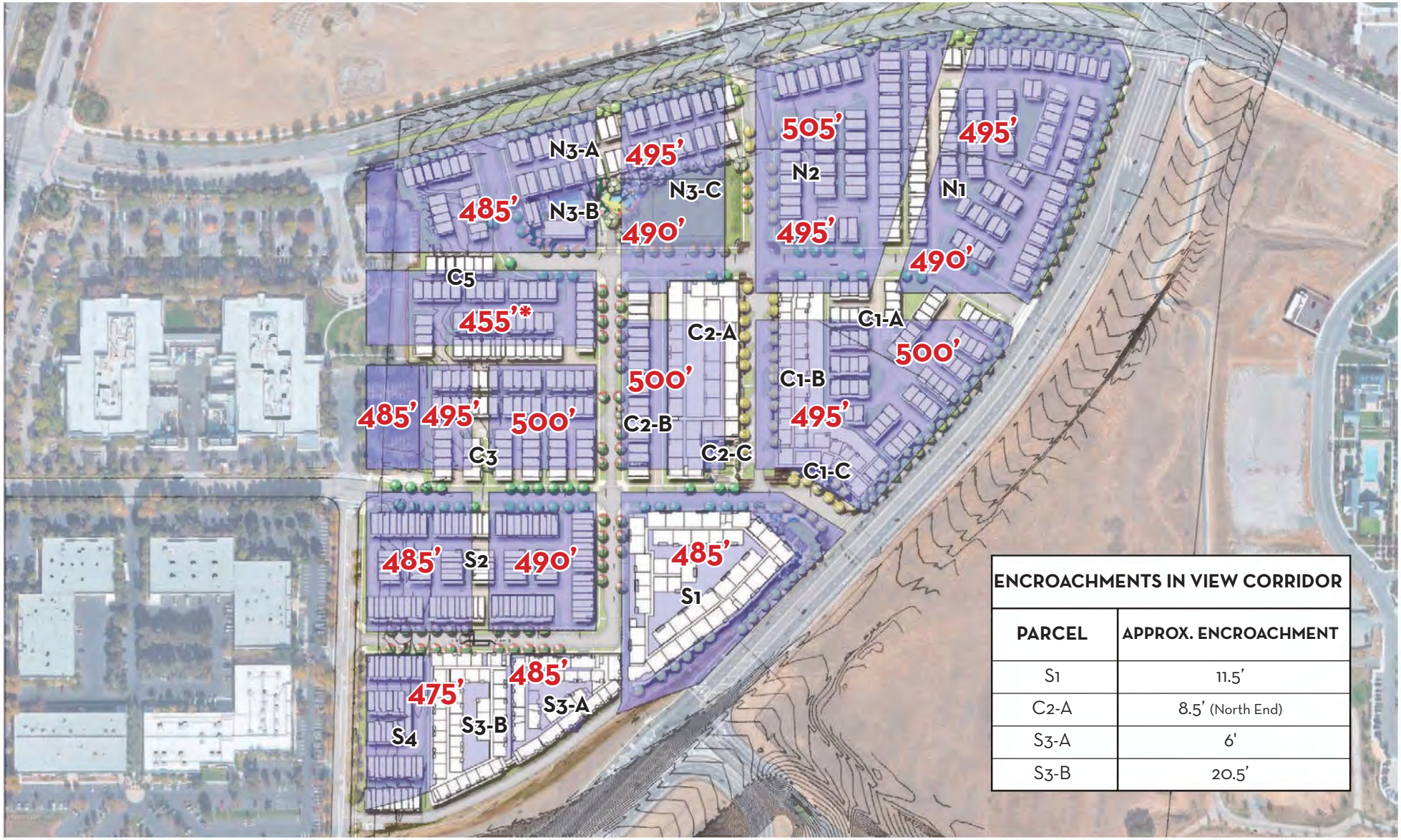
FULL BRICK VENEER
AT GRADE



THIN SET BRICK SCREED
WITH STONE LINTEL

BRICK VENEER
DETAIL AT SCREED

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ENCROACHMENTS IN VIEW CORRIDOR	
PARCEL	**APPROX. ENCROACHMENT**
S1	11.5'
C2-A	8.5' (North End)
S3-A	6'
S3-B	20.5'

CONCEPT DESIGN

HEIGHTS ANALYSIS
MASTER PLAN

H-1

ISABEL PORTOLA
OWNER, LLC

WHA

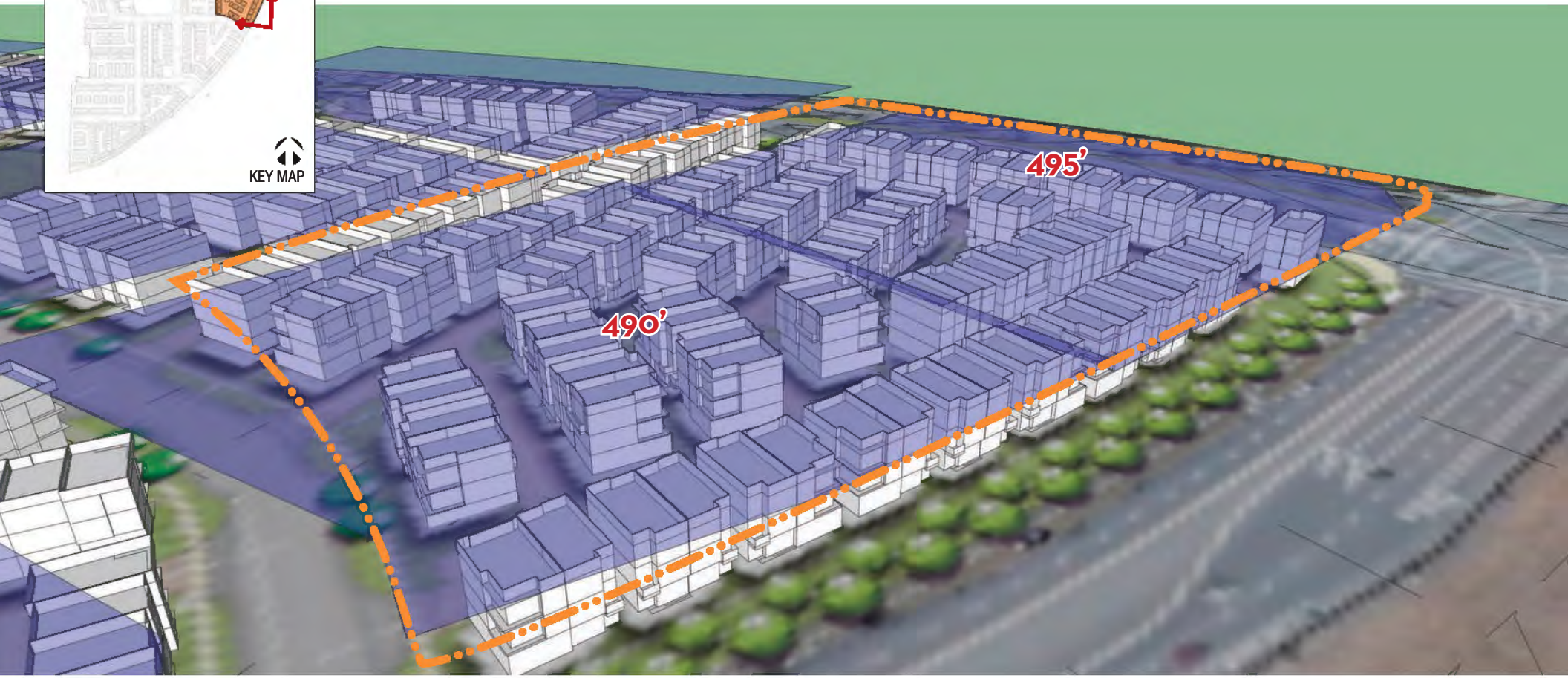
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N-1: Max. Height: ± 490.25' MSL



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL N1 | VIEW CORRIDOR ANALYSIS

H-2

ISABEL PORTOLA
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WHA

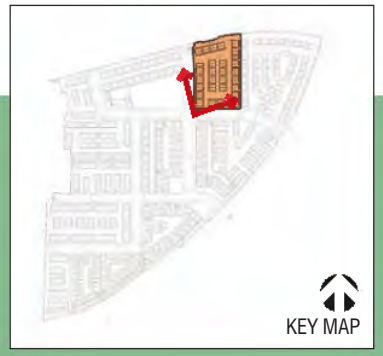
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N-2: Max. Height: ± 486.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL N2 | VIEW CORRIDOR ANALYSIS

H-3

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WHA

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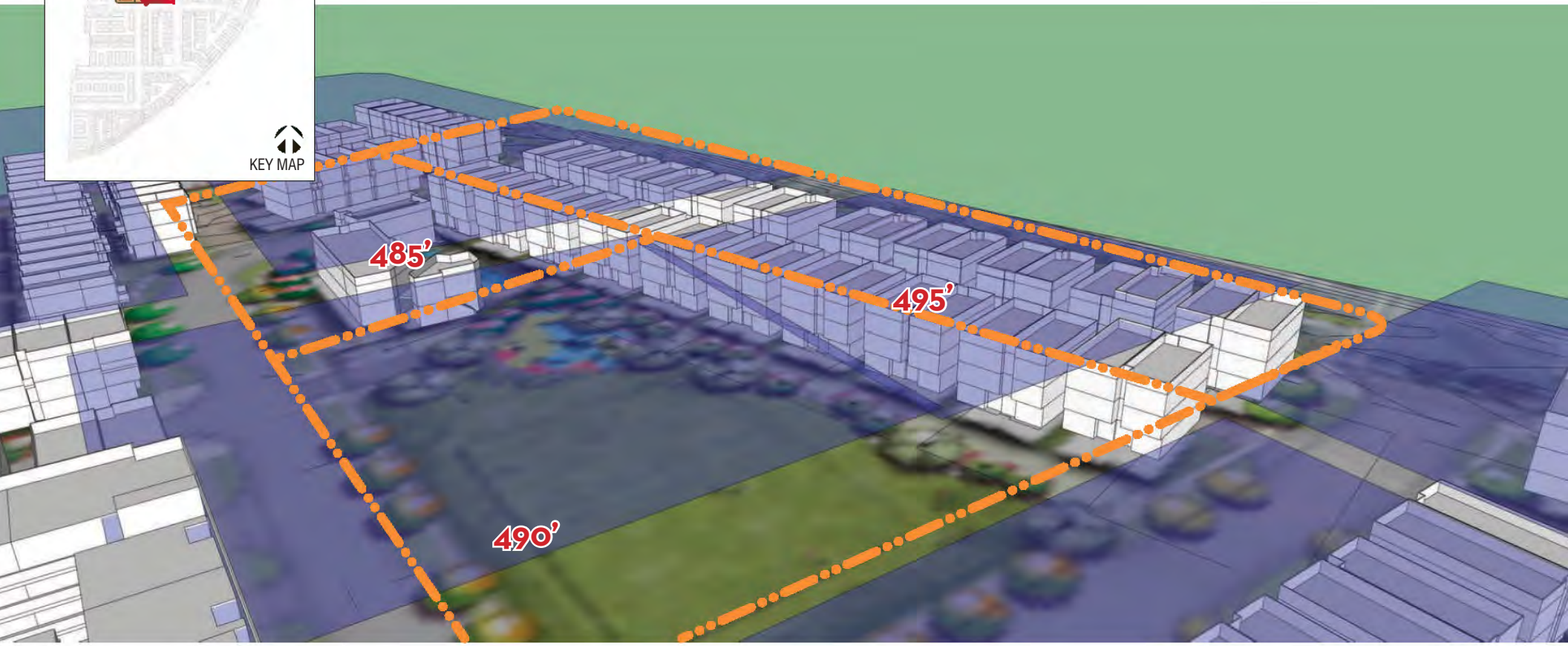
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2732

EXHIBIT C

N3-A: Max. Height: ± 487.5' MSL No Encroachment
N3-B: Park
N3-C: Max. Height: ± 486.2' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCELS N3-A, N3-B, & N3-C | VIEW CORRIDOR ANALYSIS

H-4

ISABEL PORTOLA
OWNER, LLC

WHA

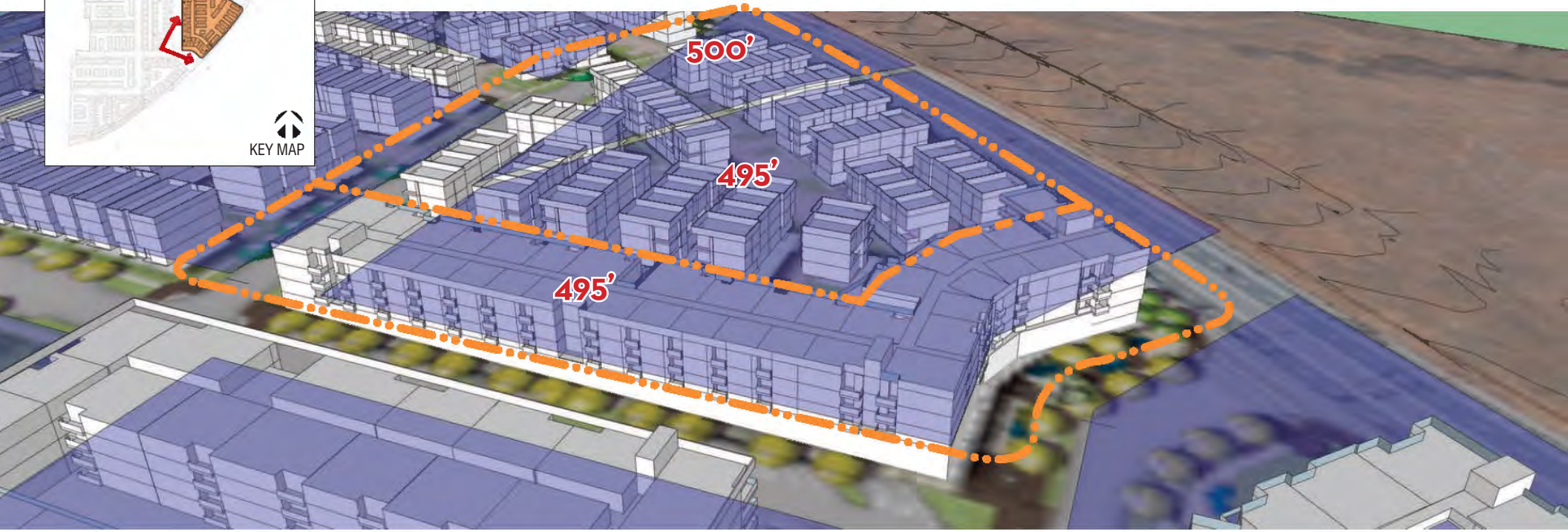
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C1-A: Max. Height: ± 483.3' MSL No Encroachment
C1-B: Max. Height: ± 488.9' MSL No Encroachment



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EXHIBIT C

C2-A: Max. Height: ± 498.5' MSL
Encroachment Approx. 8.5' North End Only
C2-B: Max. Height: ± 474.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCELS C2-A & C2-B | VIEW CORRIDOR ANALYSIS

H-6

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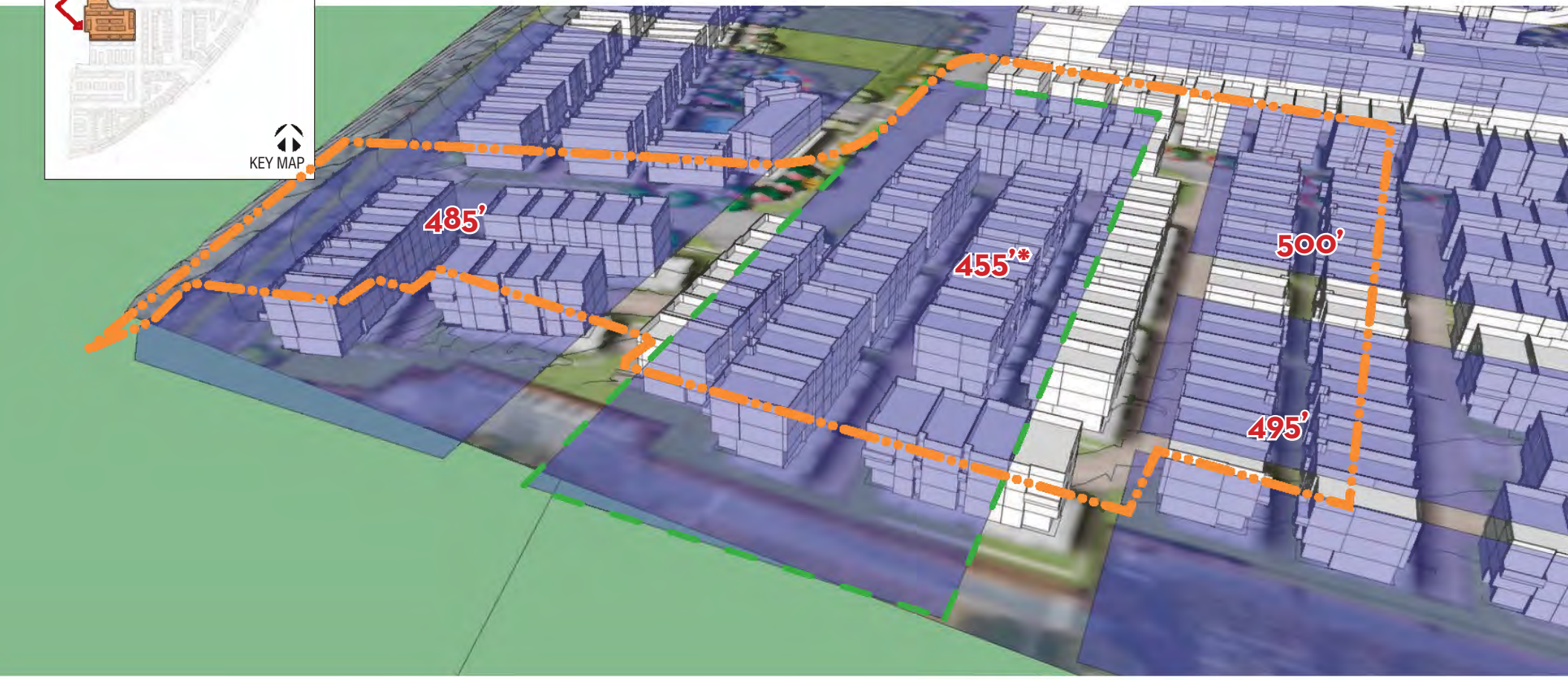
C3: Max. Height: ± 469.3' MSL No Encroachment



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C5: Max. Height: ± 478.3' MSL No Encroachment

*Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL C5 | VIEW CORRIDOR ANALYSIS

H-8

ISABEL PORTOLA
OWNER, LLC

WHA

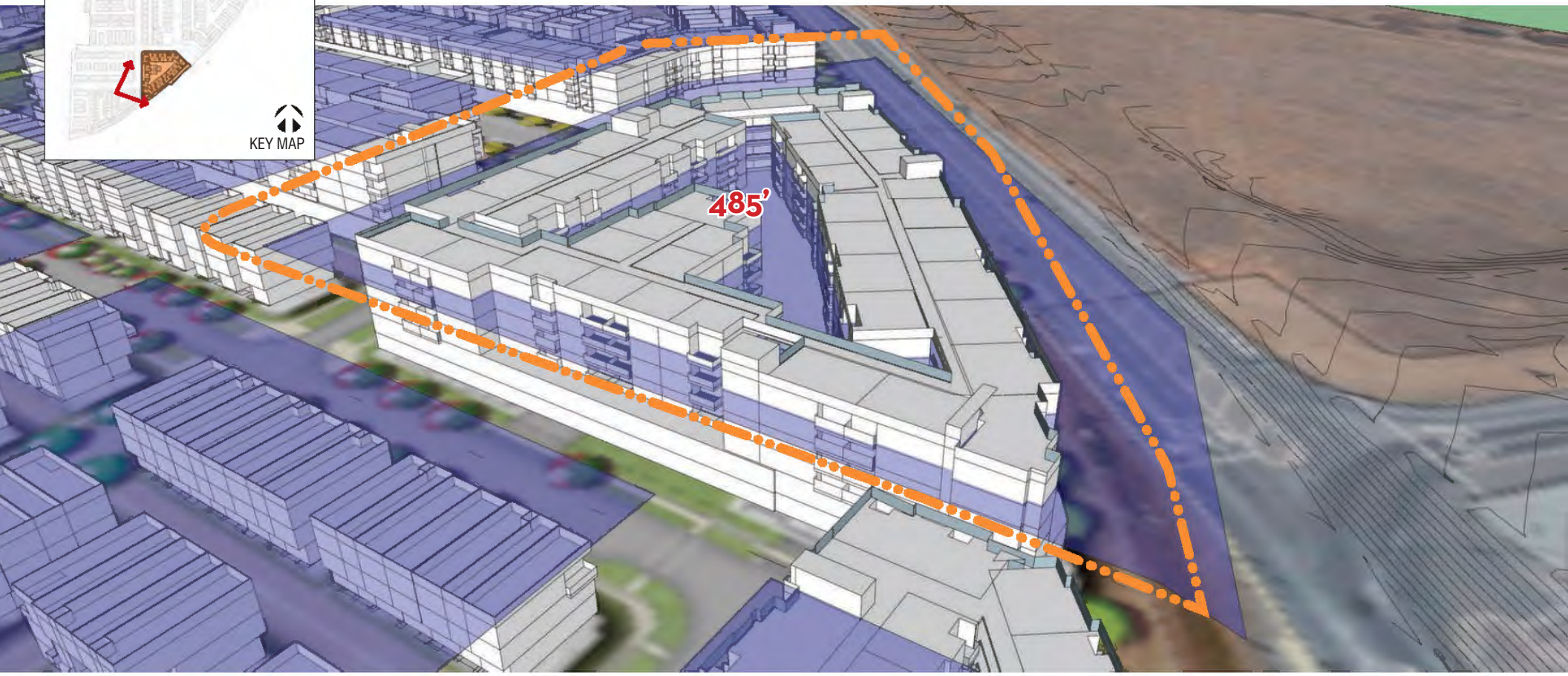
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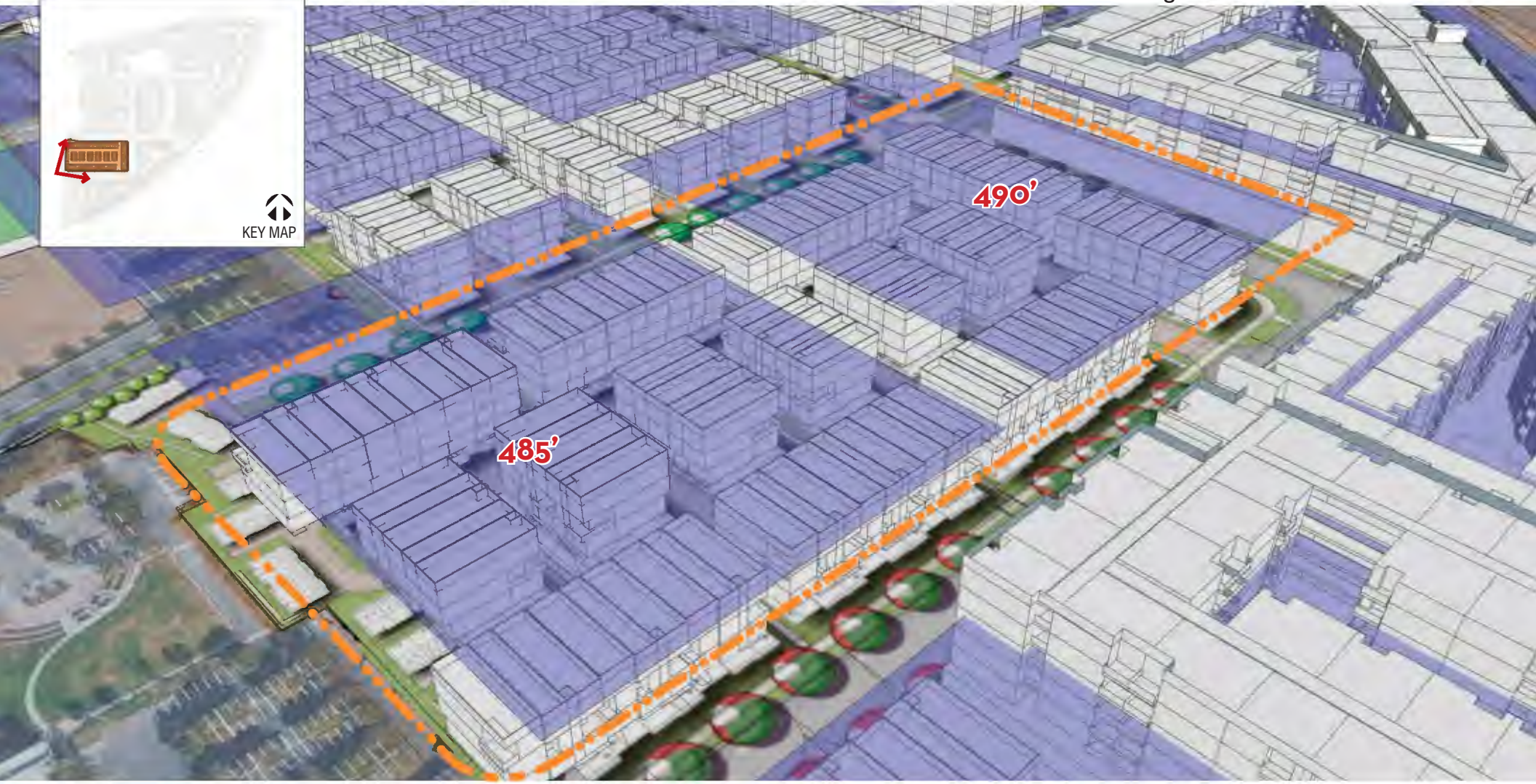
2737

S1: Max. Height: ± 495.5' MSL
Approx. 11.5' Encroachment



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S2: Max. Height: + 463.5' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S2 | VIEW CORRIDOR ANALYSIS

H-10

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WHA.

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S3-A: Max. Height: ± 491 ' MSL

APPROX. 6'-0" Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S3-A | VIEW CORRIDOR ANALYSIS

H-11

ISABEL PORTOLA
OWNER, LLC

WHA.

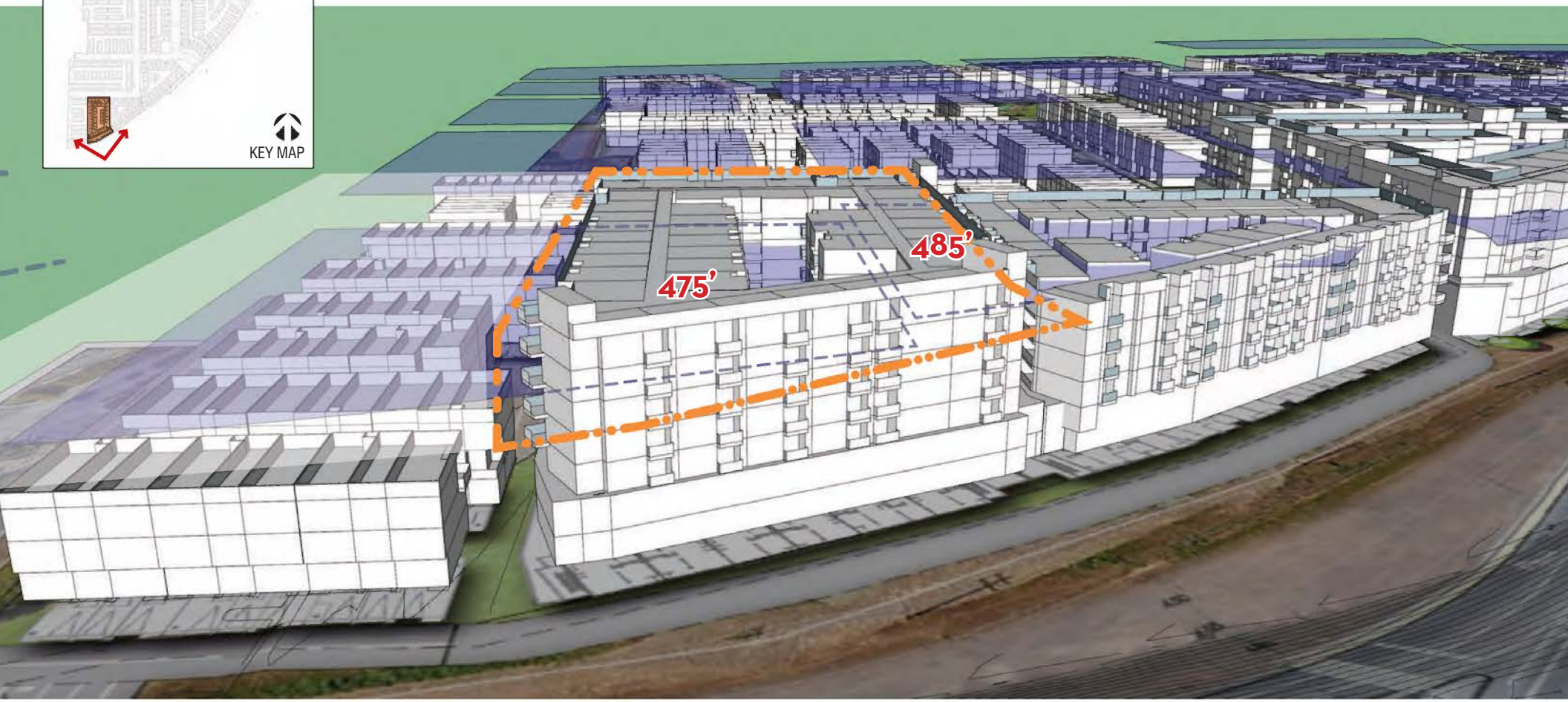
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S3-B: Max. Height: ± 495.5' MSL
Approx. 20.5' Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S3-B | VIEW CORRIDOR ANALYSIS

H-12

ISABEL PORTOLA
OWNER, LLC

WHA

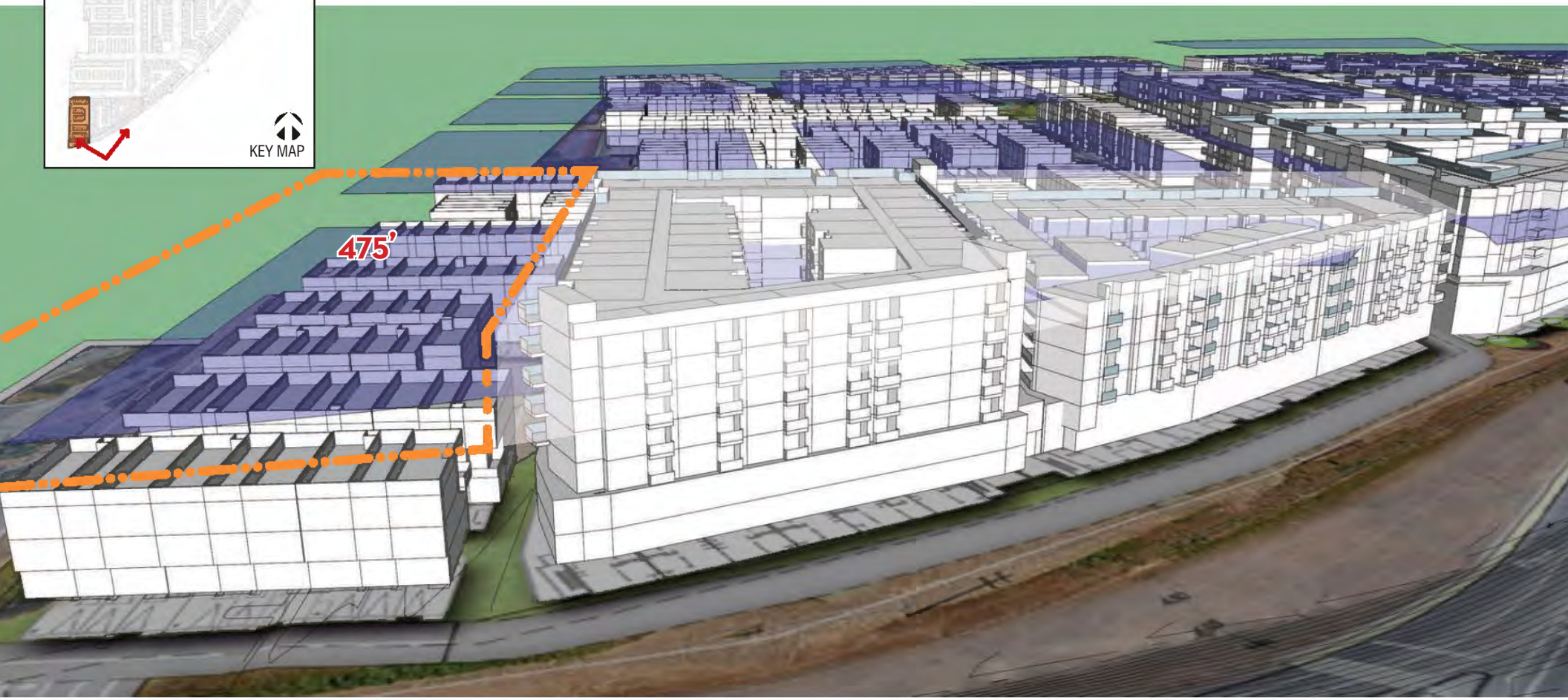
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S4: Max. Height: ± 459' MSL No Encroachment



CONCEPT DESIGN

HEIGHTS ANALYSIS
PARCEL S4 | VIEW CORRIDOR ANALYSIS

H-13

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CONCEPT DESIGN

MASSING MODEL NORTHEAST VIEW

M-1

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CONCEPT DESIGN

MASSING MODEL
SOUTHEAST VIEW

M-2

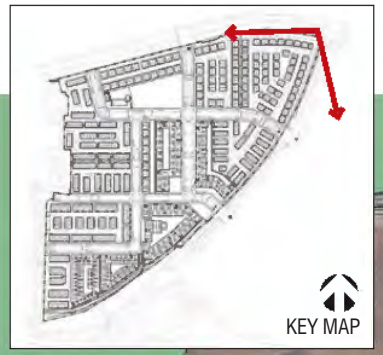
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CONCEPT DESIGN

MASSING MODEL
SOUTHWEST VIEW

M-3

ISABEL PORTOLA
OWNER, LLC

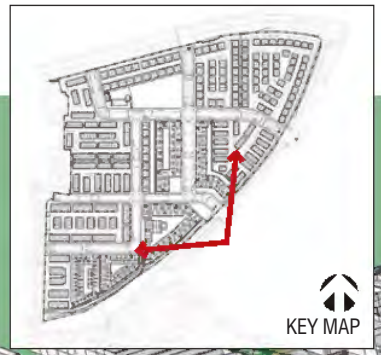
WHA

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CONCEPT DESIGN

MASSING MODEL
ELEVATED ENTRY VIEW

M-4

ISABEL PORTOLA
OWNER, LLC

WHA

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LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

06-07-24 | 2022015

2746



CONCEPT DESIGN

MASSING MODEL
PERSPECTIVE ENTRY VIEW

M-5

ISABEL PORTOLA
OWNER, LLC

WHA.

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LIVERMORE
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LIVERMORE, CALIFORNIA

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2747

Parcel N1			
Existing Zoning: Village			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	4 Stories Max, 2 Stories Min (Height Zone 490 S) (Height Zone 495 N) (Height Zone 505 NW)	3 Stories: Max. Hgt: 490.25 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd =208 Max. Req'd =271 Proposed=219	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 430 SF/DU Private Open Space: 88 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 34' ft. from the curb. **Facing all other streets:** 10 ft. from PL.	N/A Compliant Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	6'-6" (in this request, there are no primary windows from living, dining, bedrooms) 15' between porches	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	2 Porches are separated 7.5' & 9.9'	Waiver
Note:		Four (4) Triplex buildings have been added to fit site constraints.	

Parcel N2			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. , 2 Stories Min. (Height Zone 495 S) (Height Zone 505 N)	3 Stories: Max. Hgt: 486.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 119 Max. Req'd = 157 Proposed = 137	Compliant within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 183 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 67 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** 10' all floors **Table 2.5** doesn't apply because there is no ground floor retail or flex **Facing Major Streets:** Appx. 31 ft. from the curb. **Facing all other streets:** 10' for all floors from PL.	Compliant Compliant Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-6" (in this request, there are no primary windows facing each other from living, dining, bedrooms)	Compliant
Alley Garage Separation **Alley Garage Separation (Cont.)**	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	18.9' separation between porches. Porches encroach 2'-6" into the setback	Compliant
Note:		Two (2) Triplex buildings have been added to fit the site constraints	

Parcel N3-A			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max., 2 Stories Min (Height Zone 485 W) (Height Zone 495 E)	3 Stories: Max. Hgt: 487.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 85 Max. Req'd = 116 Proposed = 85	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 130 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 67 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** 10' for all floors **Facing Major Streets:** Appx. 27 ft. from the curb. **Facing all other streets:** 10' for all floors from PL.	Compliant Compliant Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7.5' Building Separation (in this request, there are no primary windows from living, dining, bedrooms)	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches do not face each other. Porches encroach 2'-6" into the setback	Compliant

Parcel N3-B			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces		Neighborhood Park 1.5 acres	
Height	4 Stories (485-490)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	7 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 65,340 SF N/A	N/A N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min 10' from PL.	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

COMPLIANCE MATRIX

CM-1

CONCEPT DESIGN

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EXHIBIT C

Parcel N3C Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Rec Center	Park	Compliant
Height	4 Stories (Height Zone 490 S) (Height Zone 495 N)	2 Stories : 468.2 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	10 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	N/A	N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** Min 10' for all floors from PL.	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	Same as Interior Setback	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

Parcel C1-A Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	6 Stories Max, 3 Stories Min (Height Zone 495 S & 500 N)	3 Stories : Max. Hgt: 483 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 132 Max. Req'd = 164 Proposed=141	
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 249 SF/DU Private Open Space: 80 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Min. 20 ft. from the curb. **Facing all other streets:** 10' for all floors from PL.	N/A Compliant Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3' Setback from interior PL: 10' all floors -	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches Porches encroach 2'-6" into the setback	Compliant

Parcel C1-B Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	6 Stories (Height Zone 495) Table 2-5: Retail Floor to Clg: 14' min	3 Stories over tall retail level Retail Flr to Clg: >14' Avg (sloping site): 488.9 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 174 Min Req'd Res = (127) Min Req'd Guest = (14) Min Req'd Comm. = (33) Max. Req'd = 304 Max Req'd Res = (196) Max Guest = (30) Max Req'd Comm. = (78) Proposed = 205 Proposed Res = (158) Proposed Guest = (14) Proposed Comm = (33)	Compliant Within range of min/max Guest and Commercial Spaces are unassigned, but provided total within min/max range.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 128 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** 0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 5' over PL **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Waiver See **Parcel C1-B (Cont.)** table below N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage first story 5' setback from interior PL. All other floors 10' setback from interior PL.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 20 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Podium garage structure – doesn't apply.	N/A
NOTE:	Parking	The entry to the lower garage level serving both commercial and residential uses is located on the Main Street frontage. The entry to the upper residential-only garage level comes from the street to the north.	

Parcel C1-B (Cont.) Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Table 2-5	Ground Floor Retail		
Residential Density	Refer to the density range of the underlying residential zone; spaces designed as live/work units shall count as one dwelling unit each.	Core applied to the units above	N/A
Floor to Ceiling Height	Min. 16 ft.	14'	Waiver
Front setbacks along Main Street	Must be 0 for a minimum 75% of street frontage per block; Min. 15 ft. for a minimum 15% of street frontage per block for public open space/outdoor dining area. For the 4th story and above, an additional 10 ft. setback	Pocket Plaza has been provided through C1-C Same as above 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Same as above Waiver
Building Projections along Main Street	Architectural projections such as balconies, awnings, and arcades may project up to 5 feet over the property line along Main Street, if located at least 8 feet above sidewalk grade.	Canopies & Balconies project up to 5' over PL	Compliant

Parcel C1-C Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Pocket Plaza	0.17 acres	N/A
Height	6 Stories (Height Zone 500)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4 Comm 1:400 1:250	N/A	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 7,405 SF	N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	N/A N/A N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	N/A	N/A

COMPLIANCE MATRIX

CM-2

CONCEPT DESIGN

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EXHIBIT C

Parcel C2-A			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	6 Stories Max, 3 Stories Min. (Height Zone 500 S) (Height Zone 490 N) Table 2-5: Retail Floor to Clg: 14' min	4 Stories over tall retail level Retail Flr to Clg: 14' Avg (sloping site) Exceeds Height Envelope by appx. 8.5' at north end only: 498.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 174 Min Req'd Res = (139) Min Req'd Guest = (15) Min Req'd Comm. = (42) Max. Req'd = 282 Max Req'd Res = (220) Max Guest = (29) Max Req'd Comm. = (99) Proposed = 238 Proposed Res = (181) Proposed Guest = (15) Proposed Comm = (42)	Compliant Guest and Commercial Spaces are unassigned, but provided within min/max range.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 102 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** 0' setback for all levels. Top floor balconies unroofed for stepback. Canopies & Balconies project up to 5' over PL **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Waiver See **Parcel C2-A (Cont.)** table below Compliant Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage first story 5' setback from interior PL. All other floors 10' setback from interior PL.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Podium garage structure – doesn't apply.	N/A

Parcel C2-A (Cont.)			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Table 2-5	Ground Floor Retail		
Residential Density	Refer to the density range of the underlying residential zone; spaces designed as live/work units shall count as one dwelling unit each.	Core applied to the units above	N/A
Floor to Ceiling Height	Min. 16 ft.	14'	Waiver
Front setbacks along Main Street	Must be 0 for a minimum 75% of street frontage per block; Min. 15 ft. for a minimum 15% of street frontage per block for public open space/outdoor dining area. For the 4th story and above, an additional 10 ft. setback	Pocket Plaza has been provided through C2-C Same as above 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant Same as above Waiver
Building Projections along Main Street	Architectural projections such as balconies, awnings, and arcades may project up to 5 feet over the property line along Main Street, if located at least 8 feet above	Canopies & Balconies project up to 5' over PL	Compliant

Parcel C2-B			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	6 Stories Max, 3 Stories Min (Height Zone 500)	3 Stories : Max. Hgt: 474.5 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 36 Max. Req'd = 48 Proposed = 45	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 109 SF/DU Private Open Space: Plan 1: 17'-3" x 5'-0" @ ~~86 SF~~ Plan 2: 15'-0" x 6'-0" @ 90 SF Plan 3: 14-8" x 6'-6" @ 95 SF Provided 68 SF/DU	Compliant Waiver - Plan 1 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** Min 10'	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min 10' from PL	Compliant
Rear	Same as Interior Setback	Setback from rear PL: appx. 33' all floors	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	7'-6" (in this request, there are no primary windows facing each other from living, dining, bedrooms)	Compliant Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 26' paved width / garage face to garage face doesn't apply because garages do not face each other.	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	Porches do not face each other. Porches encroach 2'-6" into the setback	Compliant
Notes			One (1) triplex building has been added to fit site constraints.

Parcel C2-C			
Existing Zoning: Core			
	Proposed	**Submittal**	**Compliance**
Civic Spaces	Pocket Plaza	0.19 acres	N/A
Height	6 Stories (500)	0 Stories	N/A
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4 Comm 1:400 1:250	0 Provided	N/A
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Total Area 7,248 SF N/A	N/A N/A
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	N/A N/A N/A	N/A N/A N/A
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	N/A	N/A
Rear	Same as Interior Setback	N/A	N/A
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units. Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	N/A	N/A

Parcel C3			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. 4 Stories Min (Height Zone 495W & 500E)	3 Stories: Max. Hgt: 469.3 MSL	Compliant
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd = 96 Max. Req'd = 127 Proposed=106	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 96 SF/DU Private Open Space: 86 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** 10' for all floors from PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10.8' min building separation	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' garage face to garage face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' min between porches. Porches encroach 2'-6" into the setback	Compliant

COMPLIANCE MATRIX

CM-3

CONCEPT DESIGN

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Parcel C5			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max. 4 Stories Min. (Height Zone 455 S & 485N) Note: 455 was INSP park site	3 Stories : Max. Hgt: 478.3 MSL	Compliant *Height adjusted from former park location at 455' MSL to 485' MSL in accordance with CDD discretion under INSP.
Parking	Type: Min Max Studio/1BR: 1.0 1.25 2BR 1.5 2.0 3BR+ 2.0 2.5 Guest 1:8 1.4	Min. Req'd =179 Max. Req'd = 231 Proposed=182	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 191 SF/DU Private Open Space: 86 SF/Unit min, min 6'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Approximately 32' ft from curb **Facing all other streets:** 10' for all floors from PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min. garage setback from alley: 3' Setback from interior PL: 10' all floors	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	10' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff. Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' to Building Face to Building Face	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' between porches. Porches encroach 2'-6" into the setback	Compliant

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

Parcel S-1			
Existing Zoning: Neighborhood Commercial			
	Proposed	**Submittal**	**Compliance**
Zoning	Neighborhood Commercial		
Height	(Height Zone 485)	Exceeds Height Envelope by appx. 11.5': 496.5 MSL	Waiver
Residential Density (Mixed Use Projects)	To be evaluated as part of Conditional Use Permit	Provided Mix Use building with ground floor retail and stacked flat condos above. (Core Standards applied to residential units)	Compliant
Block Dimension	Maximum 300 feet between publicly accessible paths of travels (including streets, pathways, and driveways.)	Block dimensions along C Street are 120' (Building edge to driveway) & 116' (driveway to driveway) & Along Gateway are 190' (building edge to pathway)	Compliant
FAR	0.4-1.0	0.30	Waiver
Parking	Type: Min Max Comm 1:600 1:300	Min. Req'd = 43 Max. Req'd = 85 On Street Parking = (8) Commercial Parking = (35) Provided Parking = 43 *Note: Onstreet parking for parcel S1 is provided for the Commercial Parking requirement	Compliant Within range of min/max.
Open Space	Public: Min. 0.25 acres on Neighborhood Commercial block	0.25-acre Town Square provided	Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing all other streets:** 0' min to 10' max from PL.	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 31' from curb. **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	N/A Compliant Compliant
Interior Setback (Side/Rear)	N/A	10' at parking podium, 10' residential stories	N/A
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
On-Site Landscaping	Min 10% of site area. Trees shall be planted in accordance with City Stds and Guidelines. Street setback areas and setbacks adjacent to residential shall include trees.	0.60 ac. Podium Courtyard, 0.24 ac. Trail, 0.24 ac. setbacks = 1.08 ac On net site area of 2.55 ac = 42.3% Setbacks include trees.	Compliant
Public Open Space	Min 0.25 acres on Neighborhood Commercial Block	Provided on NB Block in "TS" as a town square.	Compliant

Parcel S-1 Continued			
Existing Zoning: Neighborhood Commercial			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 485)	Exceeds Height Envelope by appx. 11.5': 496.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 269 Min Req'd Res = (204) Min Req'd Guest = (22) Min Req'd Comm. = (43) Max. Req'd = 450 Max Req'd Res = (322) Max Guest = (43) Max Req'd Comm. = (85) Proposed = 407 Proposed Res = (342) Proposed Guest = (22) Proposed Comm = (43)	Compliant Within range of min/max Guest and Commercial Spaces are unassigned, but provided total within min/max range.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 111 SF/DU Private Open Space: Complies, min. 50 SF/Unit avg, min 4'x8'	Compliant Compliant
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Table 2-5:** Projections up to 5' over PL permitted **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing Main Street:** N/A **Facing Major Streets:** Appx. 31' from curb. **Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	10' at parking podium, 10' residential stories	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 20 ft. separation between primary windows (living, dining, bedroom) of residential units.	Podium structure – doesn't apply	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	Decks and canopies will project up to 6' into setback areas.	Compliant
NOTE:		The entry to the lower garage level serving both commercial and residential uses is located on the Main Street frontage. The entry to the upper residential-only garage level comes from the street to the north.	

Parcel S2			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	5 Stories Max., 2 Stories Min. (Height Zone 485 W) (Height Zone 490 E)	3 Stories: Max. Hgt: 463.5 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.5 2.0 Guest 1:8 1.4	Min. Req'd = 183 Max. Req'd = 246 Proposed = 239	Compliant Within range of min/max.
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 90 SF/DU Private Open Space: Plan 1: 10'-3" x 7'-3" @ 75 SF Plan 2: 14'-2" x 5'-4" @ ~~75 SF~~ Plan 3: 10'-8" x 7'-6" @ 87 SF Provided 53 SF/DU	Compliant Waiver - Plan 2 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing Main Street:** Refer to Table 2-5 for ground floor and upper floor setbacks (for ground floor retail/flex). **Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 10 ft. (min.) from PL.	**Facing Main Street:** N/A **Facing Major Streets:** N/A **Facing all other streets:** 10' from face of building to PL.	N/A N/A Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. There are no interior PL for this parcel.	Compliant
Rear	Same as Interior Setback	Same as Interior Setback	Compliant
Building Separation	Min. 10 ft. separation between primary windows (living, dining, bedroom) of residential units.	12' between buildings	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 28' Garage to Garage	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' minimum between porches. Porches encroach 2'-6" into the setback	Compliant

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EXHIBIT C

Parcel S3-A			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 485)	Max. Hgt: 491 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 172 Max. Req'd = 307 Proposed = 178 Guest Parking	Compliant Within range of min/max **AS2345 STATE DENISTY BONUS LAW
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 90 SF/DU Private Open Space: Complies, min. 50 SF/Unit	Compliant Compliant
Setback			
Front	**Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior Setback (Side)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage, 10' setback all other floors	Compliant
Interior Setback (Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	41' setback all other floors	Compliant
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	Does not Apply
Building Projections	Decks, canopies, etc. can project up to 5' into the public ROW or required setbacks.	Decks and canopies will project up to 3' into setback areas.	Compliant

Parcel S3-B			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Core		
Height	(Height Zone 475)	Max. Hgt: 495.5 MSL	Waiver
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.25 2.0 Guest 1:8 1.4	Min. Req'd = 245 Max. Req'd = 390 Proposed = 245	Compliant Within range of min/max
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 50 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 4 ft. x 8 ft.	Common Areas: 115 SF/DU Private Open Space: Complies, min. 50 SF/Unit	Compliant Compliant
Setback			
Front	**Facing all other streets:** Min. 5 ft.; Max. 12 ft. Min. 10 ft. for 3rd story & above	**Facing all other streets:** 10' for all floors from PL. Top floor balconies unroofed for stepback	Compliant
Interior Setback (Side)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	0' setback at podium garage, 10' setback all other floors	Compliant
Interior Setback (Rear)	Min. 0 ft. side setback along Main St, alleyways, and for first story not along alleyways; otherwise Min. 5 ft. for second story; Min. 10 ft. for third story and above	43' setback all other floors	Compliant
Building Separation	Min. 20 ft. window to window separation	Single structure – doesn't apply	Does not Apply
Building Projections	Decks, canopies, etc. can project up to 5' into the public ROW or required setbacks	Decks and canopies will project up to 3' into setback areas.	Compliant

Parcel S4			
Existing Zoning: Office Core			
	Proposed	**Submittal**	**Compliance**
Zoning	Village		
Height	(Height Zone 475)	Max. Hgt: 459 MSL	Compliant
Parking	Type: Min Max Studio: 0.75 1.0 1BR 1.0 1.5 2BR+ 1.5 2.0 Guest 1:8 1.4	Min. Req'd = 75 Max. Req'd = 102 Proposed = 91	Compliant
Open Space	Common Areas 75 SF/DU (10% may be provided through indoor space) Private Open Space 75 SF/DU which may be averaged across a project provided that each unit has at least one private outdoor space with a min. dimension of 6 ft. x 8 ft.	Common Areas: 214 SF/DU Private Open Space: Plan 1: 10'-3" x 7'-3" @ 75 SF Plan 2: 14'-2" x 5'-4" @ ~~75 SF~~ Plan 3: 10'-8" x 7'-6" @ 87 SF Provided 56 SF/DU	Compliant Waiver - Plan 2 does not meet minimum width dimension and SF cannot be counted toward average.
Setback			
Front	**Facing all other streets:** 10 ft. (min.) from PL.	Provided 10'	Compliant
Interior Setback (Side/Rear)	Min. 15 ft. where abutting existing residential uses; otherwise, Min. 0 ft. setback for all stories along alleyways and for first story not along alleyways; Min. 5 ft. for second story; Min. 10 ft. for third story and above	Min garage setback from alley: 3'. There are no interior PL for this parcel.	Compliant
Building Separation	Min. 20 ft. window to window separation	Min. 20 ft. window to window separation Min 15' porch to porch	Compliant
Alley Garage Separation	Min. 20 ft. paved width for alleys, unless otherwise approved by LPFD and City Staff Min. 28 ft. measured garage face to garage face along alleys, unless otherwise approved by LPFD and City Staff.	Min. 22' paved width / Min. 26' Fire Lane / Min. 30' Building to Building	Compliant
Porch Separation	Porches facing each other must be separated by 15 ft. (min.) along paseos. Limited encroachments consistent with Livermore Development Code section 4.02.020 are permitted.	15' minimum between porches. Porches encroach 2'-6" into the setback	Compliant

Parcel TS			
Existing Zoning: Center			
	Proposed	**Submittal**	**Compliance**
Civic Spaces		Town Square	
Height	(Height Zone 485)	0 Stories	N/A
FAR	0.4-1.0	N/A	N/A
Parking	Type: Min Max Comm 1:600 1:300	0 Provided	N/A
Open Space		Total Area 10,890 SF	N/A
Setback			
Front	**Facing Major Streets:** 20 ft. (min.) from the curb. **Facing all other streets:** 0' min to 10' max from PL.	**Facing Major Streets:** N/A **Facing all other streets:** N/A	N/A N/A
Interior Setback (Side/Rear)	N/A	N/A	N/A
Building Separation	Min. 20 ft. window to window separation	N/A	N/A
Building Projections	Decks, canopies, etc. can project up to 6' into the public ROW or required setbacks	N/A	N/A

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EXHIBIT D



ILLUSTRATIVE SITE PLAN L1-1

ISABEL PORTOLA OWNER, LLC

GATES +ASSOCIATES LANDSCAPE ARCHITECTURE

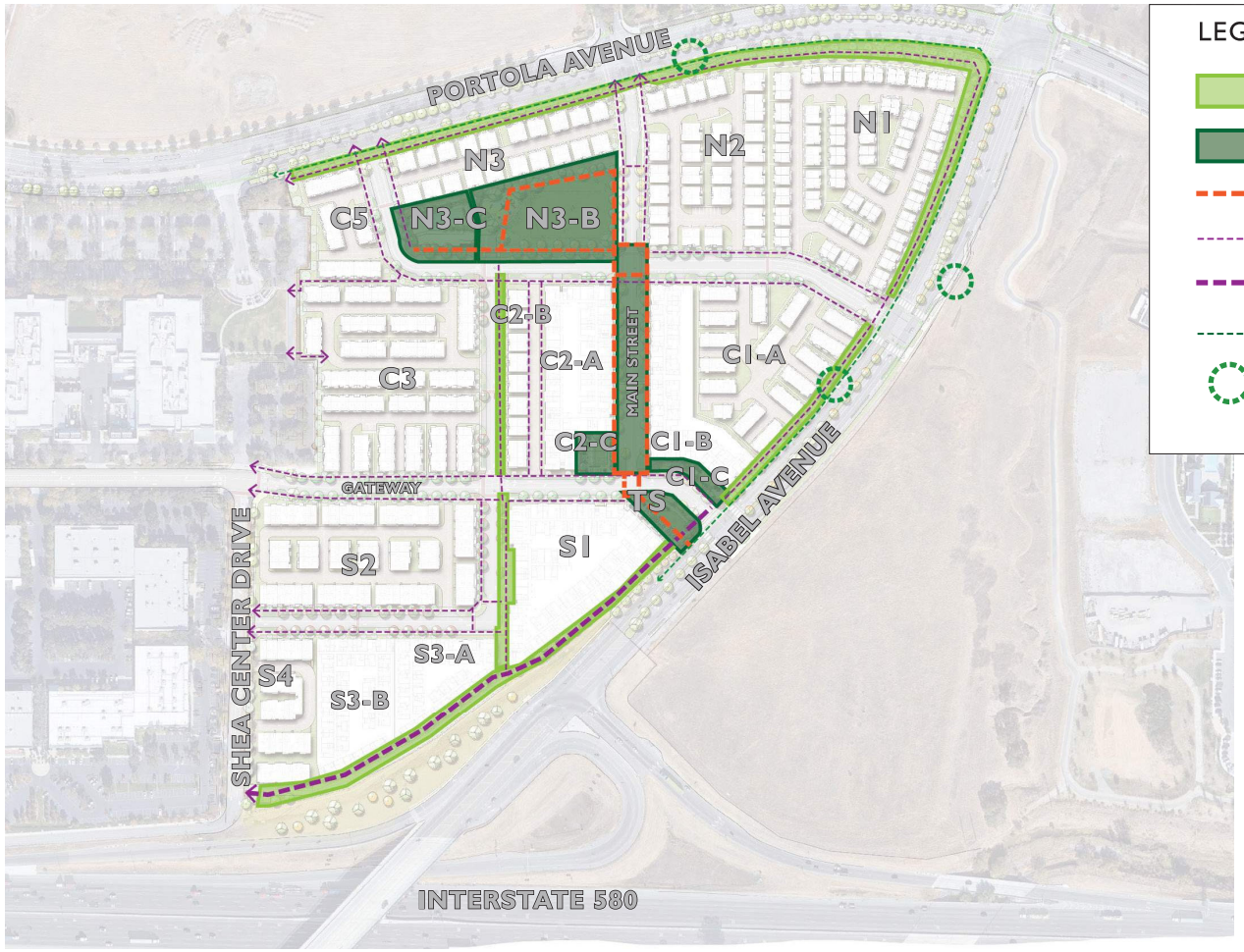
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LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 75 150 300

06.05.24

EXHIBIT D



OPEN SPACE AND PEDESTRIAN CIRCULATION L1-2

ISABEL PORTOLA OWNER, LLC

GATES +ASSOCIATES LANDSCAPE ARCHITECTURE

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06.05.24

EXHIBIT D



LEGEND

- Bike Parking Public
- Bike Parking Neighborhood
- Litter and Recycling
- Enhanced Crossing
- Low Wall

				Ground Floor		Bicycle Parking				
					Res	Village		Center/Core		Nbhd Comm &
				Comm	Lobby	Resident	Visitor	Resident	Visitor	Ground Floor Flex
PA	Designation	Units	Bdrms	SF	Amenity	1:1 unit	1:4 units	1:4 Bdrm	1:20 Units	1: 1400 SF
N1	Village	98	362			98	25			
N2	Village	56	224			56	14			
N3-A	Village	40	160			40	10			
N3-B	Open Space									
N3-C	Open Space									
C1-A	Village	62	217			62	16			
C1-B	Core	114	183	19,294	3,226			46	6	17
C2-A	Core	116	220	24,690	3,228			55	6	20
C2-B	Village	17	68			17	5			
C3	Village	45	171			45	12			
C5	Village	84	320			84	21			
S-1	Nbhd Comm	172	328	21,651	2,273			82	9	18
S2	Village	102	236			102	26			
S3-A	Core	152	272					68	8	
S3-B	Core	200	280					70	10	
S4	Village	41	97			41	11			
				65,635	8,727					

BIKE SUMMARY

Overall Total Bicycle Parking Required:	1100
Overall Total Bicycle Parking Provided:	1100

SITE AMENITIES L1-3

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EXHIBIT D











LEGEND

- Iconic Sulpture Installations
- Murals, Small Sculptures & Decorative Arts









PUBLIC ART ELEMENTS L1-4

ISABEL PORTOLA OWNER, LLC

GATES +ASSOCIATES LANDSCAPE ARCHITECTURE

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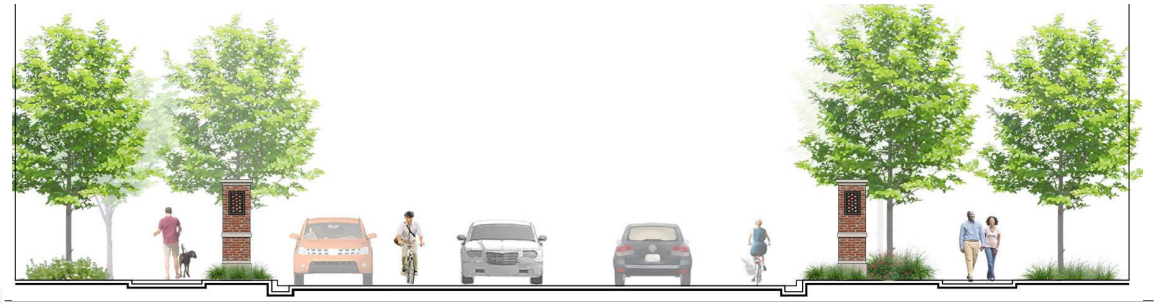
EXHIBIT D



COMMUNITY ENTRIES AND GATEWAYS L1-5

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EXHIBIT D



Community Entry

SCALE 3/8" = 1'-0"

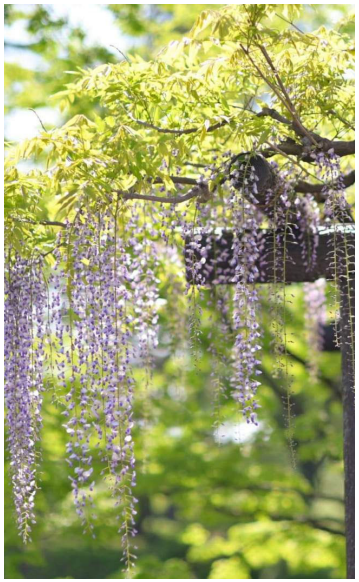


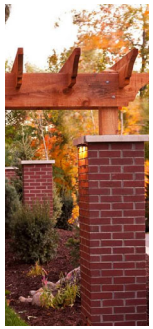
Gateway Feature



Neighborhood Sign Element

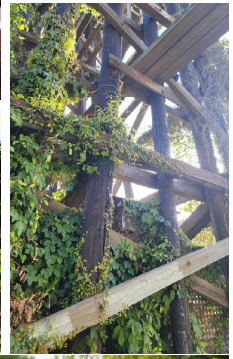
SCALE 1/2" = 1'-0"

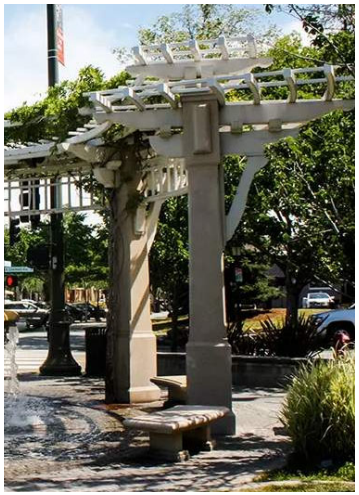


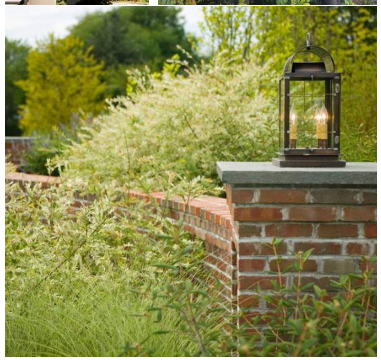














COMMUNITY ENTRIES AND GATEWAY CONCEPTS L1-6

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EXHIBIT D



Total Tree Count: 465

TREES



Acer buergerianum
Trident Maple



Celtis occidentalis
Hackberry



Acer × freemanii 'Armstrong'
Armstrong Red Maple



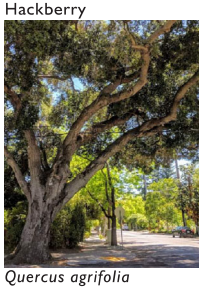
Lagerstroemia indica 'Zuni'
Zuni Crape Myrtle



Platanus acerifolia 'Columbia'
Plane Tree



Platanus racemosa
Western Sycamore



Quercus agrifolia
Coast Live Oak



Quercus lobata
Valley Oak



Tilia cortada
Littleleaf Linden



Zelkova serrata ' Green Vase'
Green Vase Zelkova

TREE SCHEDULE

ACB	ACER BUERGERIANUM	TRIDENT MAPLE	24"BOX	M (WUCOLS IV)	30'H X 25'W	55	POLLINATOR SUPPORT
AFA	ACER X FREEMANII 'ARMSTRONG'	ARMSTRONG FREEMAN MAPLE	36"BOX	M (WUCOLS IV)	60'H X 15'W	62	
COC	CELTIS OCCIDENTALIS	COMMON HACKBERRY	24"BOX	L (WUCOLS IV)	40'H X 40'W	30	POLLINATOR SUPPORT
LAZ	LAGERSTROEMIA INDICA X FAURIEI 'ZUNI'	ZUNI CRAPE MYRTLE	15 GAL.	L (WUCOLS IV)	15'H X 15'W	20	
PHD	PHOENIX DACTYLIFERA	DATE PALM	24"BOX	L (WUCOLS IV)	60'H X 15'W	10	
PLR	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24"BOX	M (WUCOLS IV)	40'H X 40'W	13	POLLINATOR SUPPORT, NATIVE
PAC	PLATANUS X ACERIFOLIA 'COLUMBIA'	COLUMBIA LONDON PLANE TREE	24"BOX	M (WUCOLS IV)	60'H X 40'W	17	POLLINATOR SUPPORT
QAG	QUERCUS AGRIFOLIA	COAST LIVE OAK	36"BOX	VL (WUCOLS IV)	80'H X 50'W	39	POLLINATOR SUPPORT, NATIVE
QUE	QUERCUS LOBATA	VALLEY OAK	24"BOX	L (WUCOLS IV)	70'H X 50'W	5	POLLINATOR SUPPORT, NATIVE
TLC	TILIA CORDATA	LITTLELEAF LINDEN	36"BOX	M (WUCOLS IV)	80'H X 50'W	142	POLLINATOR SUPPORT
ZSG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE JAPANESE ZELKOVA	24"BOX	M (WUCOLS IV)	40'H X 30'W	72	

FUTURE POTENTIAL TREE WITH BUILDING DESIGN PACKAGES

EXISTING TREE TO REMAIN ALONG PORTOLA AVE

STREET TREE PLAN L1-7

ISABEL PORTOLA
OWNER, LLC

GATES +ASSOCIATES
LANDSCAPE ARCHITECTURE

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EXHIBIT D

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE
AC	Acacia 'Cousin Itt'	Cousin Itt Little River Wattle	5 Gal	4'-0" O.C.	L
AC	Achillea millefolium	Common Yarrow	1 Gal	2'-6" O.C.	L
AG	Agapanthus 'Black Pantha'	Lily-of-the-Nile	1 Gal	2'-0" O.C.	M
AB	Agave 'Blue Glow'	Agave	3 Gal	2'-0" O.C.	L
AL	Anementhele lessoniana	New Zealand Wind Grass	1 Gal	3'-0" O.C.	M
AN	Anigozanthos 'Big Red'	Kangaroo Paw	1 Gal	2'-6" O.C	L
AR	Arbutus unedo 'Elfin King'	Dwarf Strawberry Tree	5 Gal	4'-6" O.C.	L
AD	Artemisia douglasiana	Mugwort	1 Gal	6'-0" O.C.	L
BO	Berberis 'Orange Rocket'	Orange Rocket Barberry	1 Gal	3'-0" O.C.	M
BG	Bouteloua gracilis 'Blonde Ambition'	Blue Grama Grass	1 Gal	2'-6" O.C.	L
BF	Bulbine frutescens	Orange Bulbine	1 Gal	1'-6" O.C.	M
BU	Buxus 'Green Mountain'	Boxwood	1 Gal	3'-0" O.C.	M
CA	Calamagrostis x acutiflora 'Karl Foerester'	Feather Reed Grass	1 Gal	3'-0" O.C.	M
CL	Callistemon 'Little John'	Dwarf Bottlebrush	5 Gal	3'-6" O.C.	L
CT	Carex tumulicola	Berkeley Sedge	1 Gal	1'-6" O.C.	L
CH	Chondropetalum tectorum	Cape Rush	1 Gal	3'-6" O.C.	L
CP	Coleonema puchellum 'Sunset Gold'	'Sunset Gold' Breath of Heaven	5 Gal	3'-6" O.C.	M
DV	Dietes g. 'Variegata'	Variegated Fortnight Lily	5 Gal	3'-0" O.C.	L
DG	Dietes grandiflora	Fortnight Lily	5 Gal	3'-0" O.C.	L
EE	Euonymus j. 'Green Spire'	Evergreen Euonymus	5 Gal	2'-0" O.C.	M
EG	Euonymus j. 'Silver King'	Evergreen Euonymus	5 Gal	3'-0" O.C.	M
GL	Gaura lindheimeri	White Gaura	1 Gal	4'-0" O.C.	M
HE	Hebe x andersonii	NCN	5 Gal	4'-0" O.C.	M
HC	Hemerocallis 'Terra Cotta Baby'	Evergreen Day Lily	1 Gal	2'-6" O.C.	M
HM	Heuchera maxima	Coral Bells	1 Gal	1'-6" O.C.	L
JP	Juncus patens 'Elk Blue'	Elk Blue Grey Rush	1 GAL	3'-6" O.C.	L
LN	Lantana 'Lemon Swirl'	Lantana	1 Gal	3'-0" O.C.	L
LA	Lavatera thuringiaca 'Red Rum'	Tree Mallow	5 Gal	3'-6" O.C.	L
LV	Lavendula angustifolia 'Martha Roderick'	English Lavender	1 Gal	2'-0" O.C.	L
LC	Leymus condensatus 'Canyon Prince'	Wild Rye	1 Gal	3'-0" O.C.	L
LM	Lomandra 'Lime Tuff'	Mat Rush	1 Gal	2'-0" O.C.	L
LL	Lomandra longifolia 'Breeze'	Dwarf Mat Rush	1 Gal	3'-0" O.C.	L
LP	Lomandra 'Platinum Beauty'	Mat Rush	1 Gal	3'-0" O.C.	L
LO	Loropetalum chinensis	Chinese Fringe Flower	5 Gal	4'-0" O.C.	M
MA	Mimulus aurantiacus	Sticky Monkey Flower	1 Gal	3'-0" O.C.	L
MS	Miscanthus sinensis gracillimus	Eulalia	5 Gal	5'-0" O.C.	M
MD	Muhlenbergia dubia	Pine Muhly	1 Gal	3'-0" O.C.	L
ML	Muhlenbergia lindheimeri	Lindheimer's Muhly	1 Gal	3'-6" O.C.	L
MR	Muhlenbergia rigens	Deer Grass	1 Gal	3'-6" O.C.	L
MH	Muhlenbergua capillaris 'Lenca'	Pine Muhly	1 Gal	3'-0" O.C.	L
MC	Myrtus communis 'Compacta'	Dwarf Myrtle	1 Gal	3'-0" O.C.	L
NA	Nandina domestica 'Harbor Dwarf'	Heavenly Bamboo	1 Gal	2'-6" O.C.	M
NF	Nepeta 'Purrsian Blue'	Purrsian Blue Catmint	1 Gal	2'-6" O.C.	L
PN	Pennisetum 'Fairy Talks'	Fountain Grass	1 Gal	2'-6" O.C.	M
PH	Phormium t. 'Wings of Gold'	New Zealand Flax	5 Gal	3'-0" O.C.	L
PT	Pittosporum tenuifolium 'Golf Ball'	Golf Ball Mock Orange	1 Gal	3'-6" O.C.	M
SC	Salvia clevelandii	Cleveland Sage	1 Gal	5'-0" O.C.	L
SH	Salvia 'Hot Lips'	Hot Lips Littleleaf Sage	1 Gal	4'-0" O.C.	L
SL	Salvia leucantha	Mexican Sage	1 Gal	5'-0" O.C.	L
SS	Salvia x sylvestris 'Blue Hill'	Blue Hill Meadow Sage	1 Gal	1'-6" O.C.	L
SG	Stipa gigantea	Giant Feather Grass	1 Gal	2'-6" O.C.	L
TC	Teucrium fruticans 'Compacta'	Bush Germander	5 Gal	3'-0" O.C.	L
WM	Westringia fruticosa 'Morning Light'	Coast Rosemary	5 Gal	3'-6" O.C.	L

GROUNDCOVERS	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE
AE	Arctostaphylos 'Emerald Carpet'	Emerald Carpet Manzanita	5 Gal	4' O.C.	L
BP	Baccharis pilularis 'Pigeon Point'	Dwarf Coyote Brush	1 Gal	4' O.C	L
CF	Carex flacca 'Blue Zinger'	Blue Sedge	1 Gal	1'-6" O.C.	M
CE	Ceanothus griseus horizontalis	Carmel Creeper	1 Gal	6' O.C	L
CK	Coprosma kirkii 'Verde Vista'	Prostrate Mirror Plant	1 Gal	4' O.C	L
NM	Delta Bluegrass Native No-Mow	NCN	Sod	N/A	M
NP	Delta Bluegrass Native Preservation Mix	NCN	Sod	N/A	L
DM	Dymondia margaetae	Silver Carpet	Flat	12" O.C.	L
EK	Erigeron karvinskianus	Fleabane	1 Gal	18"O.C	L
ER	Eriogonum sp.	Wild Buckwheat	1 Gal	3' O.C	L
FC	Festuca californica	California Fescue	1 Gal	1'-6" O.C	M
FM	Festuca mairei	Atlas Fescue	1 Gal	2'-0" O.C.	L
GZ	Gazania sp.	Orange Gazania	1 Gal	1' O.C	M
JP	Juncus patens 'Elk Blue'	California Grey Rush	1 Gal	2'-0" O.C.	M
LN	Lippia noddiflora 'Kurapia S1'	Kurapia	Sod	N/A	L
MP	Myoporum parvifolium	Myoporum	1 Gal	4' O.C	L
OF	Osteospermum fruticosum	African Daisy	1 Gal	3' O.C	L
RC	Rosa 'Carpet Rose'	Carpet Rose	1 Gal	4' O.C	M
ZS	Zauschneria californica	Californica Fuschia	1 Gal	3'-0" O.C.	L

VINES	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE
JO	Jasminum officinale	Common Jasmine	5 Gal	As Shown	M
SJ	Solanum jasminoides	Potato Vine	5 Gal	As Shown	M
WS	Wisteria sinensis	Chinese Wisteria	5 Gal	As Shown	M



Pollinator Support

California Native

PLANTING SCHEDULE L1-8

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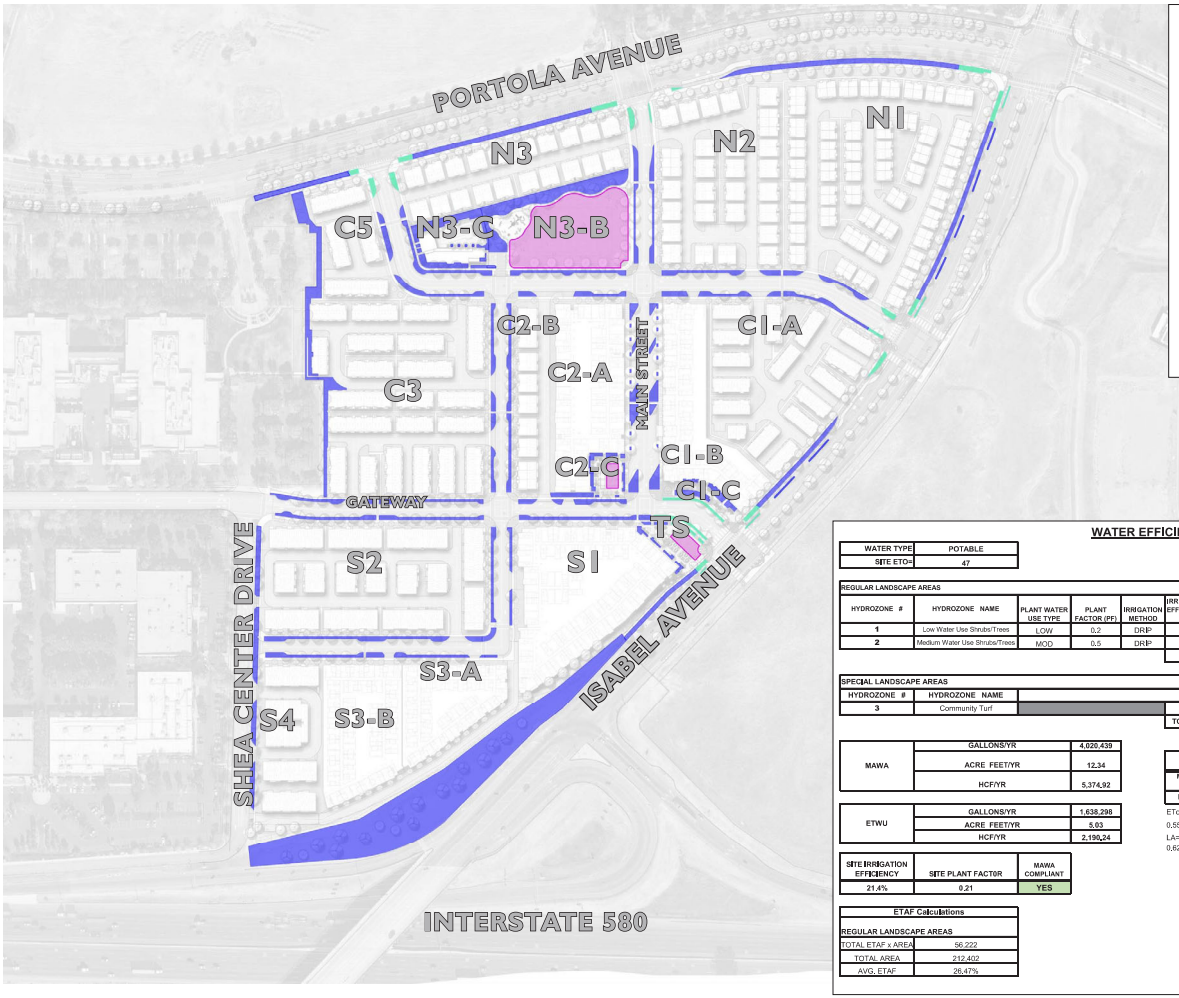
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EXHIBIT D



LEGEND

- Low Water Use (202,205 sq ft.)
- Medium Water Use (10,1197 sq ft.)
- Special Landscape Area (46,997 sq ft.)

WATER EFFICIENT LANDSCAPE WORKSHEET

WATER TYPE	POTABLE
SITE ETo=	47

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/YR)	ACRE FEET/ YEAR	HCF/ YEAR	PERCENTAGE OF LANDSCAPE
1	Low Water Use Shrubs/Trees	LOW	0.2	DRIP	0.81	0.25	202,205	49,927	1,454,877	4,465	1,945.02	95%
2	Medium Water Use Shrubs/Trees	MOD	0.5	DRIP	0.81	0.62	10,197	6,294	183,420	0.563	245.21	5%
					TOTALS		212,402	56,222	1,638,298	5.03	2,190.24	100%

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME										
3	Community Turf				1		46,997				22%
					TOTALS		46,997				22%

MAWA	GALLONS/YR	4,020,439
	ACRE FEET/YR	12.34
	HCF/YR	5,374.92
ETWU	GALLONS/YR	1,638,298
	ACRE FEET/YR	5.03
	HCF/YR	2,190.24

SITE IRRIGATION EFFICIENCY	SITE PLANT FACTOR	MAWA COMPLIANT
21.4%	0.21	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	56,222
TOTAL AREA	212,402
AVG. ETAF	26.47%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.55) + (0.45 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION
0.55= ET ADJUSTMENT FACTOR
LA=LANDSCAPED AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION
PF = PLANT FACTOR FOR HYDROZONES
HA = HYDROZONE AREA (SQ.FT)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP
IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

"I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN."

SIGNATURE _____ JUNE 05, 2024 DATE

HYDROZONE PLAN WITH WATER CALCS L1-9

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EXHIBIT D



LEGEND



● Pedestrian Light
(ST-14F per City of Livermore Standard Detail)



○ Street Light
(ST-14C per City of Livermore Standard Detail)



● Roadway Light
(ST-14A per City of Livermore Standard Detail)

LIGHTING PLAN L1-10

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EXHIBIT D

PORTOLA OFF-SITE



ISABEL OFF-SITE



OFF-SITE IMPROVEMENTS L1-11

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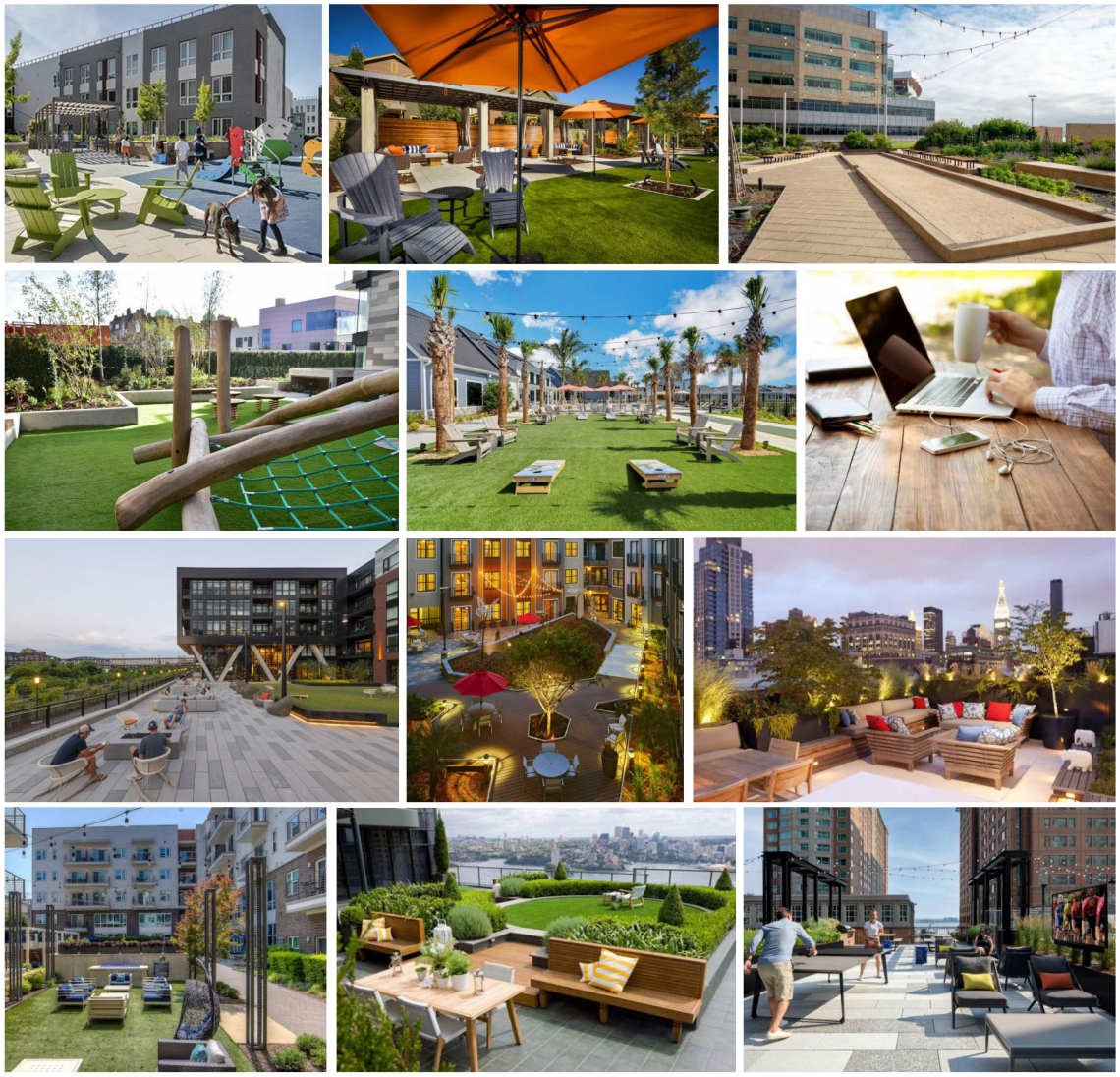
EXHIBIT D



LEGEND

Private Amenity Space

Hardscape, Landscape, and Seating areas shall be provided similar to the images shown



PRIVATE AMENITY SPACE L1-12

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EXHIBIT D



1. Entry Plaza - link to Main Street
2. Green Mounds
3. Practice Soccer Sample Size
4. Flex Green
5. Meandering Loop Trail
6. Gathering/ Seating Opportunity
7. Play Area
8. Promenade
9. Bike Parking
10. Picnic Area
11. Shaded Chaise Lounge
12. Hot Tub
13. Curved Seatwall
14. Enhanced Pedestrian Crosswalk





SECTION A-A'

SCALE 1" = 5'-0"

KEY MAP



NEIGHBORHOOD PARK N3-B L2-1

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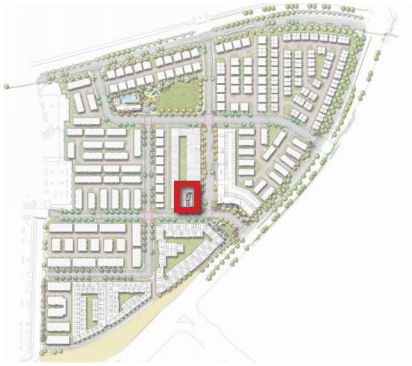
EXHIBIT D



1. Flexible Seating
2. Flex Space with String Lights
3. Seating Nodes
4. Low Wall
5. Overhead Element
6. Accent Paving
7. Enhanced Pedestrian Crosswalk



KEY MAP



VILLAGE GREEN C2-C L2-2

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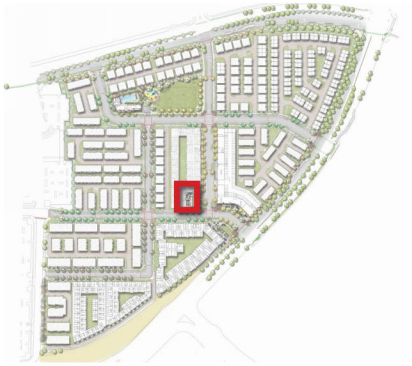
EXHIBIT D



1. Street Tree
2. Vertical Entry Element
3. Planting at Trees
4. Planting and Amenity Zone
5. Planted Zone
6. Recreational Lawn with String Light
7. Outdoor Cafe with Shade and Vines



KEY MAP



VILLAGE GREEN CONCEPTS L2-3

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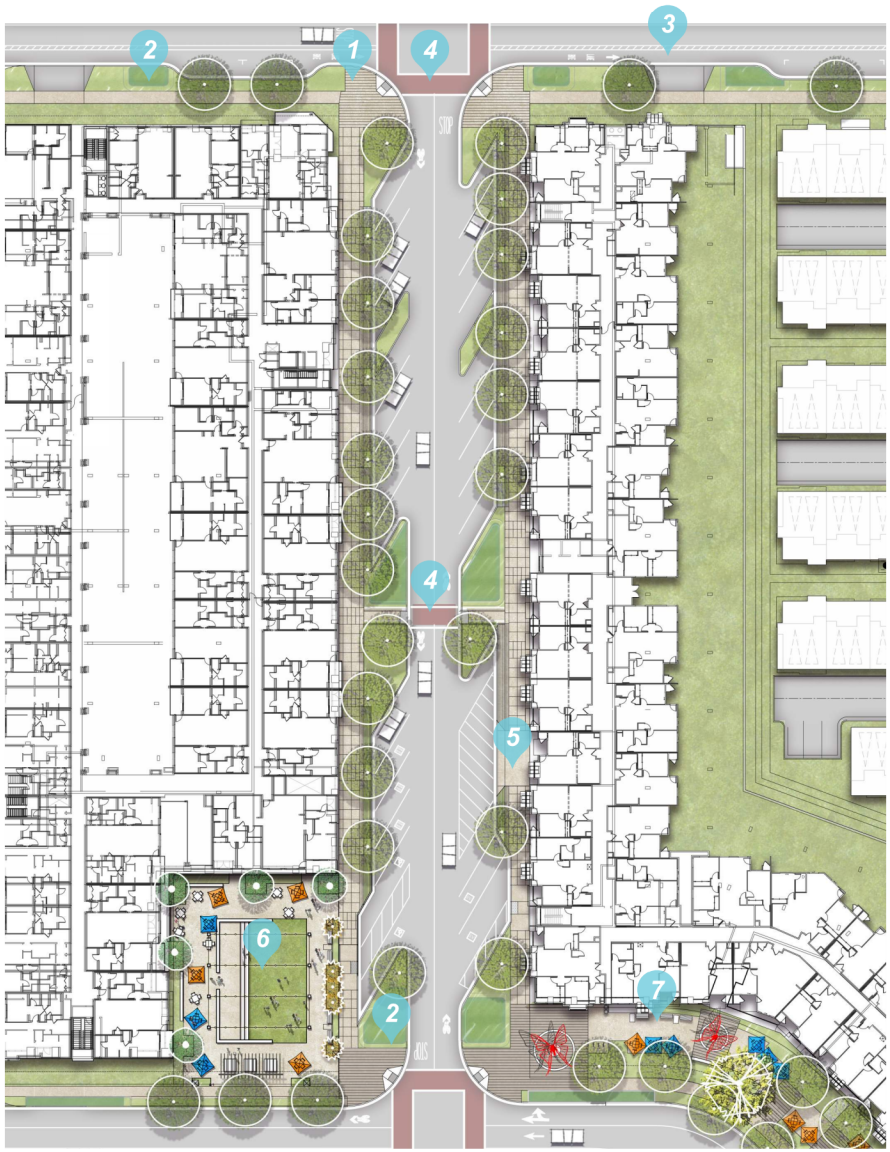
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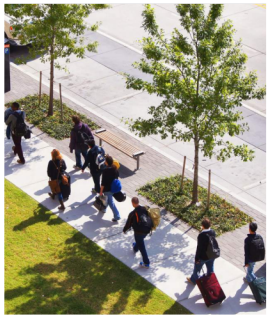


1. Accent Paving at Bulb-out and Crossing
2. Bioretention Area, Typ.
3. Bike Lane
4. Enhanced Pedestrian Crosswalk
5. Pedestrian Concrete
6. Village Green
7. Townsquare

KEY MAP











MAIN STREET
MS L2-4

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EXHIBIT D



1. Accent Paving at Bulb-out and Crossing
2. Circular Art Opportunity
3. Retail Promenade
4. Circular Gathering Area with Trellis
5. Flexible Green (Reservation of Potential Tunnel Crossing Daylight Area)
6. Shade Element
7. Connection to Main Street
8. Enhanced Pedestrian Crosswalk



KEY MAP



TOWN SQUARE
TS L2-5

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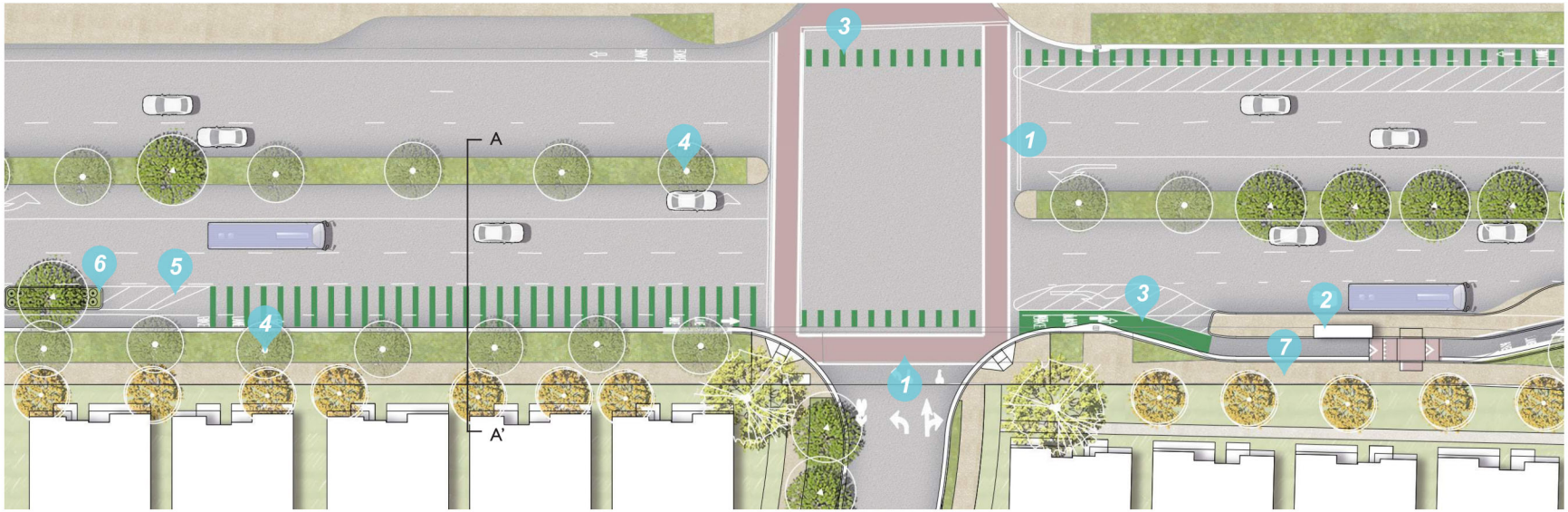
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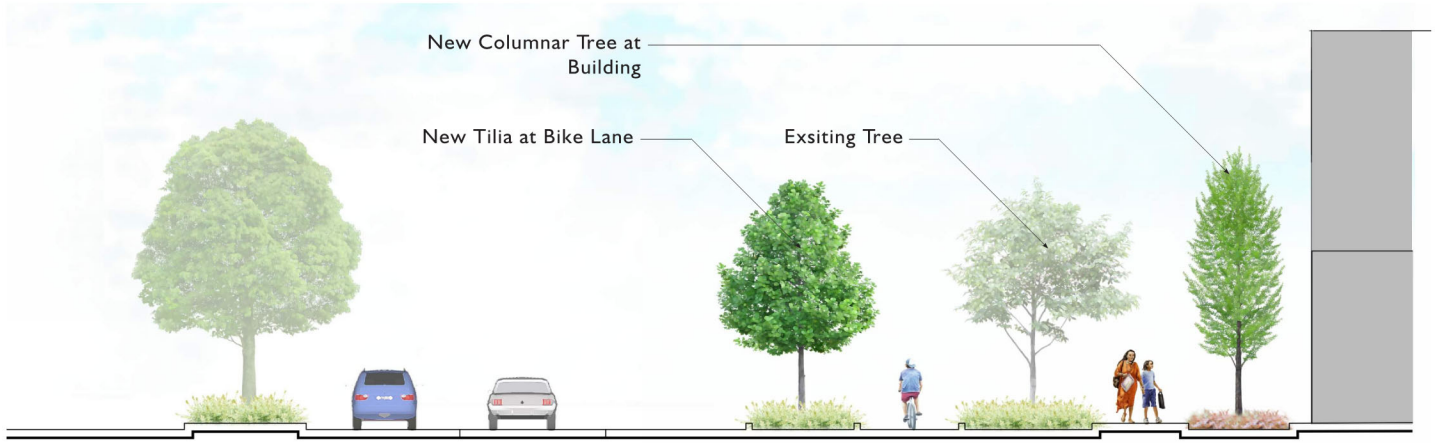
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EXHIBIT D



1. Accent Paving at Bulb-out and Crossing
2. Bus Stop Platform
3. Bike Lane
4. Existing Trees
5. Bike Median Tree - Tilia Cordata
6. Bike Median Planting - Lomandra Longifolia 'Breeze'
7. Pedestrian Sidewalk



SECTION A-A'

SCALE 1" = 5'-0"

KEY MAP



PORTOLA BIKE LANE EXHIBIT L2-6

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EXHIBIT D





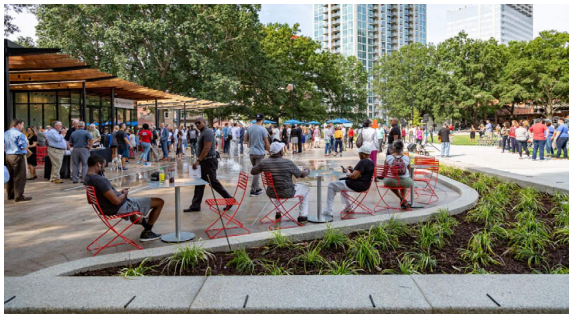















CHARACTER IMAGES AND THEME L3-1

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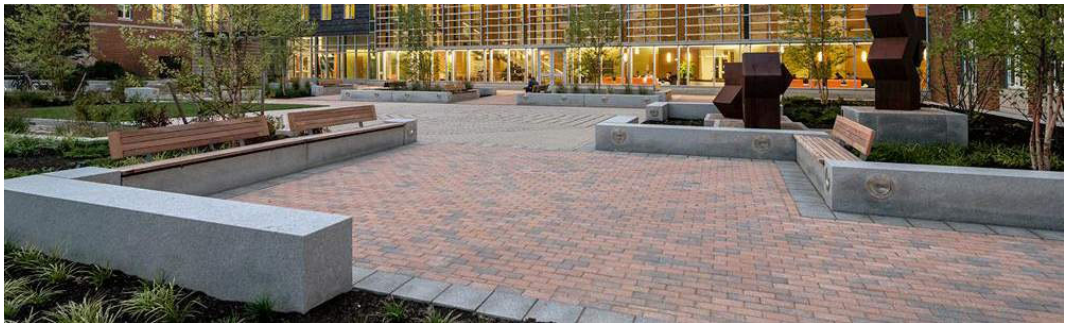


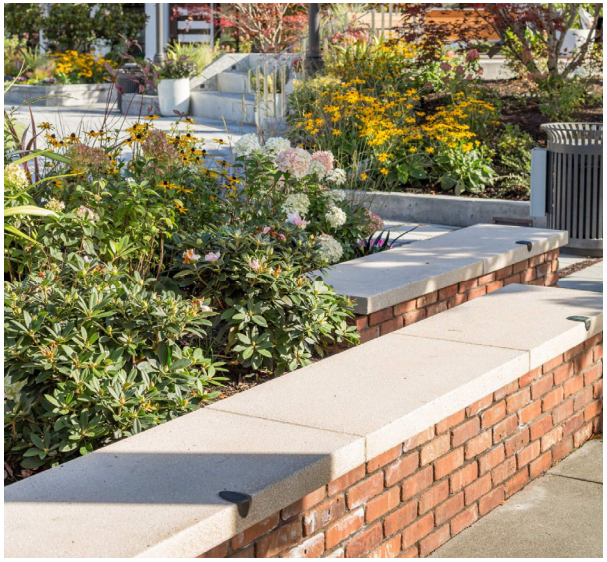




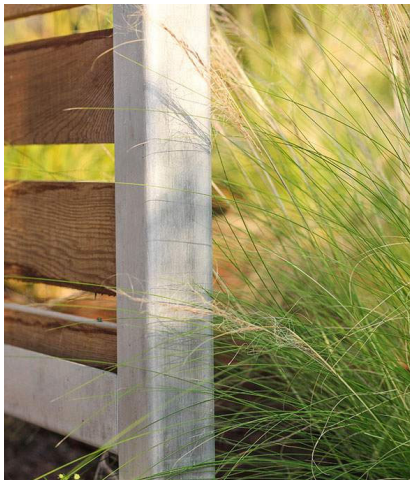


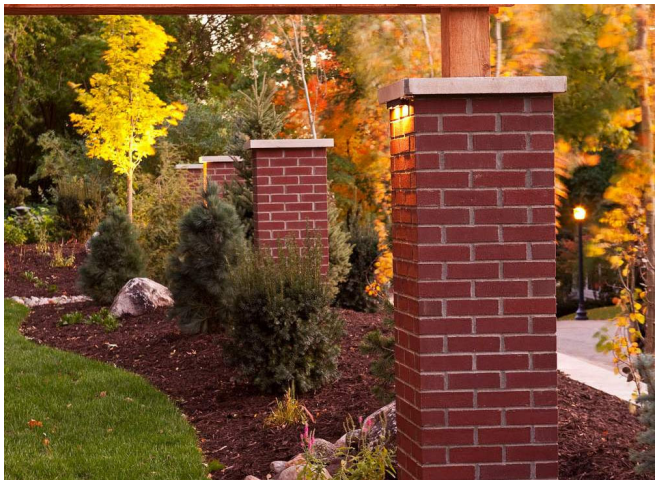














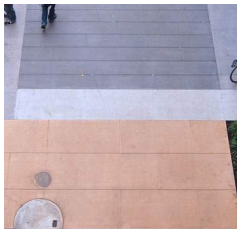


MATERIALS PALETTE L3-2

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EXHIBIT D

PAVING



Enhanced Non-Vehicular Paving
| Integral Color Concrete



Enhanced Vehicular Paving
| Thermoplastic Asphalt
Color: Std Brick
Pattern: Offset



Concrete



Non-Vehicular Brick Paving
S2/S4 Alley Front Entry

STREET FURNITURE



Bike Rack | Dumor | 291
Color: Bronze



Bench | Dumor | 168
| 6' with center
Color: Bronze



Receptacle | Dumor | 272
Color: Bronze



Low Wall

LIGHTING



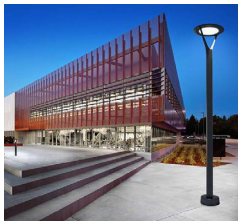
Pedestrian light | First Street
City Standard



Street Light | Downtown
City Standard



Roadway Light | LEOTEK
Green Cobra | City Standard



Luminaire | Gardco | PureForm
LED



Pathway Light | Gardco |
PureForm LED



SITE FURNISHINGS L3-3

ISABEL PORTOLA
OWNER, LLC

GATES +ASSOCIATES
LANDSCAPE ARCHITECTURE

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LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

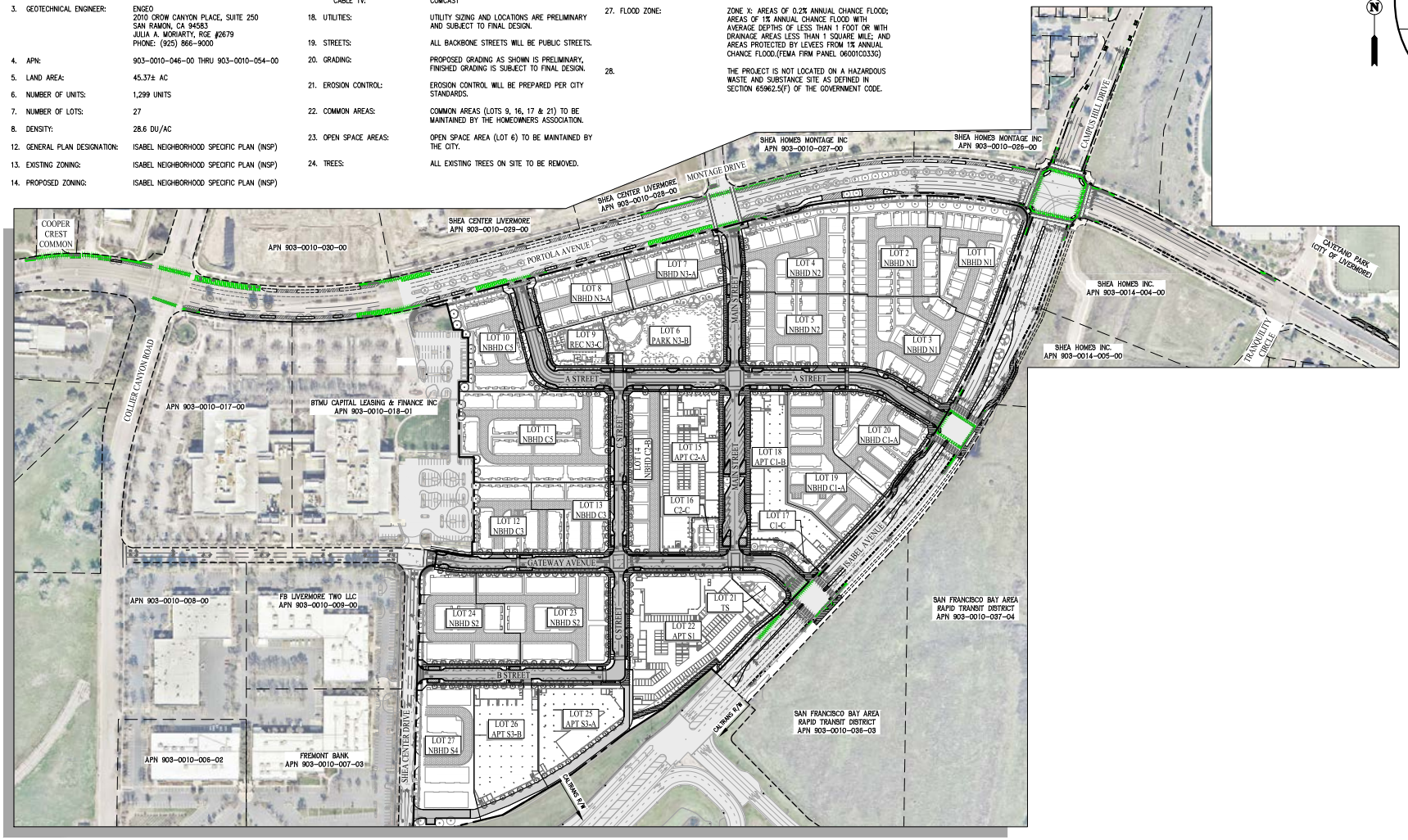
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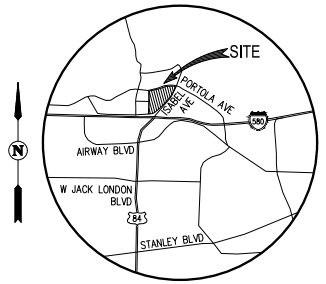
2773

EXHIBIT E

GENERAL NOTES

1. APPLICANT:	ISABEL PORTOLA OWNER, LLC 1875 CENTURY PARK EAST, SUITE 1130 LOS ANGELES, CA 90067 BILL MYERS	15. EXISTING USE:	VACANT
2. CIVIL ENGINEER:	CARLSON, BARBEE, & GIBSON, INC. 2633 CAMINO RAMON, SUITE 350 SAN RAMON, CA 94583 ANGELO OBERTELLO, RCE #64345 PHONE: (925) 866-0322	16. PROPOSED USE:	MIXED-USE – COMMERCIAL/RESIDENTIAL
3. GEOTECHNICAL ENGINEER:	ENGEO 2010 CROW CANYON PLACE, SUITE 250 SAN RAMON, CA 94583 JULIA A. MORIARTY, RGE #2679 PHONE: (925) 866-9000	17. UTILITIES: SEWER: FIRE PROTECTION: STORM DRAIN: GAS & ELECTRIC: TELEPHONE: CABLE TV:	OWNER: CITY OF LIVERMORE CITY OF LIVERMORE CITY OF LIVERMORE PG&E AT&T COMCAST
4. APN:	903-0010-046-00 THRU 903-0010-054-00	18. UTILITIES:	UTILITY SIZING AND LOCATIONS ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN.
5. LAND AREA:	45.37± AC	19. STREETS:	ALL BACKBONE STREETS WILL BE PUBLIC STREETS.
6. NUMBER OF UNITS:	1,299 UNITS	20. GRADING:	PROPOSED GRADING AS SHOWN IS PRELIMINARY, FINISHED GRADING IS SUBJECT TO FINAL DESIGN.
7. NUMBER OF LOTS:	27	21. EROSION CONTROL:	EROSION CONTROL WILL BE PREPARED PER CITY STANDARDS.
8. DENSITY:	28.6 DU/AC	22. COMMON AREAS:	COMMON AREAS (LOTS 9, 16, 17 & 21) TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
12. GENERAL PLAN DESIGNATION:	ISABEL NEIGHBORHOOD SPECIFIC PLAN (INSP)	23. OPEN SPACE AREAS:	OPEN SPACE AREA (LOT 6) TO BE MAINTAINED BY THE CITY.
13. EXISTING ZONING:	ISABEL NEIGHBORHOOD SPECIFIC PLAN (INSP)	24. TREES:	ALL EXISTING TREES ON SITE TO BE REMOVED.
14. PROPOSED ZONING:	ISABEL NEIGHBORHOOD SPECIFIC PLAN (INSP)	25. BENCHMARK:	ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1988 (NAVD 88), BASED ON EPOCH 2017.50 ELLIPSOID HEIGHTS, AS PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE NETWORK, AND NGS GEOID 18.
		26. BASIS OF BEARINGS:	THE BASIS OF BEARINGS FOR THIS SURVEY IS DETERMINED BY FOUND MONUMENTS SHOWN HEREON, THE BEARING BEING N75°14'52"E PER PARCEL MAP NO. 9770 (310 MAPS 3).
		27. FLOOD ZONE:	ZONE X: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.(FEMA FIRM PANEL 06001C0335G)
		28.	THE PROJECT IS NOT LOCATED ON A HAZARDOUS WASTE AND SUBSTANCE SITE AS DEFINED IN SECTION 65962.5(F) OF THE GOVERNMENT CODE.





VICINITY MAP

NOT TO SCALE

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VESTING TENTATIVE TRACT MAP NO. 8659

COVER SHEET TM 1.0

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

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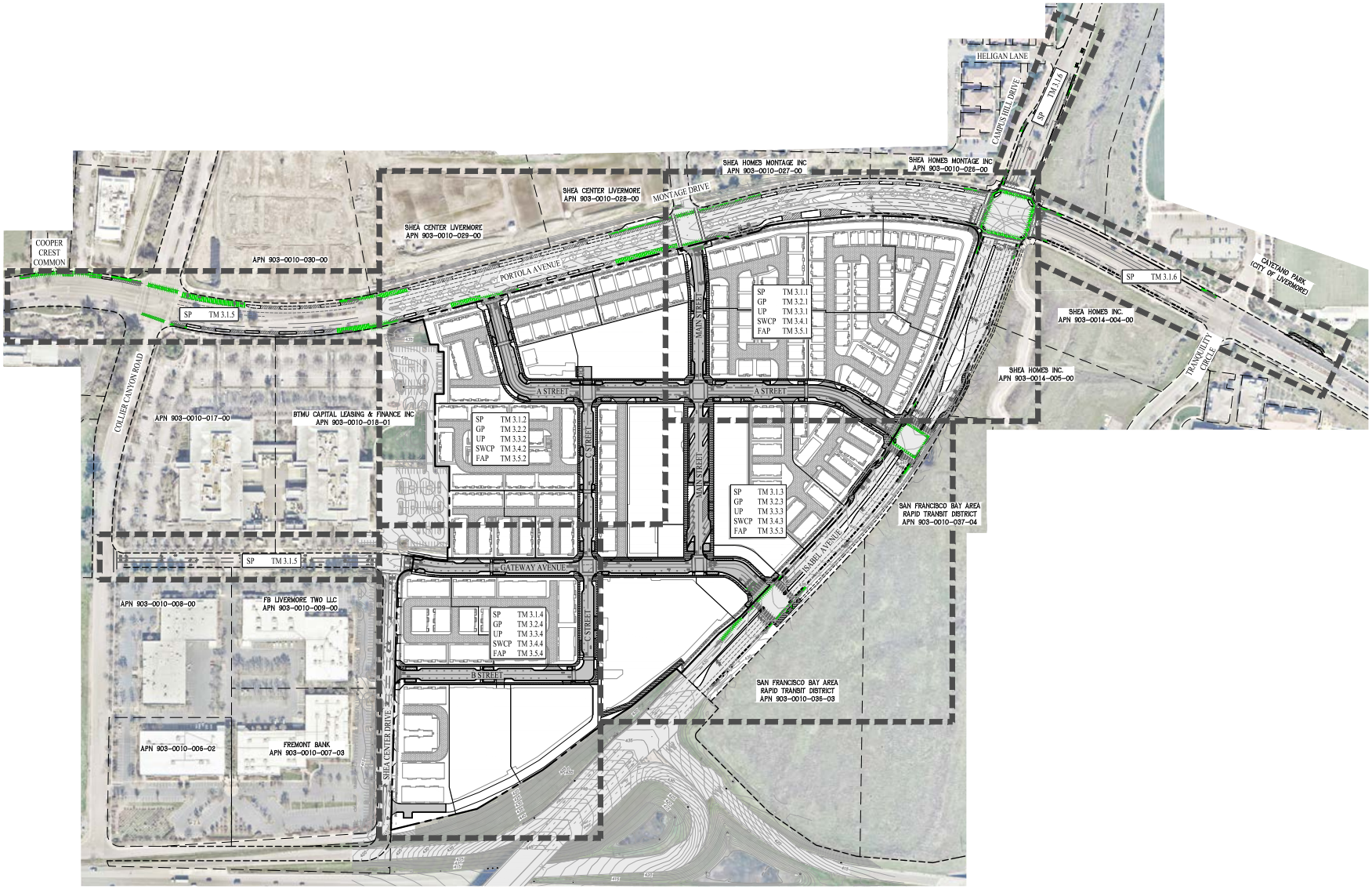
LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		LOT LINE
		RIGHT OF WAY
EX SD	SD	STORM DRAIN
EX SS	SS	SANITARY SEWER
EX W	W	WATER
	RW	RECYCLED WATER
EX UT		DRY UTILITY
EX GAS		GAS
EX JT	JT	JOINT TRENCH
OHW		OVERHEAD WIRES
		MANHOLE
		CATCH BASIN
		STORM DRAIN INLET
		FIRE HYDRANT
		PEDESTRIAN CROSSING STRIPING
		BIKE LANE STRIPING
		VERTICAL DELINEATOR
		GREEN BIKE LANE THERMOPLASTIC PAINT
		PAVEMENT
	SP	SITE PLAN
	GP	GRADING PLAN
	UP	UTILITY PLAN
	SWCP	STORMWATER CONTROL PLAN
	FAP	FIRE ACCESS PLAN
	3.1.1	SHEET NUMBER
	N1	PARCEL NAME
		OVERLAND RELEASE

ABBREVIATIONS

APN	ACCESS PARCEL NUMBER
ARV	AIR RELEASE VALVE
CB	CATCH BASIN
EVA	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
FC	FACE OF CURB
FH	FIRE HYDRANT
L	LENGTH
MH	MANHOLE
PAE	PEDESTRIAN ACCESS EASEMENT
PLE	PUBLIC LANDSCAPE EASEMENT
PSDE	PUBLIC STORM DRAIN EASEMENT
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
R/W	RIGHT OF WAY
SF	SQUARE FEET
SSE	PUBLIC SEWER EASEMENT
SWE	PUBLIC SIDEWALK EASEMENT
PSE	PUBLIC SERVICE EASEMENT
PAE	PRIVATE ACCESS EASEMENT
BTA	BIORETENTION TREATMENT AREA
LSA	LANDSCAPE AREA
WLE	PRIVATE WATER LINE EASEMENT (FIRE MAIN)

EXHIBIT E



VESTING TENTATIVE TRACT MAP NO. 8659

SHEET INDEX TM 1.2

ISABEL PORTOLA
OWNER, LLC

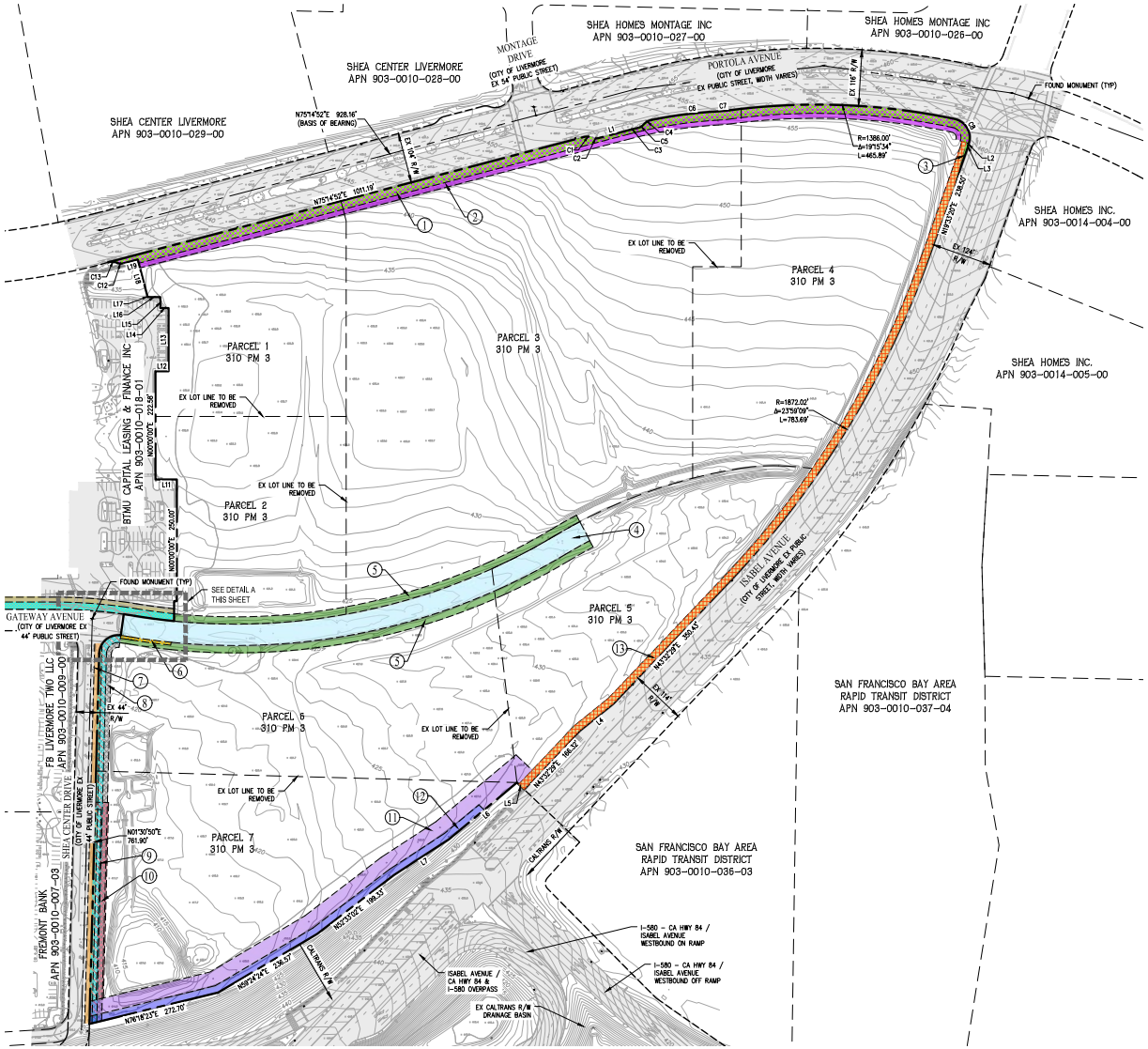
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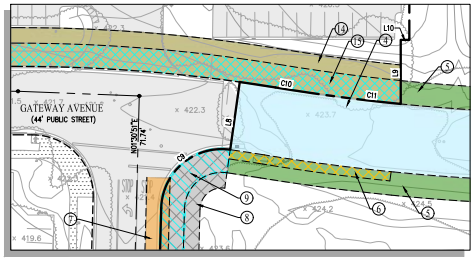
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

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EXHIBIT E





DETAIL A
SCALE: 1"=40'

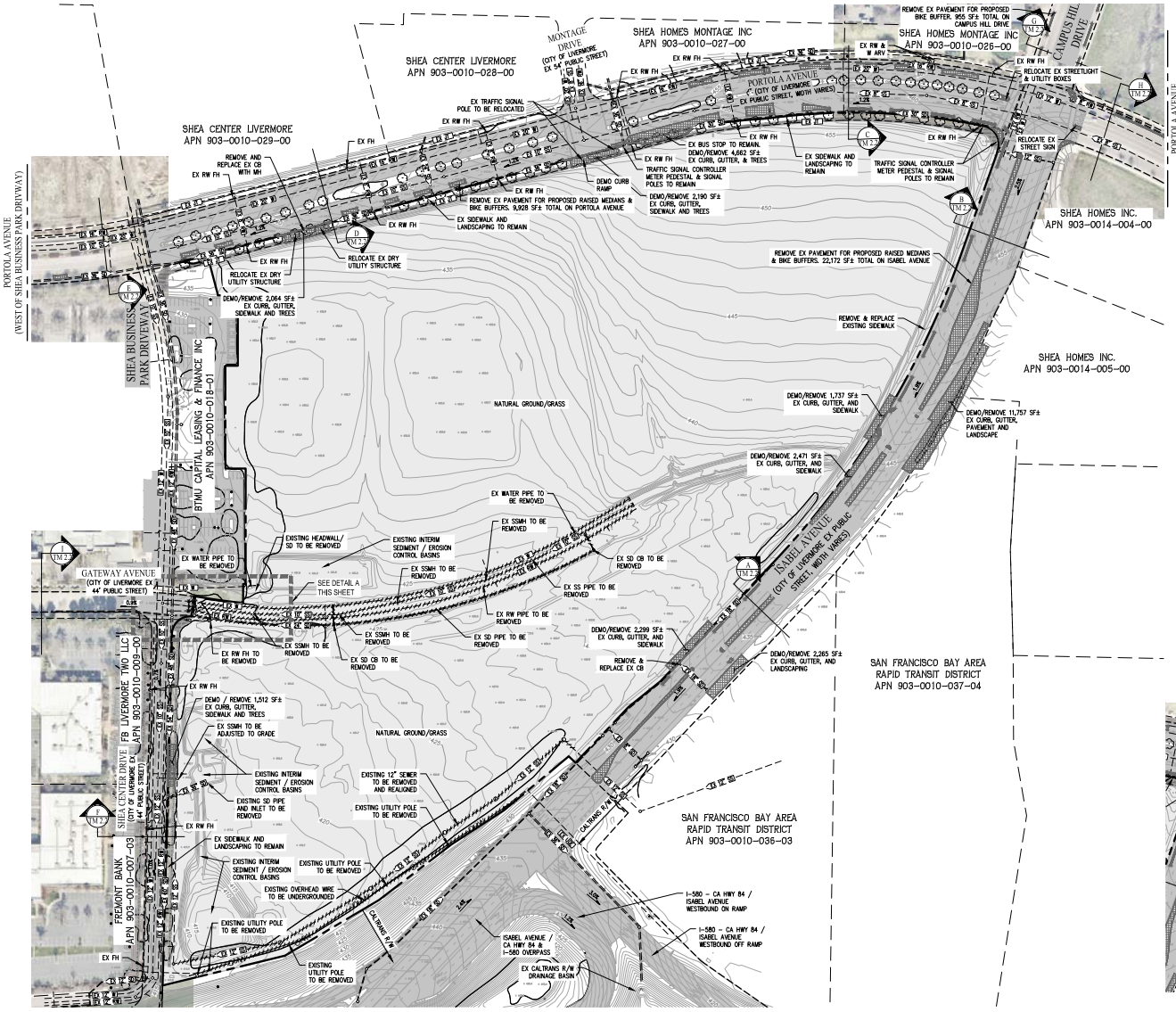
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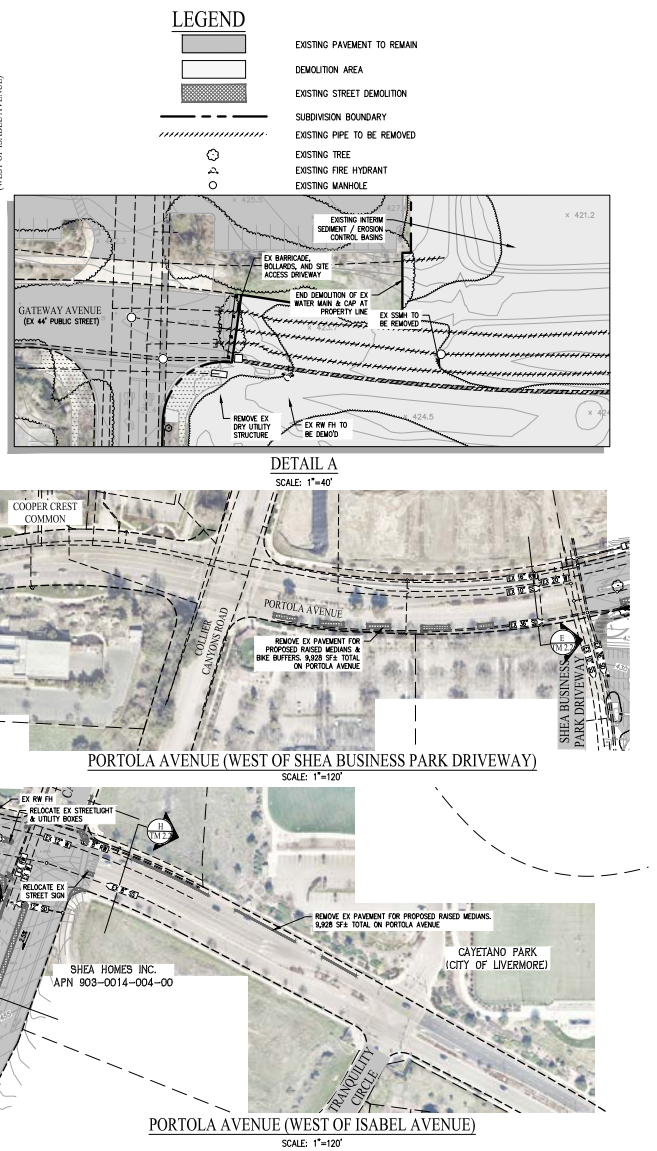
- EXISTING PAVEMENT TO REMAIN
- (1) 18' PUE & SWE IN FAVOR OF THE CITY OF LIVERMORE PER TRACT 7610 293 M 14
- (2) 28' PLE IN FAVOR OF THE CITY OF LIVERMORE PER TRACT 7610 293 M 14
- (3) PUE, SWE, & LSE IN FAVOR OF THE CITY OF LIVERMORE PER 2005273743 OR
- (4) 44' EVAE, PAE & PUE IN FAVOR OF THE CITY OF LIVERMORE PER 310 PM 3
- (5) 15' PUE IN FAVOR OF THE CITY OF LIVERMORE PER TRACT 7610 293 M 14
- (6) APPROXIMATE LOCATION OF 10' WIDE STRIP GAS AND ELECTRIC EASEMENT IN FAVOR OF PG&E PER 2005273743 OR
- (7) 15' EXISTING IRREVOCABLE OFFER OF DEDICATION FOR STORM DRAIN EASEMENT IN FAVOR OF THE CITY OF LIVERMORE PER 98411265 OR
- (8) 25' PLE IN FAVOR OF THE CITY OF LIVERMORE PER PARCEL MAP 7341 268 PM 88
- (9) 15' PUE & SWE IN FAVOR OF THE CITY OF LIVERMORE PER PARCEL MAP 7341 268 PM 88
- (10) 15' SEE IN FAVOR OF THE CITY OF LIVERMORE PER 2013292968 OR
- (11) SSE IN FAVOR OF THE CITY OF LIVERMORE PER PARCEL MAP 9770 310 PM 8 TO BE QUIT CLAIMED
- (12) 15' PUE IN FAVOR OF THE CITY OF LIVERMORE PER 2008189562 OR
- (13) 15' PUE, SWE & LSE IN FAVOR OF THE CITY OF LIVERMORE PER 2008189563 OR
- (14) 25' PLE IN FAVOR OF THE CITY OF LIVERMORE PER TRACT 7341 268 M 85
- (15) 15' PUE & SWE IN FAVOR OF THE CITY OF LIVERMORE PER TRACT 7341 286 M 85

LINE TABLE		
NO	BEARING	LENGTH
L1	N75°14'52"E	59.21'
L2	N19°32'44"E	1.17'
L3	N13°57'45"E	8.54'
L4	N51°08'09"E	89.37'
L5	N46°27'31"W	20.25'
L6	N50°11'00"E	182.16'
L7	N56°55'27"E	134.98'
L8	N08°01'53"E	44.00'
L9	N00°00'00"E	41.26'
L10	N90°00'00"W	5.53'
L11	N90°00'00"W	44.02'
L12	N90°00'00"W	27.00'
L13	N00°00'00"E	130.00'
L14	N90°00'00"W	17.00'
L15	N00°00'00"E	22.52'
L16	N90°00'00"W	26.51'
L17	N00°00'00"W	2.17'
L18	N14°45'08"W	77.74'
L19	N75°14'52"E	30.27'

CURVE TABLE			
NO	RADIUS	DELTA	LENGTH
C1	30.15'	35°25'01"	18.64'
C2	21.00'	36°52'12"	13.51'
C3	4434.03'	0°19'14"	24.80'
C4	30.10'	36°21'31"	19.10'
C5	19.91'	38°00'45"	13.21'
C6	985.55'	7°57'47"	136.97'
C7	263.39'	5°24'25"	24.86'
C8	39.00'	97°49'34"	66.59'
C9	39.00'	96°31'04"	65.70'
C10	1022.00'	1°18'07"	23.22'
C11	1367.08'	3°24'42"	81.40'
C12	21.00'	36°52'12"	13.51'
C13	29.00'	36°52'12"	18.66'

EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

EXISTING SITE CONDITIONS & DEMOLITION

TM 2.1

ISABEL PORTOLA
OWNER, LLC

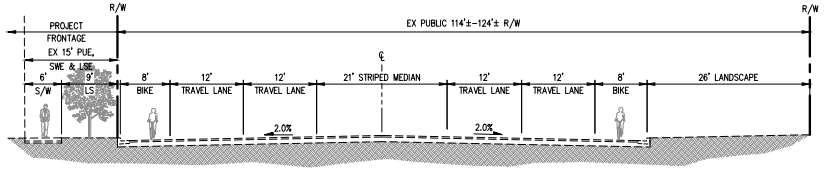
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LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

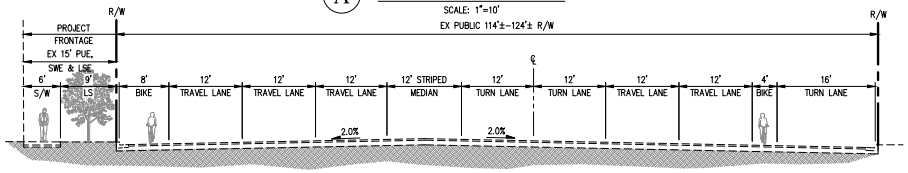
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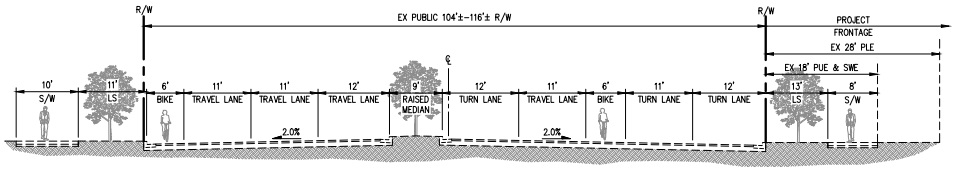
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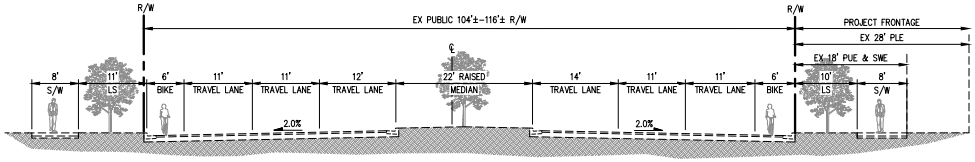
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SCALE: 1"=10'



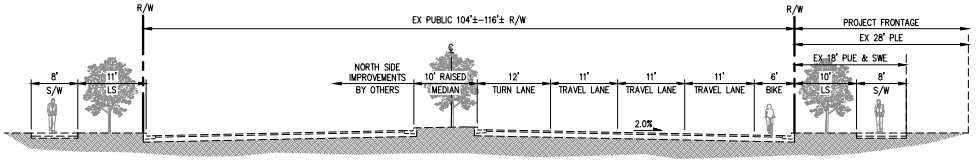
B EXISTING ISABEL AVENUE
SCALE: 1"=10'



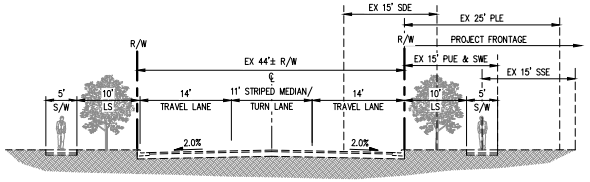
C EXISTING PORTOLA AVENUE
SCALE: 1"=10'



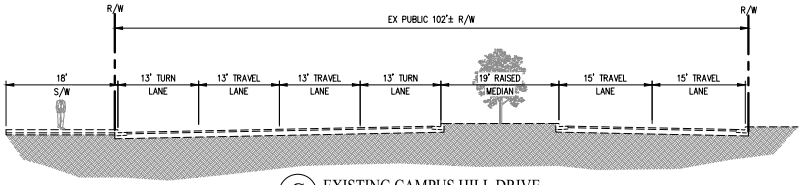
D EXISTING PORTOLA AVENUE - ADJACENT TO PROJECT
SCALE: 1"=10'



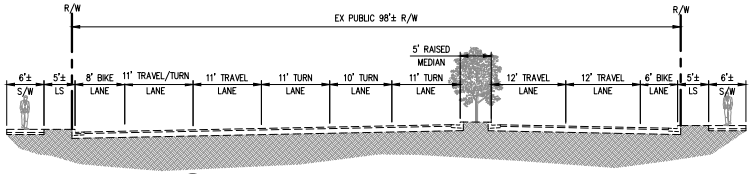
E EXISTING PORTOLA AVENUE - WEST OF PROJECT
SCALE: 1"=10'



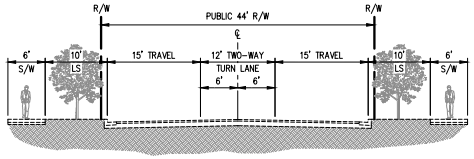
F EXISTING SHEA CENTER DRIVE
SCALE: 1"=10'



G EXISTING CAMPUS HILL DRIVE
SCALE: 1"=10'



H EXISTING PORTOLA AVENUE - EAST OF PROJECT
SCALE: 1"=10'



I EXISTING GATEWAY AVENUE
SCALE: 1"=10'

VESTING TENTATIVE TRACT MAP NO. 8659

EXISTING STREET SECTIONS

TM 2.2

ISABEL PORTOLA OWNER, LLC

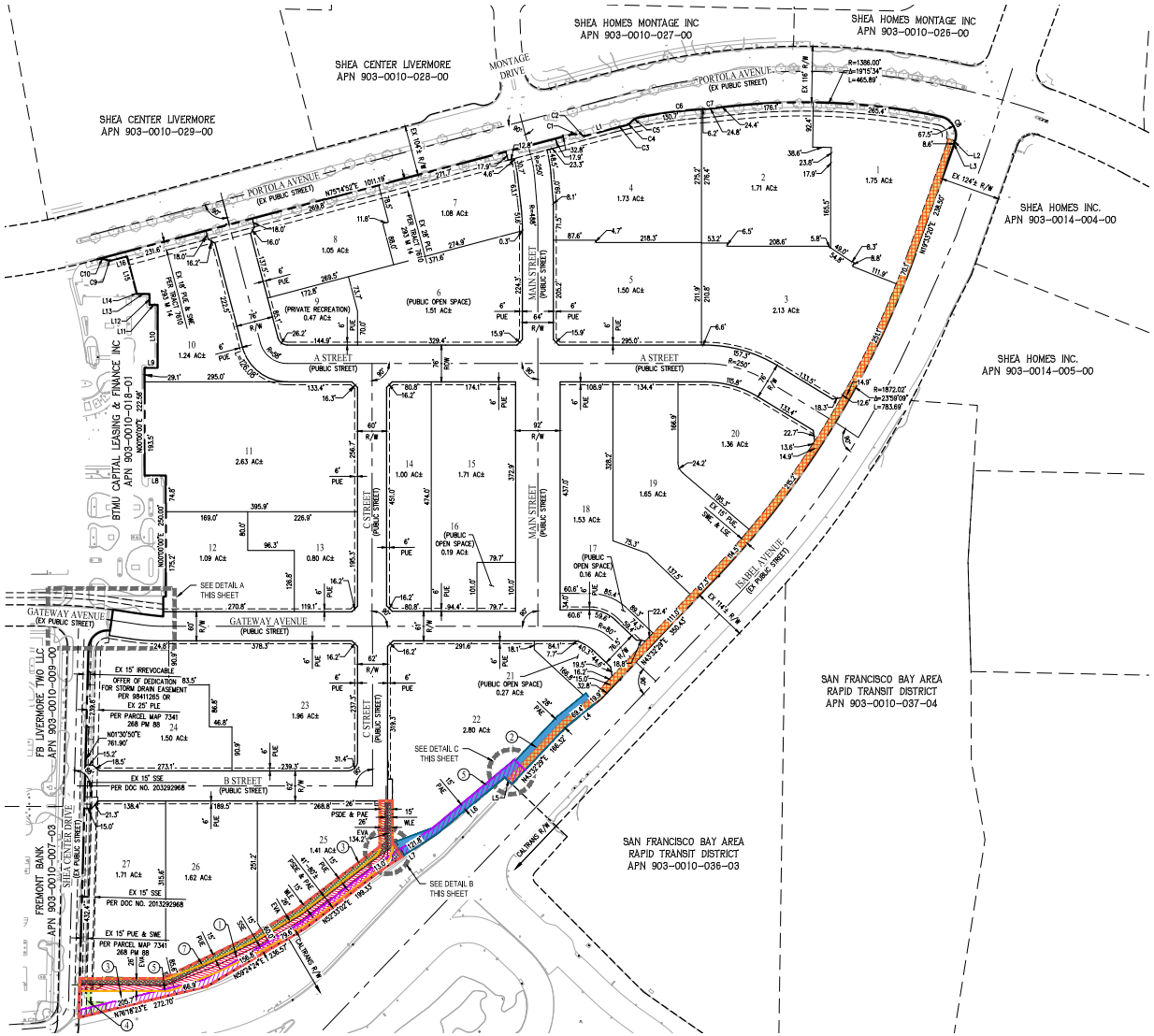
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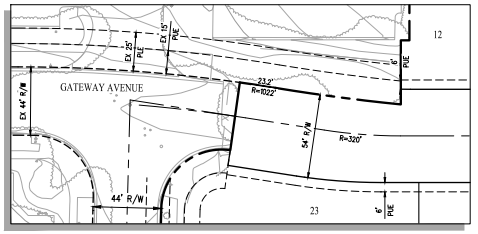
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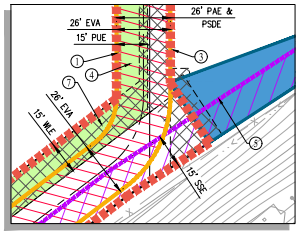
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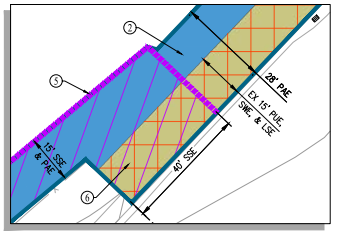




DETAIL A
SCALE: 1"=40'



DETAIL B
SCALE: 1"=30'



DETAIL C
SCALE: 1"=20'

LINE TABLE		
NO	BEARING	LENGTH
L1	N75°14'52"E	59.21'
L2	N19°32'44"E	1.17'
L3	N13°57'45"E	8.54'
L4	N51°08'09"E	89.37'
L5	N46°27'31"W	20.25'
L6	N50°11'00"E	182.16'
L7	N56°55'27"E	134.98'
L8	N90°00'00"W	44.02'
L9	N90°00'00"W	27.00'
L10	N00°00'00"E	130.00'
L11	N90°00'00"W	17.00'
L12	N00°00'00"E	22.52'
L13	N90°00'00"W	26.51'
L14	N00°00'00"W	2.17'
L15	N14°45'08"W	77.74'
L16	N75°14'52"E	30.27'

CURVE TABLE			
NO	RADIUS	DELTA	LENGTH
C1	30.15'	35°25'01"	18.64'
C2	21.00'	36°52'12"	13.51'
C3	4434.03'	0°19'14"	24.80'
C4	19.91'	38°00'45"	13.21'
C5	30.10'	36°21'31"	19.10'
C6	985.55'	7°57'47"	136.97'
C7	263.39'	5°24'25"	24.86'
C8	39.00'	97°49'34"	66.59'
C9	21.00'	36°52'12"	13.51'
C10	29.00'	36°52'12"	18.66'

LEGEND

- EXISTING PAVEMENT TO REMAIN
- (1) 26' EMERGENCY VEHICLE ACCESS EASEMENT (EVA)
- (2) PEDESTRIAN ACCESS EASEMENT (PAE)
- (3) 45' PUBLIC STORM DRAIN EASEMENT (PSDE) AND PEDESTRIAN ACCESS EASEMENT (PAE)
- (4) 15' PUBLIC UTILITY EASEMENT (PUE)
- (5) SANITARY SEWER EASEMENT (SSE)
- (6) EX 15' PUE, SWE & LSE IN FAVOR OF THE CITY OF LIVERMORE PER 2008189563 OR
- (7) WATER LINE EASEMENT (WLE)

VESTING TENTATIVE TRACT MAP NO. 8659

PROPOSED LARGE LOT PARCELIZATION

TM 3.0

ISABEL PORTOLA
OWNER, LLC

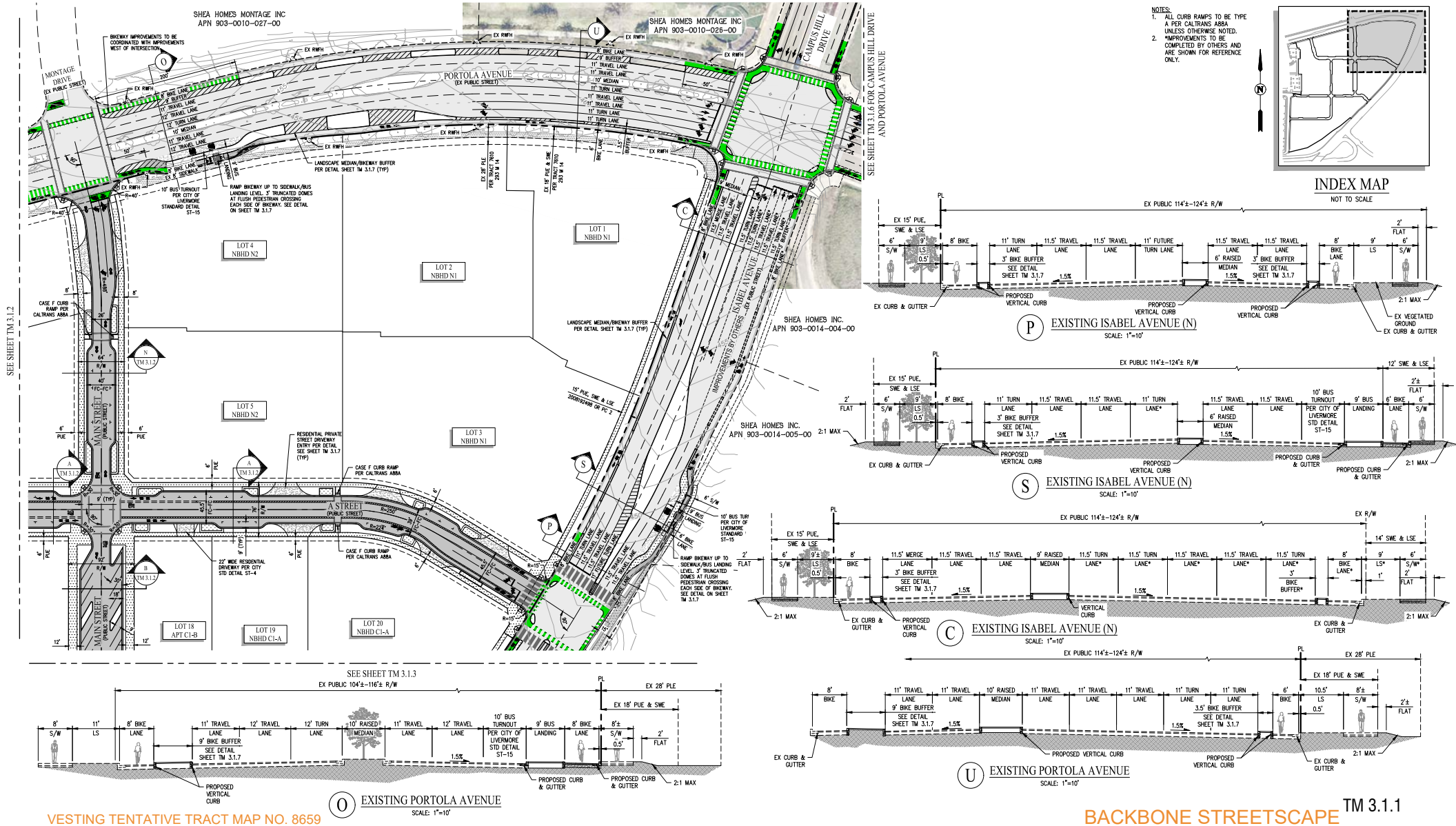
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LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

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EXHIBIT E



NOTES:
1. ALL CURB RAMPS TO BE TYPE A PER CALTRANS A88A UNLESS OTHERWISE NOTED.
2. *IMPROVEMENTS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR REFERENCE ONLY.

INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

BACKBONE STREETSCAPE TM 3.1.1

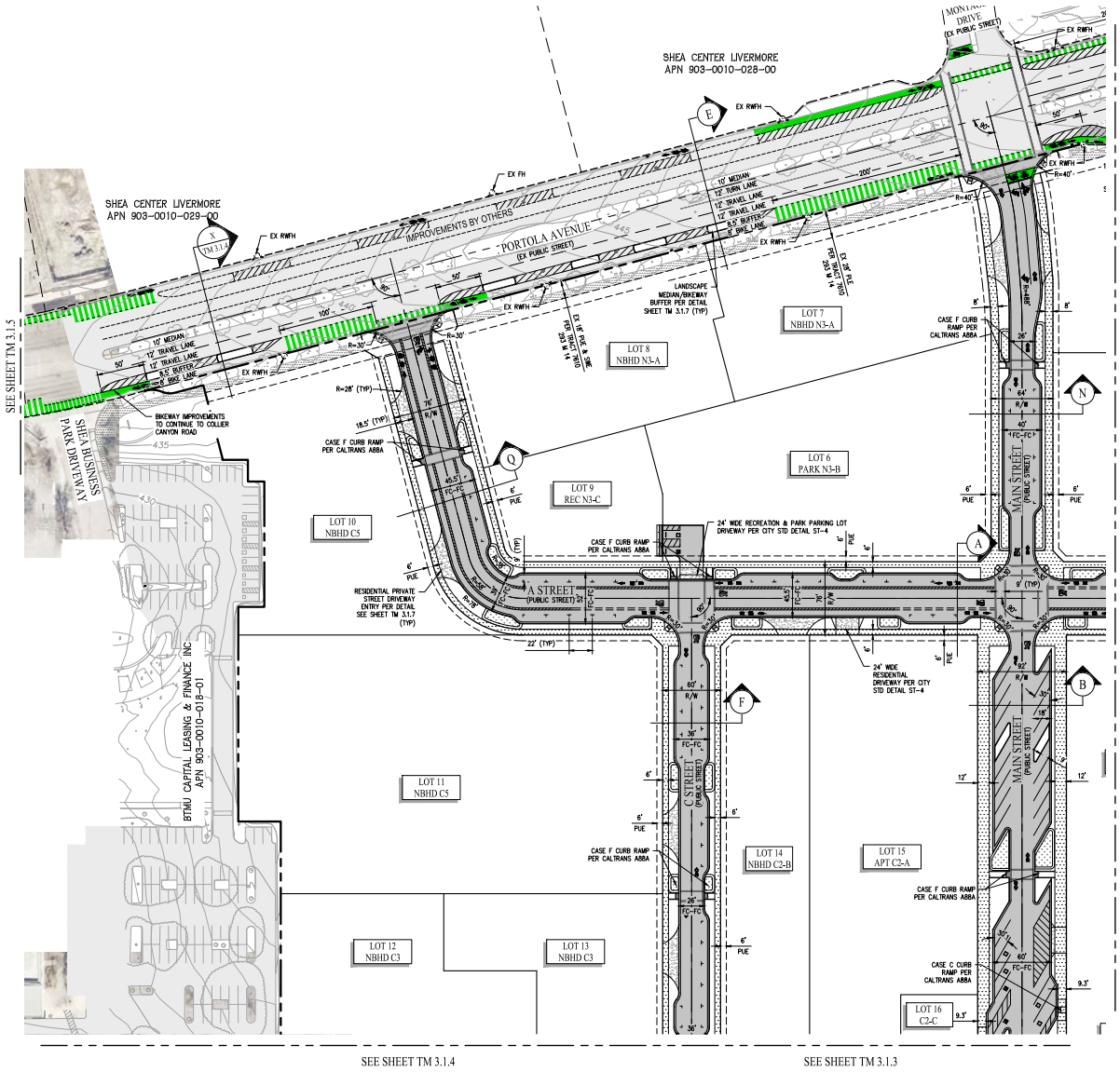
ISABEL PORTOLA OWNER, LLC

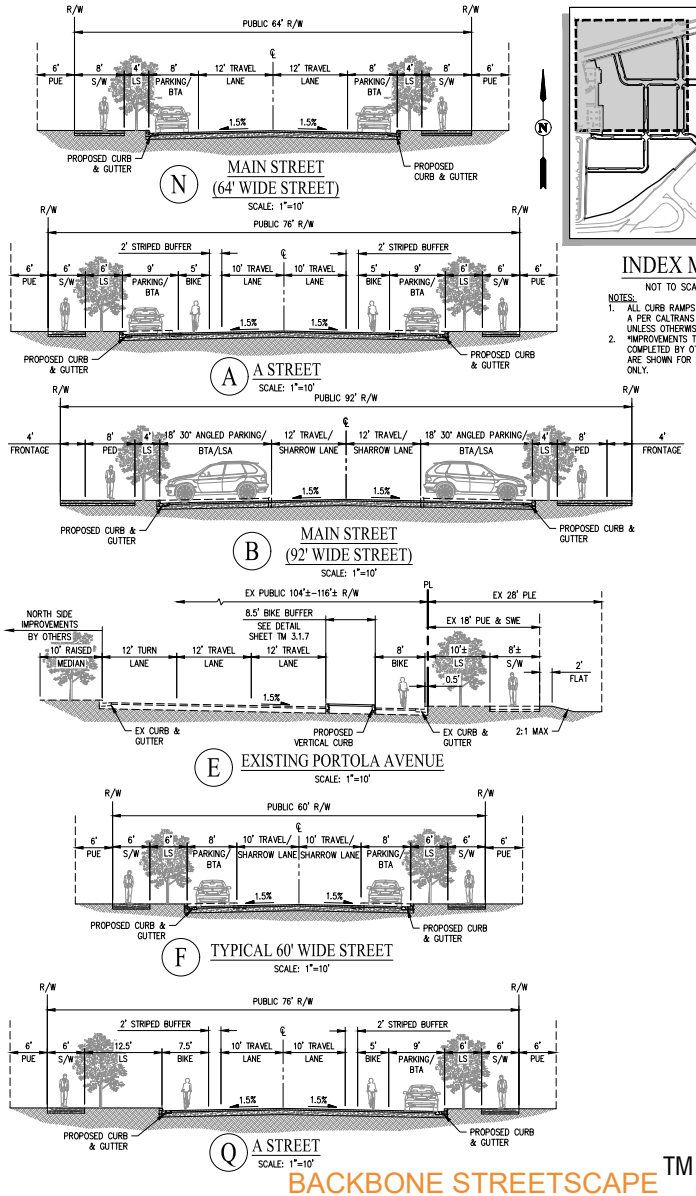
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

BACKBONE STREETSCAPE TM 3.1.2

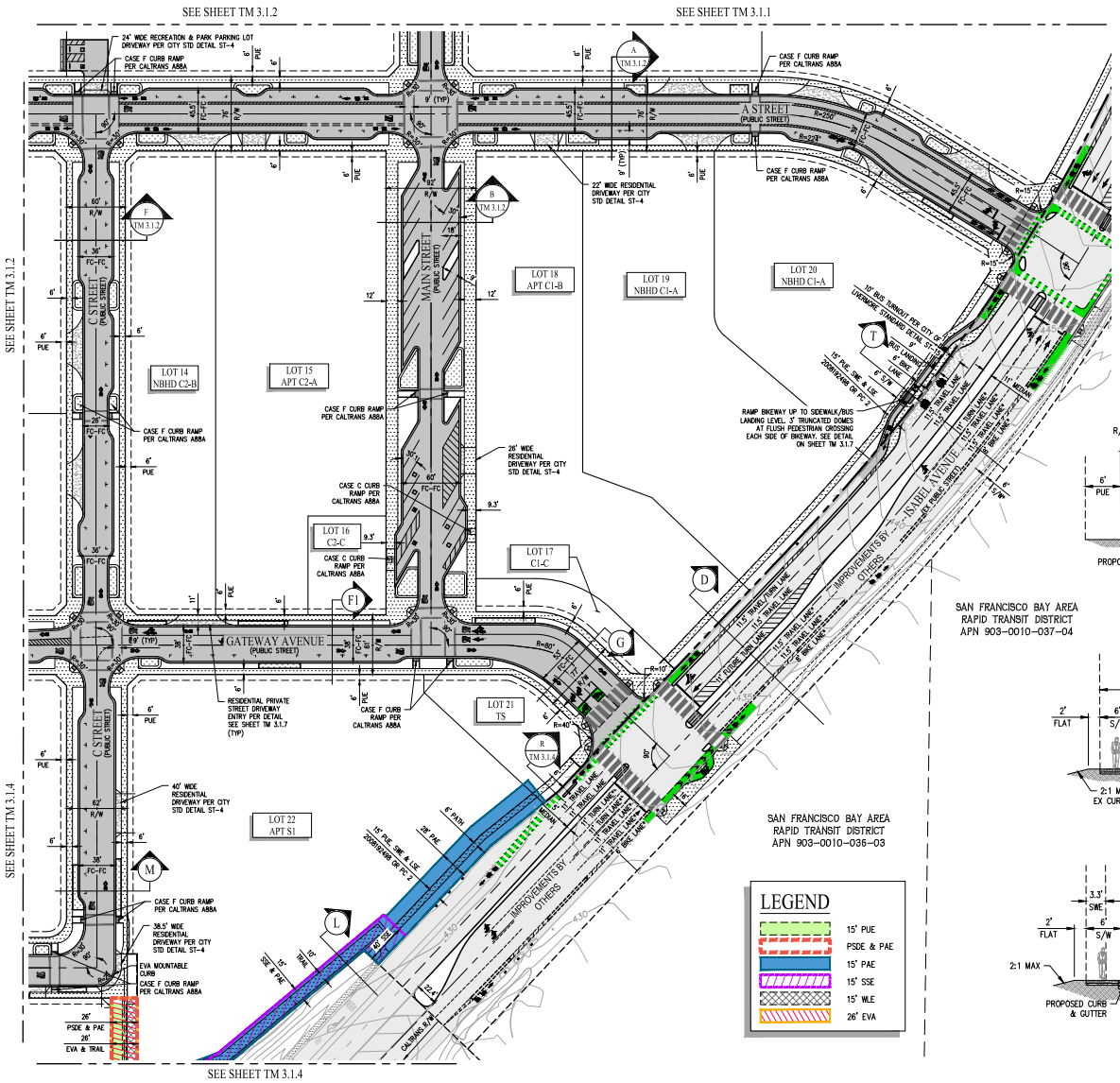
ISABEL PORTOLA OWNER, LLC

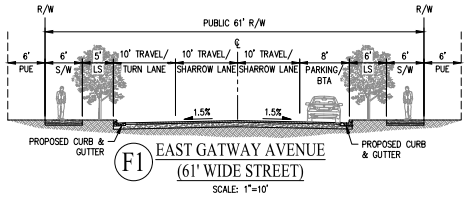
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

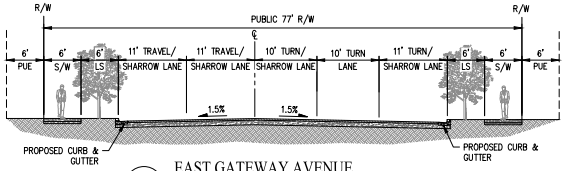
06-28-24 | 3591-000

EXHIBIT E

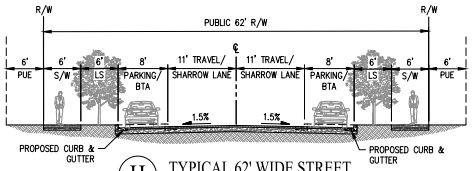




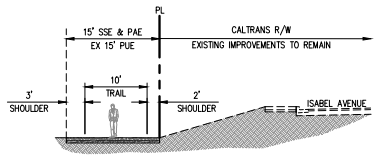
F1 EAST GATWAY AVENUE (61' WIDE STREET)
SCALE: 1"=10'



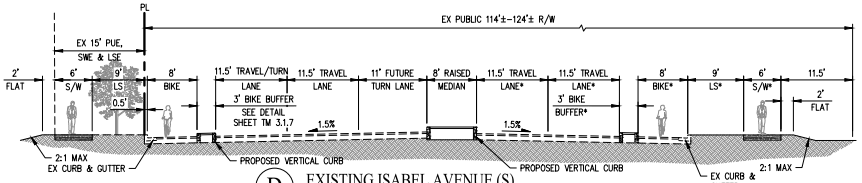
G EAST GATEWAY AVENUE (77' WIDE STREET)
SCALE: 1"=10'



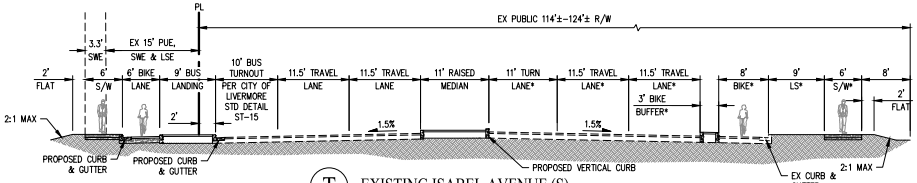
H TYPICAL 62' WIDE STREET
SCALE: 1"=10'



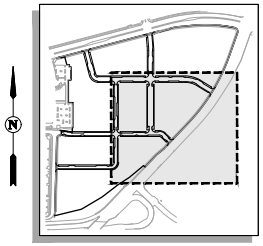
L EXISTING ISABEL AVENUE
SCALE: 1"=10'



D EXISTING ISABEL AVENUE (S)
SCALE: 1"=10'



T EXISTING ISABEL AVENUE (S)
SCALE: 1"=10'



INDEX MAP
NOT TO SCALE

NOTES:
1. ALL CURB RAMPS TO BE TYPE A PER CALTRANS ABBA UNLESS OTHERWISE NOTED.
2. *IMPROVEMENTS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR REFERENCE ONLY.

VESTING TENTATIVE TRACT MAP NO. 8659

BACKBONE STREETSCAPE TM 3.1.3

ISABEL PORTOLA OWNER, LLC

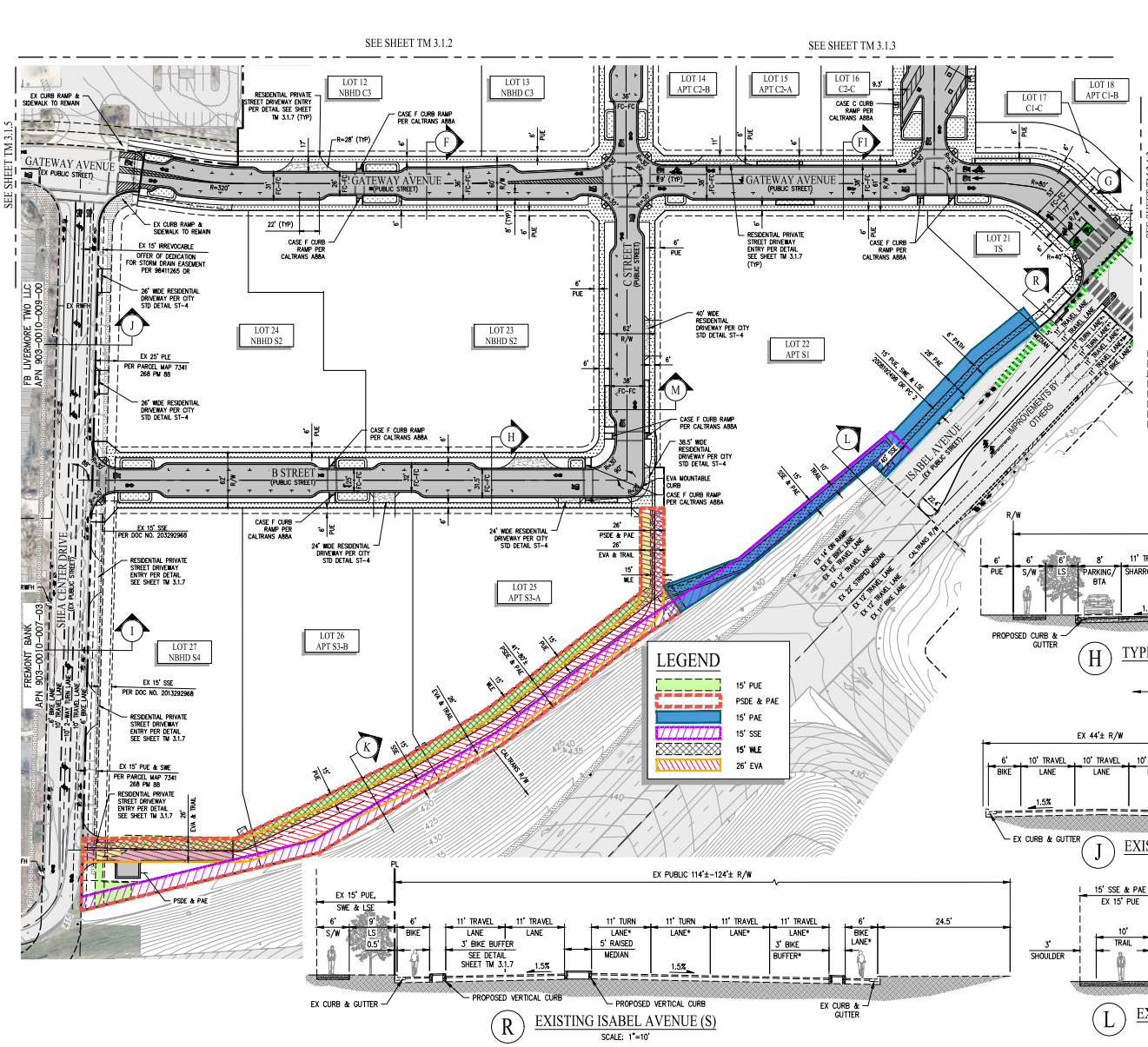
LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

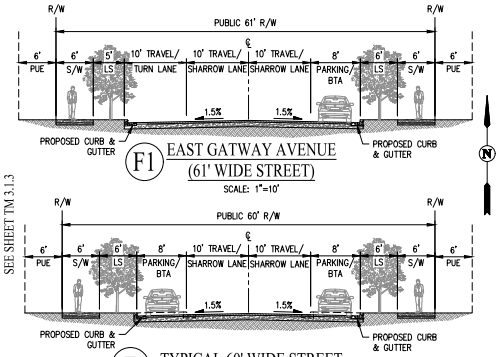
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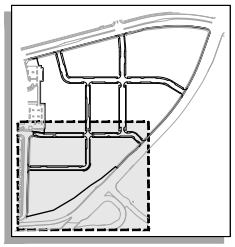
06-28-24 | 3591-000

2783

EXHIBIT E



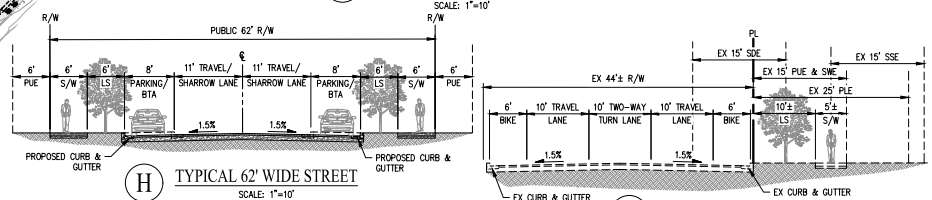


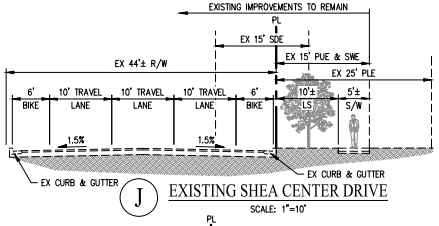


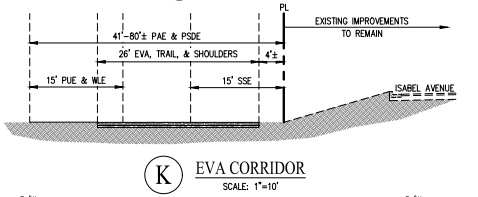
INDEX MAP

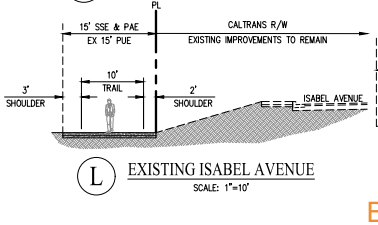
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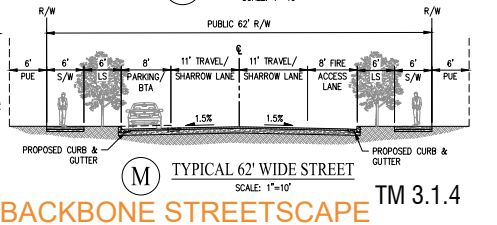
NOTES:
1. ALL CURB RAMPS TO BE TYPE A PER CALTRANS A88A UNLESS OTHERWISE NOTED.
2. *IMPROVEMENTS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR REFERENCE ONLY.











VESTING TENTATIVE TRACT MAP NO. 8659

BACKBONE STREETSCAPE

TM 3.1.4

ISABEL PORTOLA OWNER, LLC

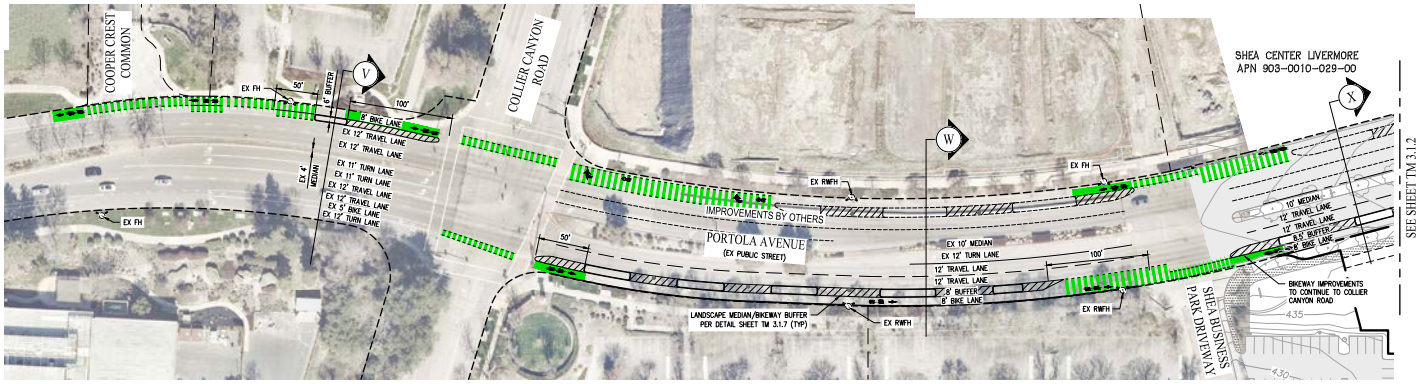
cbg

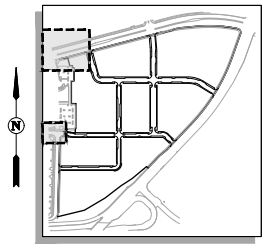
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

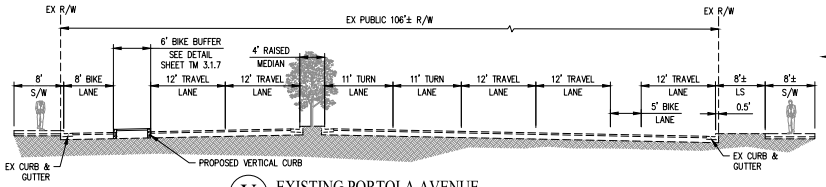
EXHIBIT E



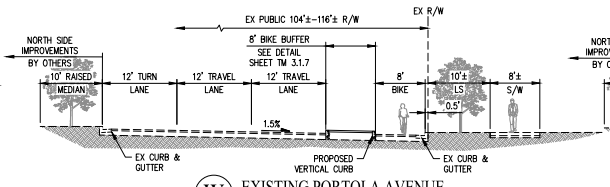


INDEX MAP
NOT TO SCALE

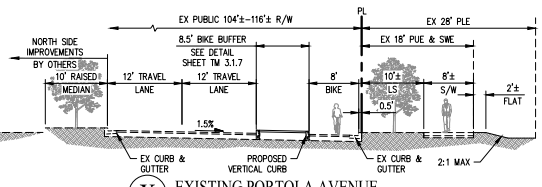
NOTES:
1. ALL CURB RAMPS TO BE TYPE A PER CALTRANS A88A UNLESS OTHERWISE NOTED.
2. *IMPROVEMENTS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR REFERENCE ONLY.



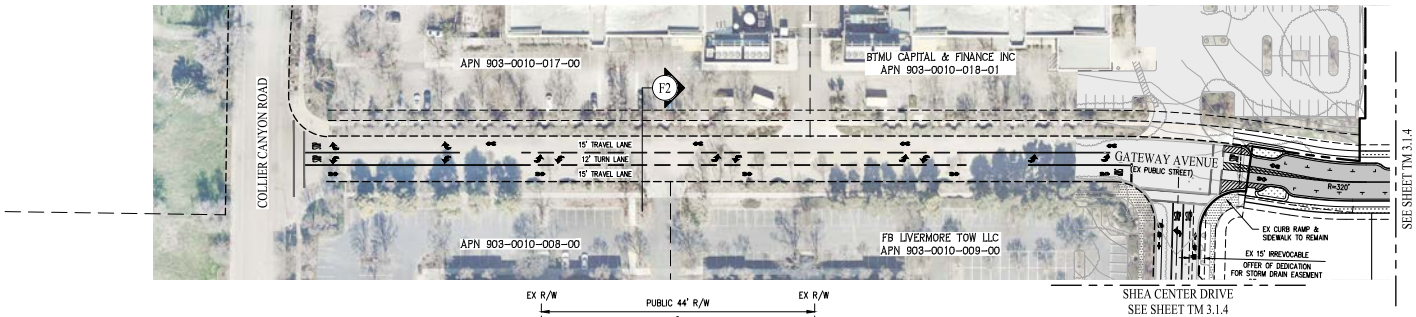
V EXISTING PORTOLA AVENUE
SCALE: 1"=10'

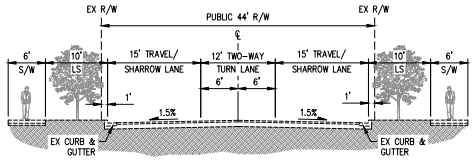


W EXISTING PORTOLA AVENUE
SCALE: 1"=10'



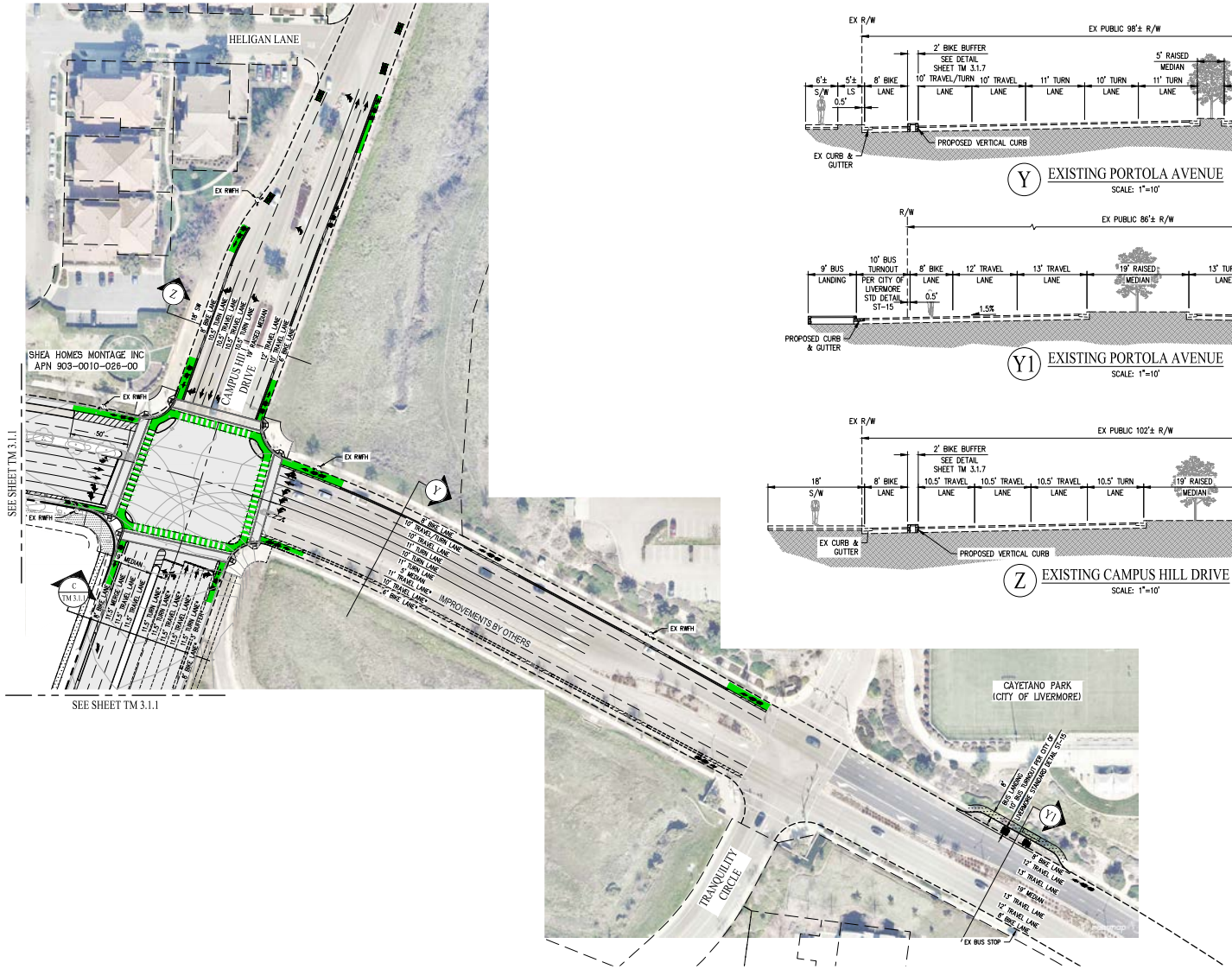
X EXISTING PORTOLA AVENUE
SCALE: 1"=10'





F2 EXISTING GATEWAY AVENUE
(44' WIDE STREET)
SCALE: 1"=10'

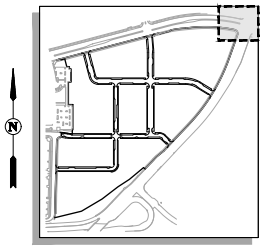
EXHIBIT E



Y EXISTING PORTOLA AVENUE
SCALE: 1"=10'

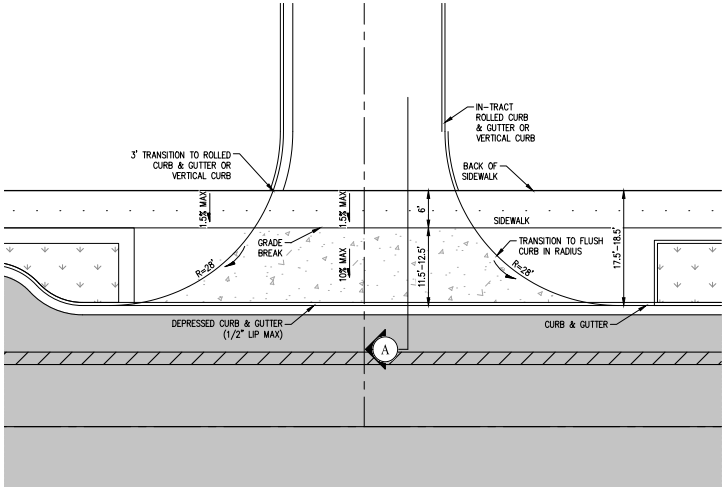
Y1 EXISTING PORTOLA AVENUE
SCALE: 1"=10'

Z EXISTING CAMPUS HILL DRIVE
SCALE: 1"=10'



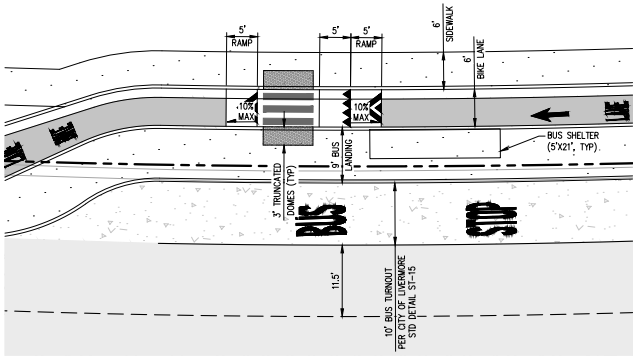
INDEX MAP
NOT TO SCALE

NOTES:
1. ALL CURB RAMPS TO BE TYPE A PER CALTRANS A88A UNLESS OTHERWISE NOTED.
2. *IMPROVEMENTS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR REFERENCE ONLY.



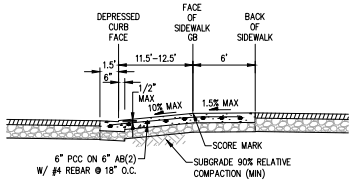
TYPICAL RESIDENTIAL PRIVATE STREET DRIVEWAY ENTRY

SCALE: 1"=10'



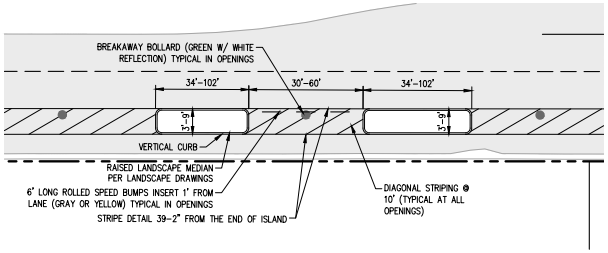
PEDESTRIAN CROSSING DETAIL

SCALE: 1"=10'



SECTION A

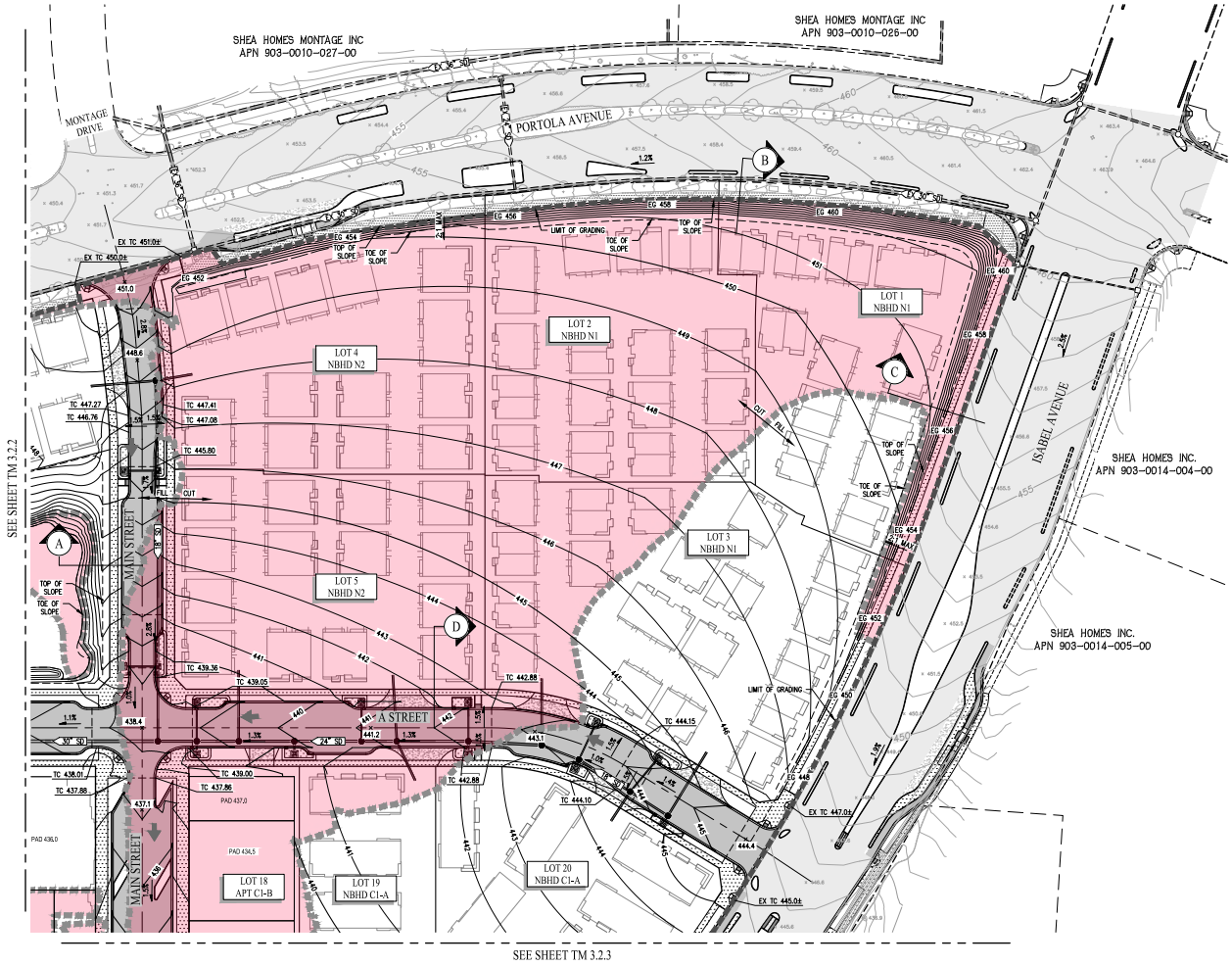
NOT TO SCALE

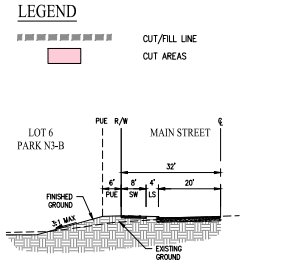


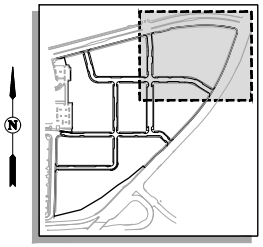
BIKE BUFFER DETAIL

SCALE: 1"=20'

EXHIBIT E







VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY GRADING & DRAINAGE PLAN TM 3.2.1

ISABEL PORTOLA
OWNER, LLC

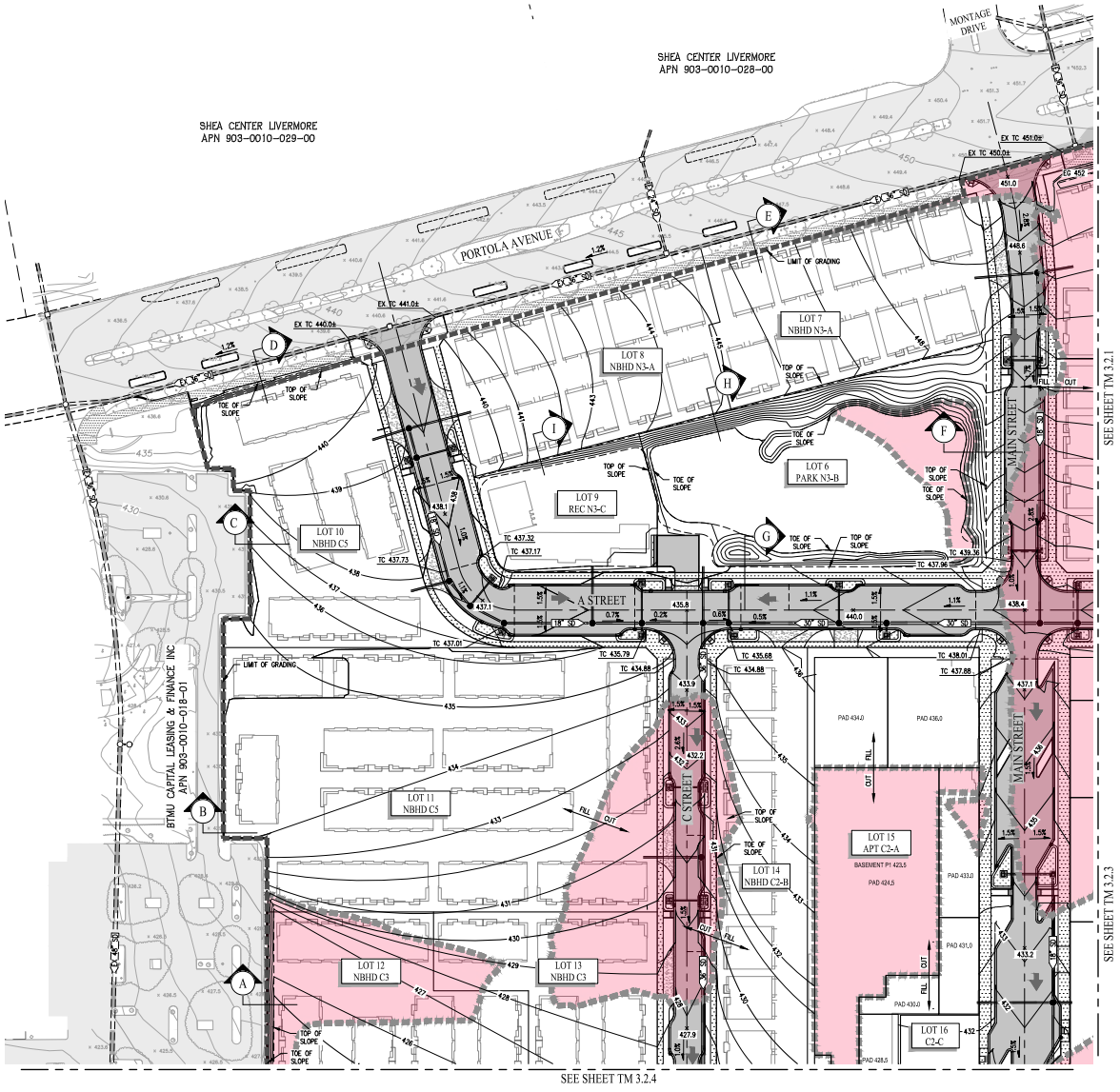
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

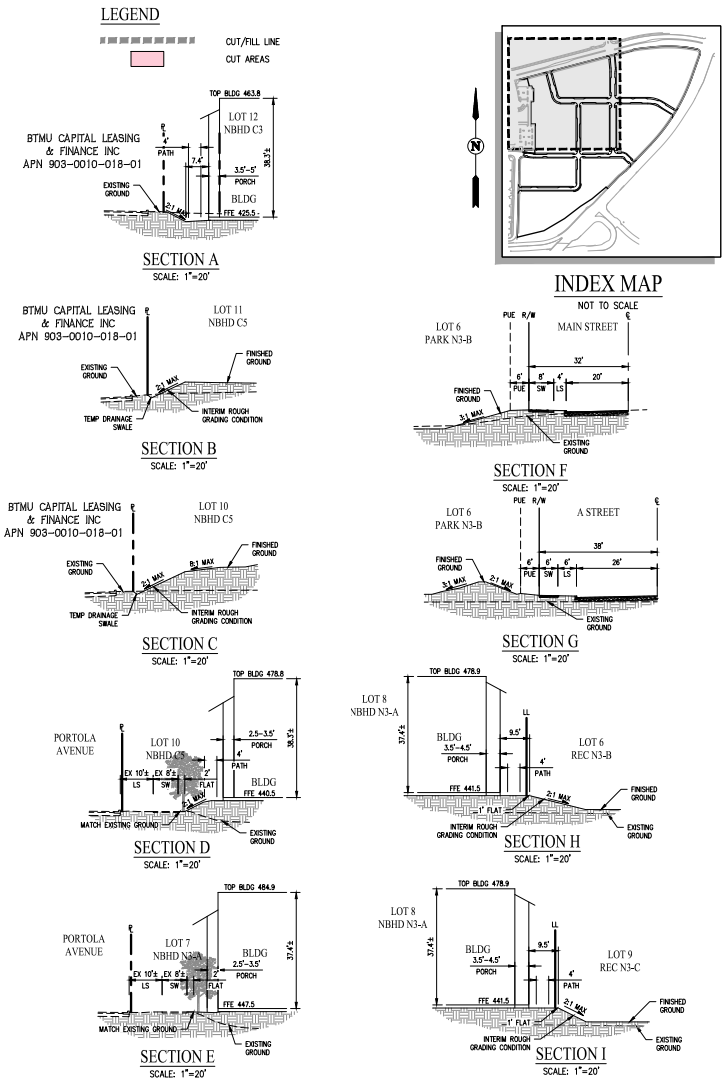
0 30 60 120

06-28-24 | 3591-000

2788

EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY GRADING & DRAINAGE PLAN TM 3.2.2

ISABEL PORTOLA OWNER, LLC

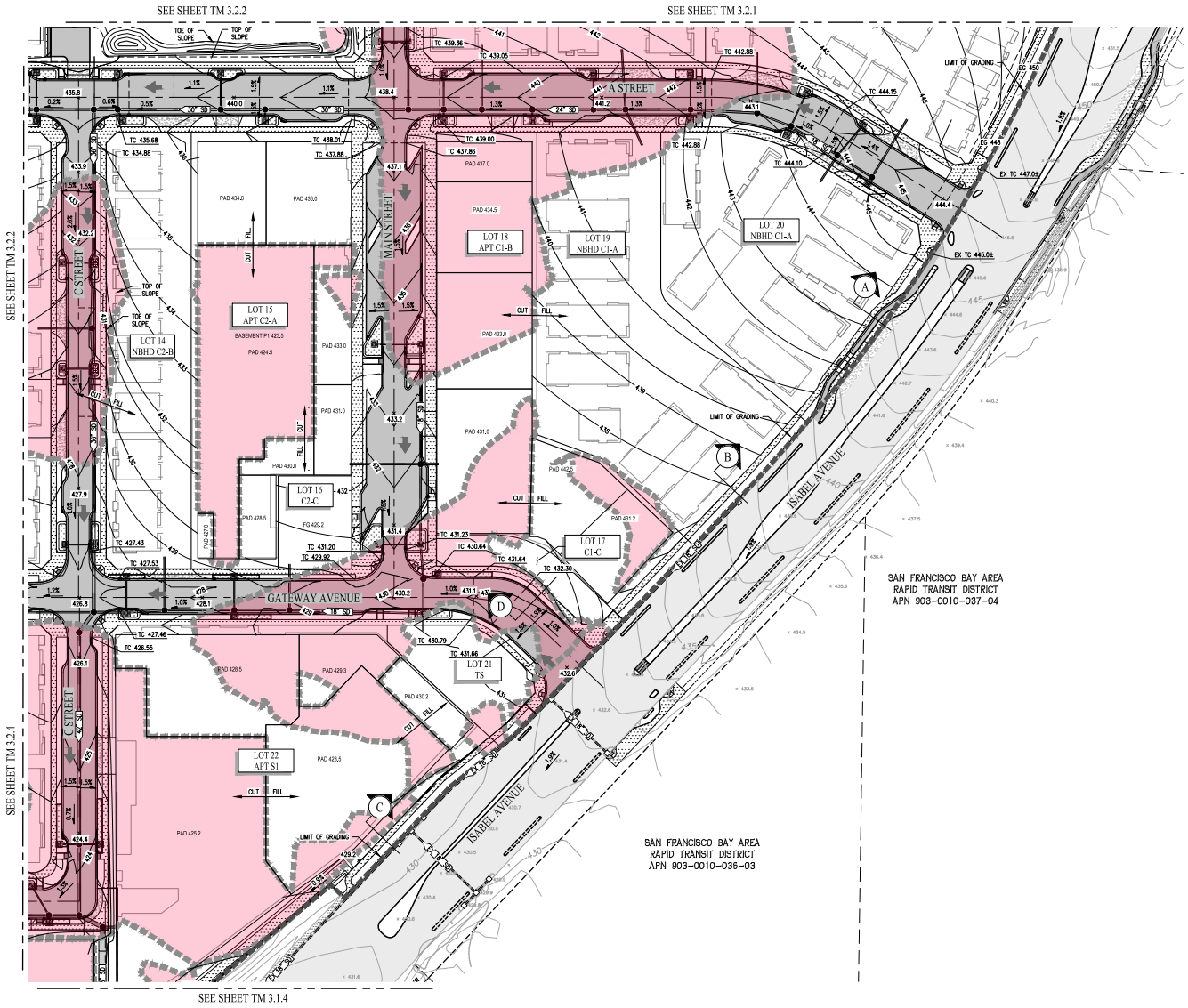
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

2789

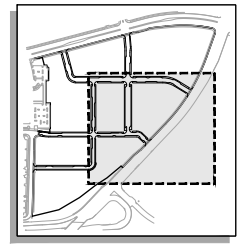
EXHIBIT E



LEGEND

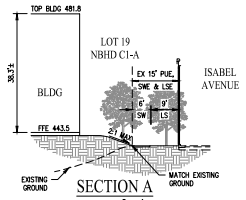
CUT/FILL LINE

CUT AREAS



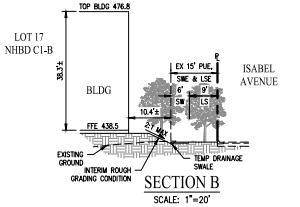
INDEX MAP

NOT TO SCALE



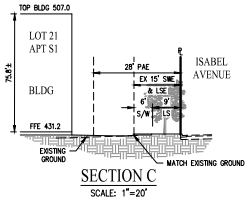
SECTION A

SCALE: 1"=20'



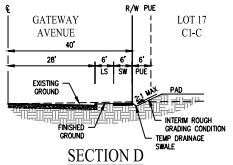
SECTION B

SCALE: 1"=20'



SECTION C

SCALE: 1"=20'



SECTION D

SCALE: 1"=20'

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY GRADING & DRAINAGE PLAN TM 3.2.3

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

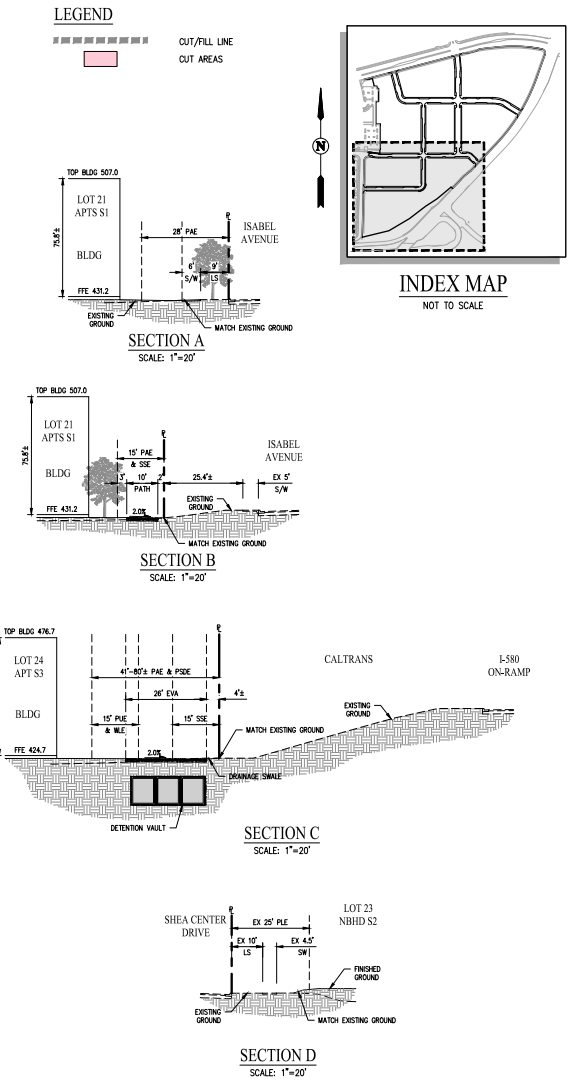
0 30 60 120

06-28-24 | 3591-000

2790

EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY GRADING & DRAINAGE PLAN TM 3.2.4

ISABEL PORTOLA OWNER, LLC

cbg

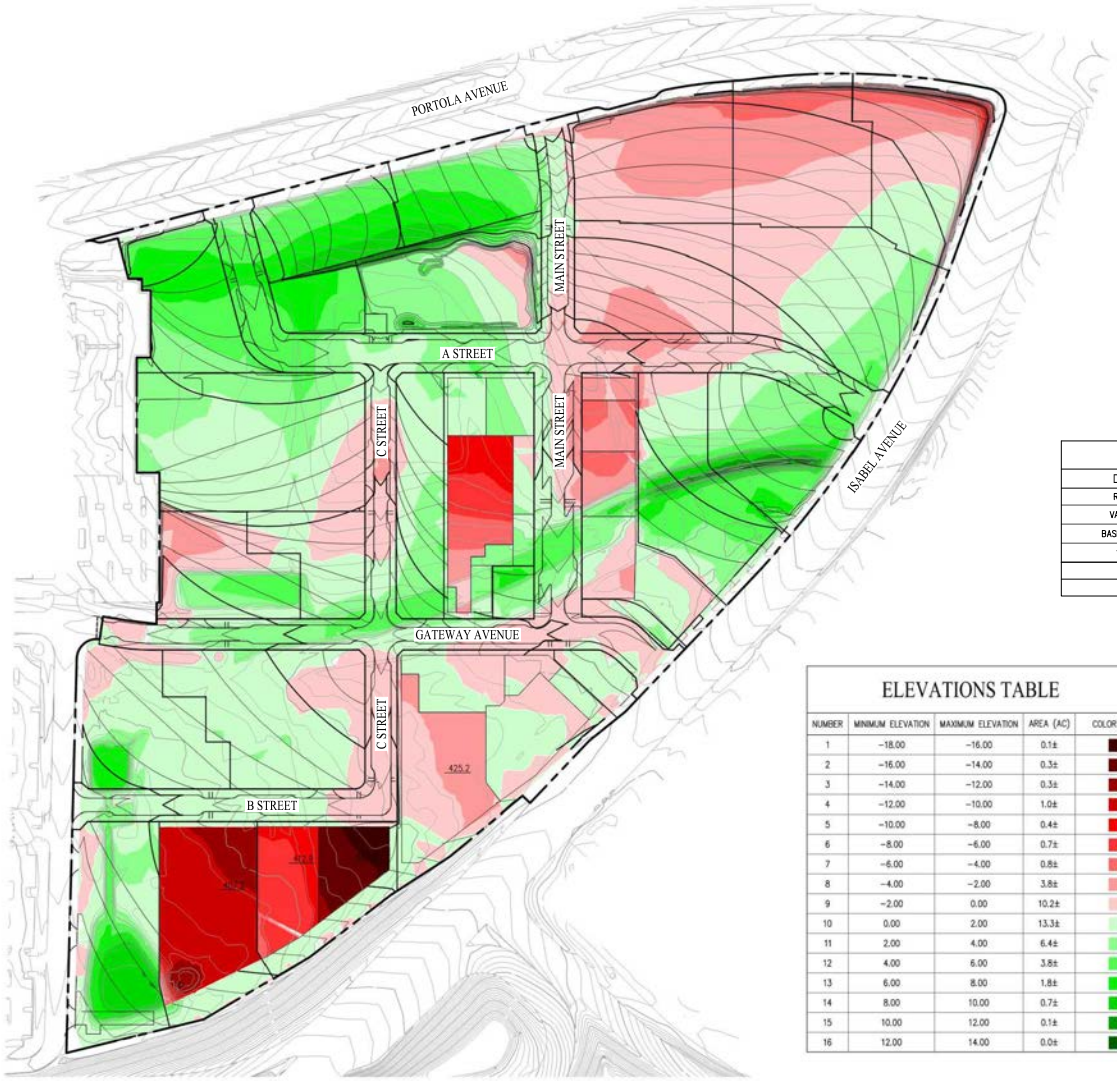
LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

2791

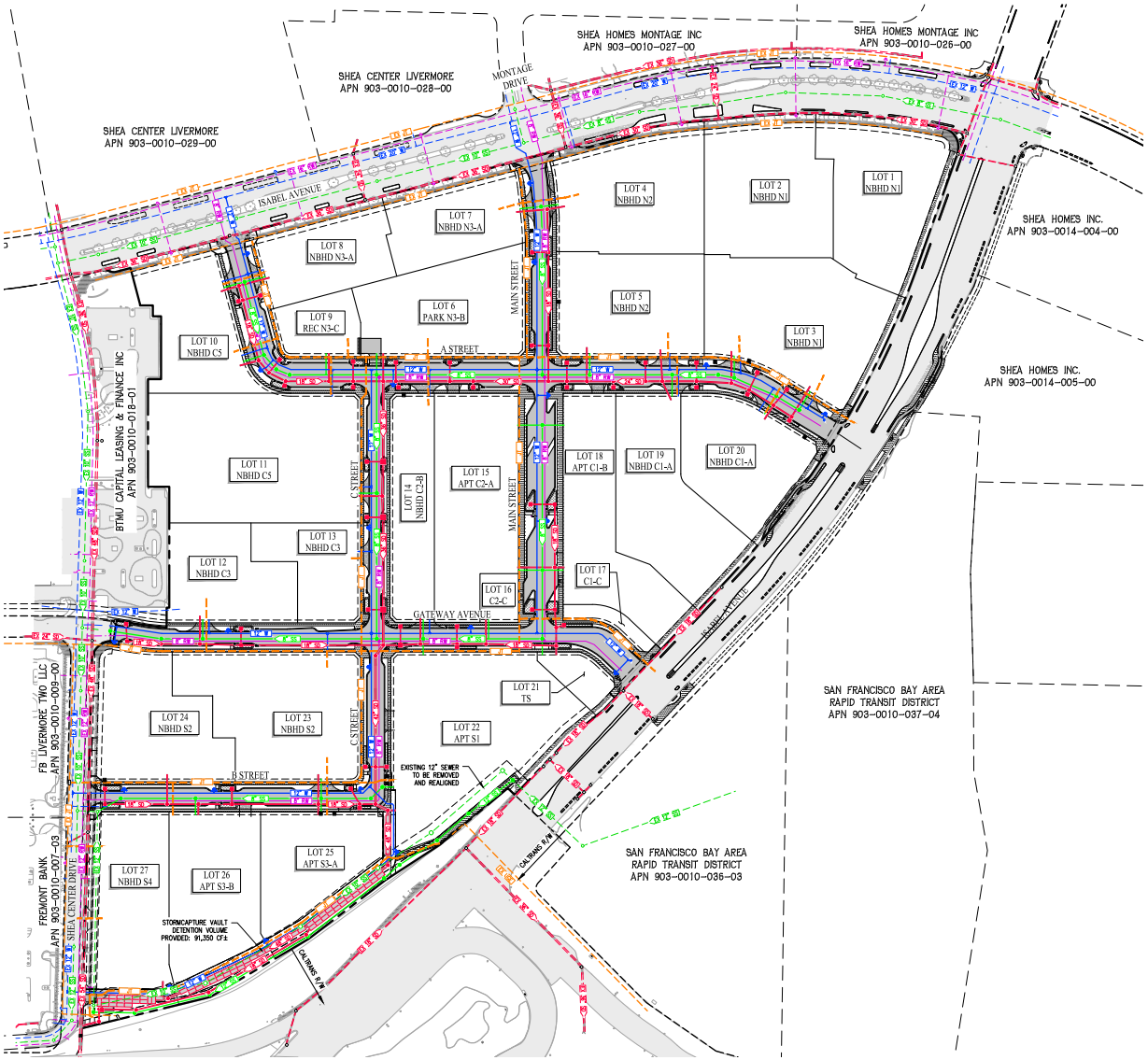
EXHIBIT E



EARTHWORK SUMMARY		
DESCRIPTION	CUT (CY)	FILL (CY)
RAW EARTHWORK	99,600	89,100
VAULT EXCAVATION	5,100	
BASEMENT EXCAVATION	53,500	
15% SHRINKAGE	23,800	
NET	182,000	89,100
OFFHAUL	93,100	

ELEVATIONS TABLE				
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA (AC)	COLOR
1	-18.00	-16.00	0.1±	
2	-16.00	-14.00	0.3±	
3	-14.00	-12.00	0.3±	
4	-12.00	-10.00	1.0±	
5	-10.00	-8.00	0.4±	
6	-8.00	-6.00	0.7±	
7	-6.00	-4.00	0.8±	
8	-4.00	-2.00	3.8±	
9	-2.00	0.00	10.2±	
10	0.00	2.00	13.3±	
11	2.00	4.00	6.4±	
12	4.00	6.00	3.8±	
13	6.00	8.00	1.8±	
14	8.00	10.00	0.7±	
15	10.00	12.00	0.1±	
16	12.00	14.00	0.0±	

EXHIBIT E



LEGEND

EXISTING	PROPOSED	
		PROJECT BOUNDARY
SS	SS	SANITARY SEWER PIPE
W	W	POTABLE WATER PIPE
RW	RW	RECYCLED WATER PIPE
SD	SD	STORM DRAIN PIPE
JT	JT	JOINT TRENCH
UE		UNDERGROUND ELECTRICAL
OHW		OVERHEAD WIRE
	N1	PARCEL NAME
		POTABLE WATER FIRE HYDRANT
		RECYCLED WATER FIRE HYDRANT
		STORMWATER HYDROMODIFICATION VAULT

MATERIALS SCHEDULE

PRODUCT	MATERIAL TYPE
POTABLE WATER PIPE	AWWA C900 PVC
RECYCLED WATER PIPE	AWWA C900 PVC
STORM DRAIN PIPE	12"-36" HDPE DR 17 42"-60" RCP CLASS III MINIMUM
SANITARY SEWER PIPE	ABS ASTM D 2680
POTABLE WATER FIRE HYDRANT	6" DIAMETER CLOW MODEL 950
STORMWATER HYDROMODIFICATION VAULT	OLD CASTLE – STORM CAPTURE DETENTION SYSTEM

SANITARY SEWER PIPE NOTES:
1. SLOPE FOR SEWER MAIN IS DESIGNED TO BE 0.33% UNLESS OTHERWISE NOTED.
2. ALL SEWER STUBS TO BE 2% MIN.

STORM DRAIN PIPE NOTES:
1. TYPICAL SLOPES FOR VARIOUS PIPE SIZES UNLESS OTHERWISE NOTED:
   - A. 12" S=0.50%
   - B. 18" S=0.30%
   - C. 24" S=0.30%
   - D. 36" S=0.30%
   - E. 42" S=0.30%
   - F. 48" S=0.10%

SEE SHEETS TM 3.2.1-TM 3.2.4 FOR ALL NON-TYPICAL SLOPES.

VESTING TENTATIVE TRACT MAP NO. 8659

OVERALL UTILITY PLAN

TM 3.3.0

ISABEL PORTOLA
OWNER, LLC

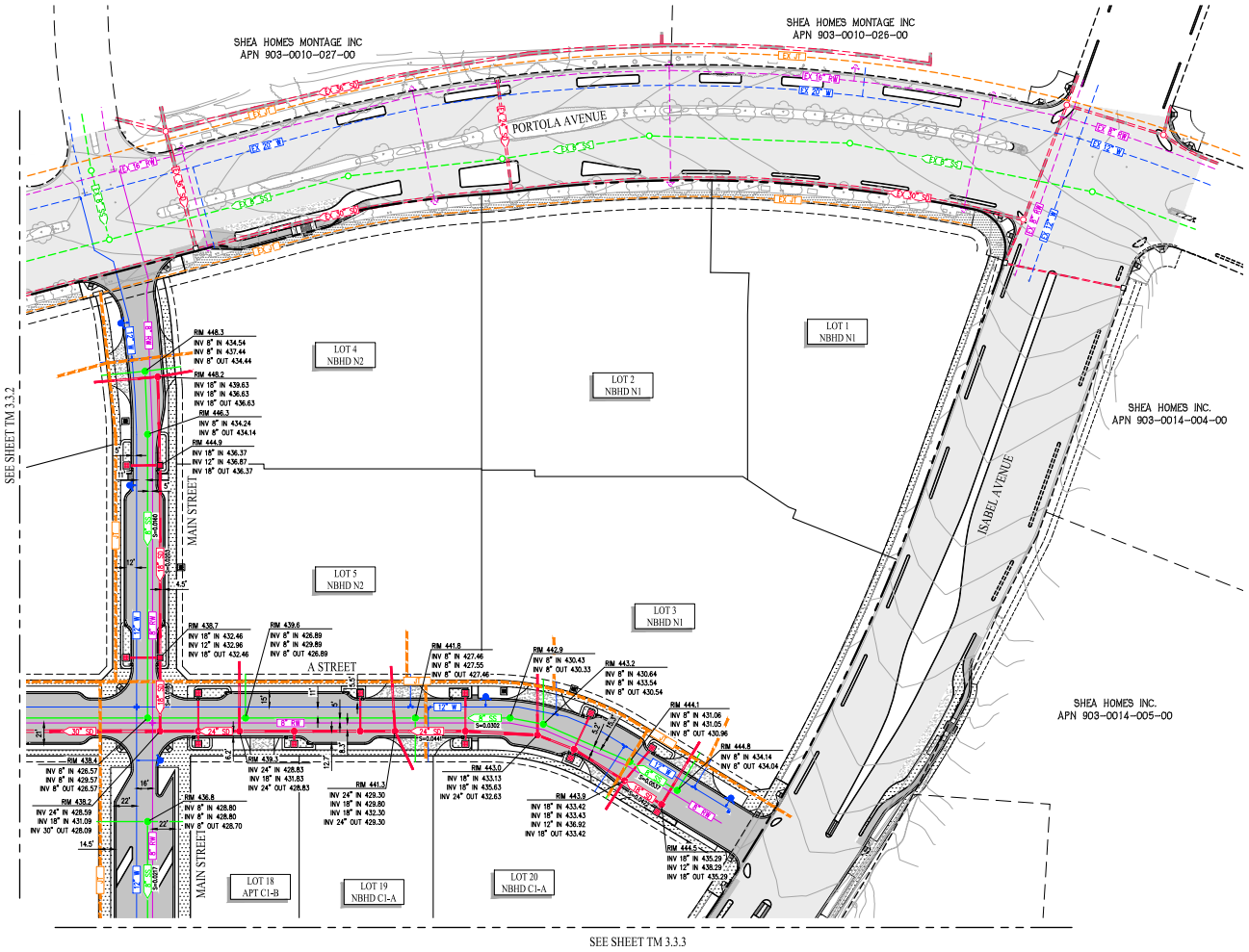
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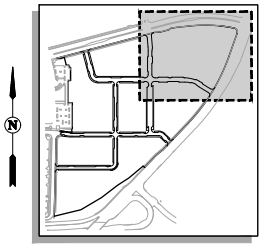
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 60 120 240

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY UTILITY PLAN TM 3.3.1

ISABEL PORTOLA
OWNER, LLC

cbg

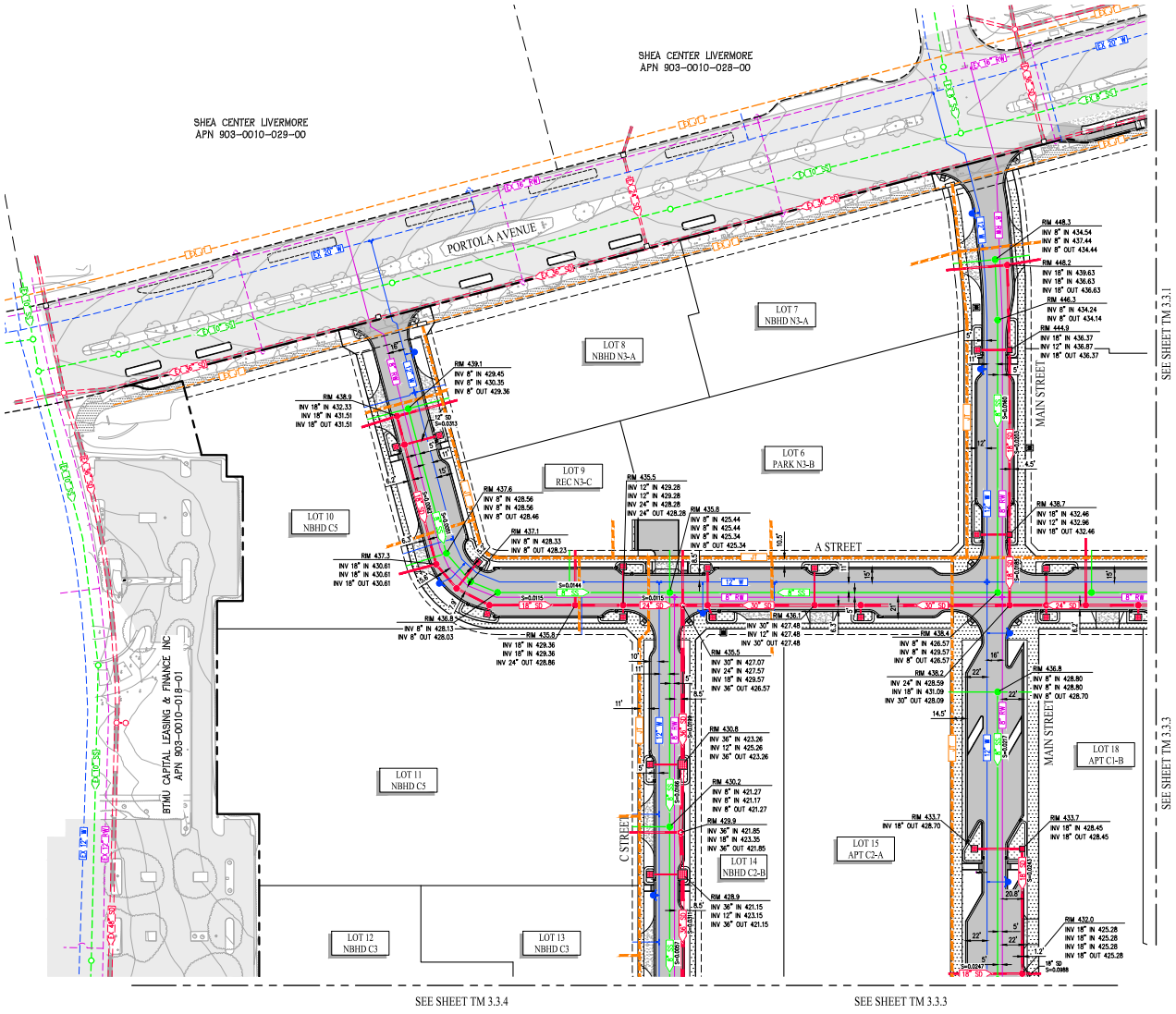
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

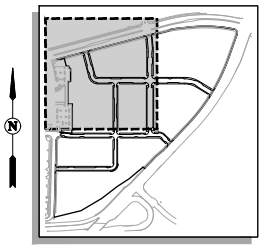
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06-28-24 | 3591-000

2794

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY UTILITY PLAN TM 3.3.2

ISABEL PORTOLA
OWNER, LLC

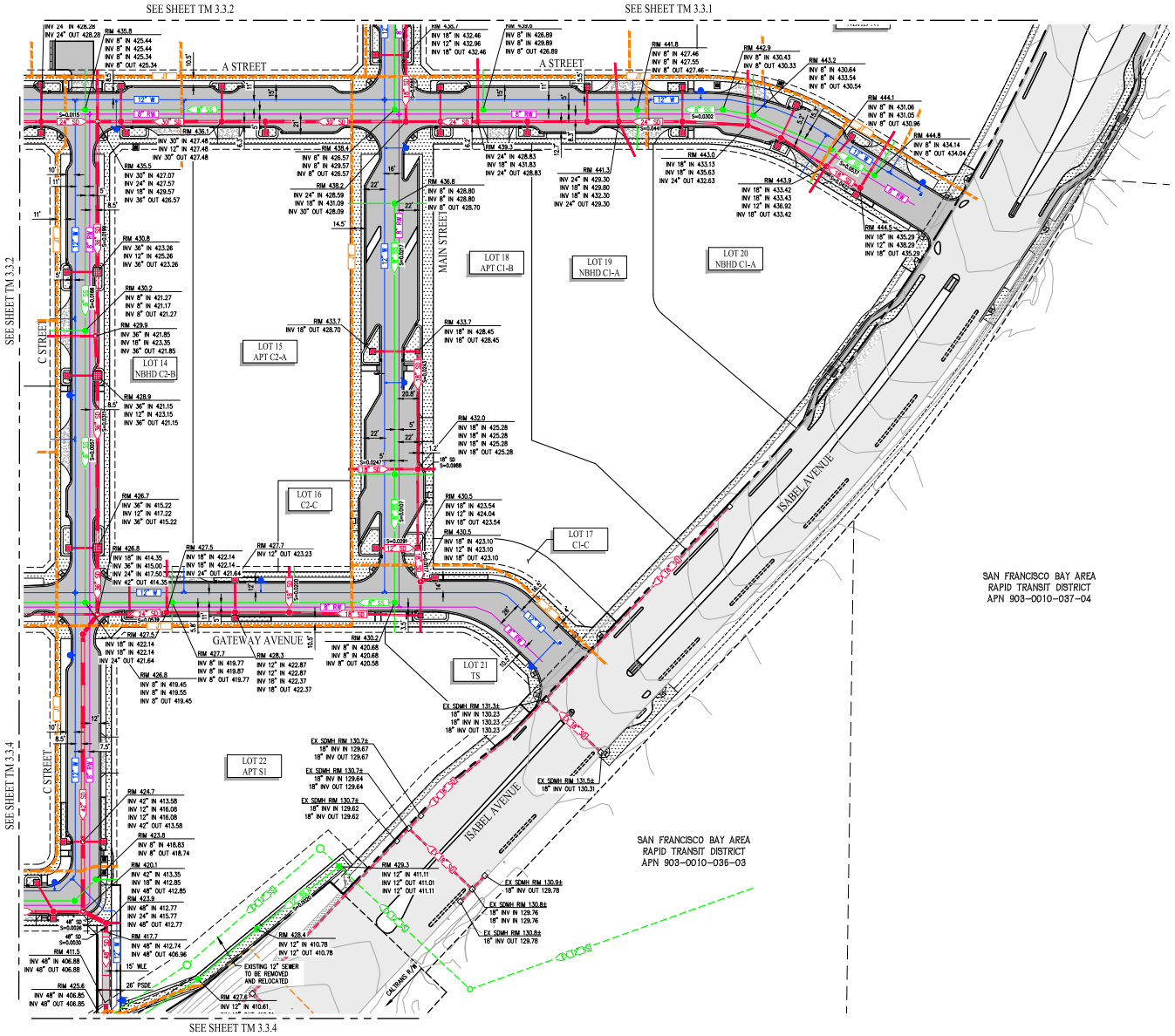
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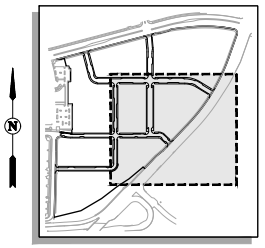
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY UTILITY PLAN TM 3.3.3

ISABEL PORTOLA OWNER, LLC

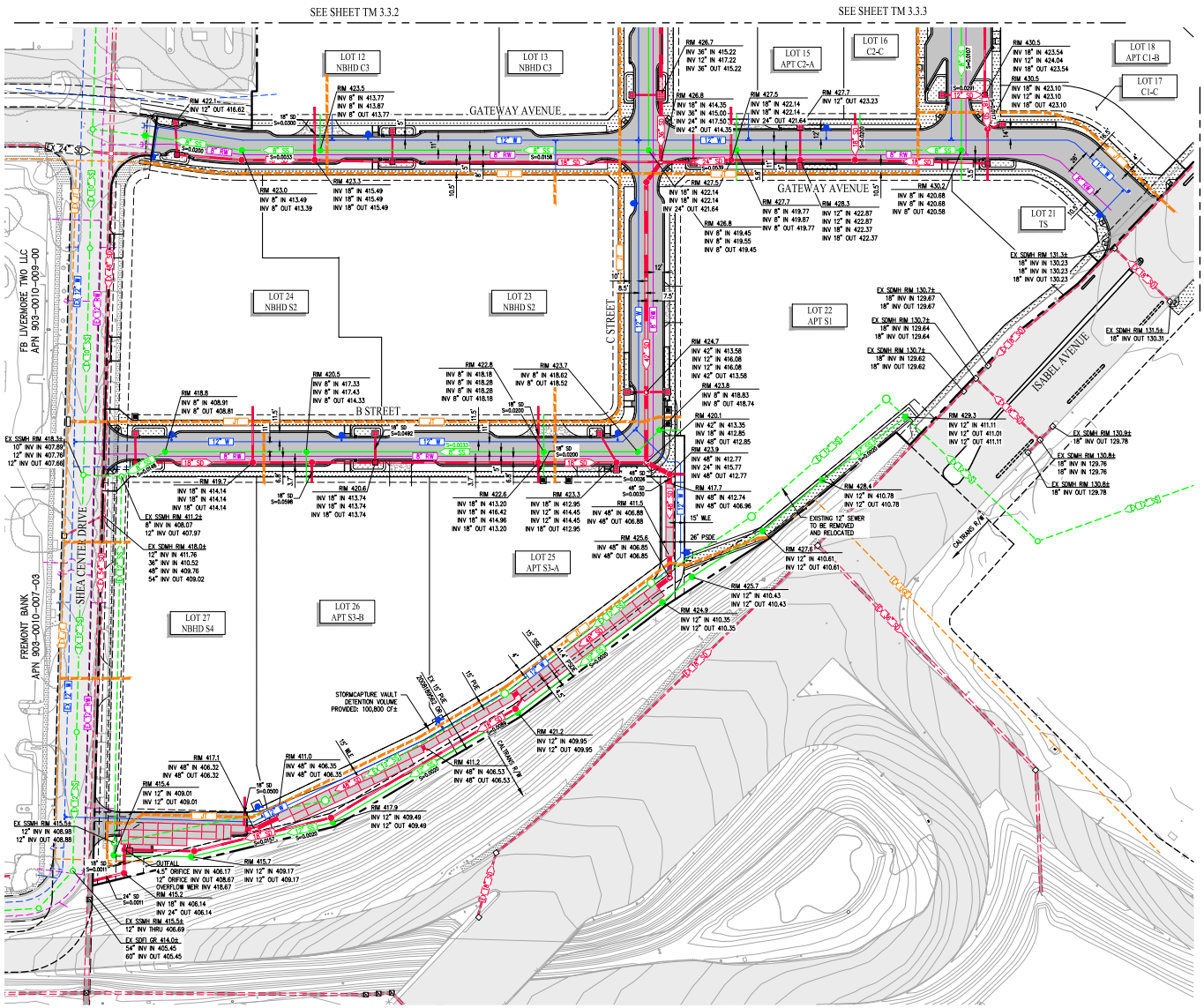
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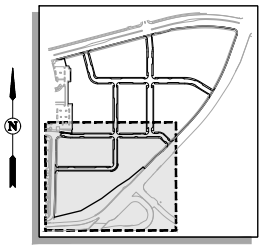
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY UTILITY PLAN TM 3.3.4

ISABEL PORTOLA OWNER, LLC

cbg

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ISABEL CROSSING
LIVERMORE, CALIFORNIA

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EXHIBIT E



	LAND USE	PROPOSED STORM WATER FACILITIES
	GREEN STREETS	BIOTREATMENT AREAS
	ON-SITE TOWNHOMES	ON-SITE PERVIOUS PAVERS (ALLEYS)
	ON-SITE HIGH DENSITY	ON-SITE BIOTREATMENT/FLOW THROUGH PLANTER AREAS
	OPEN SPACE AREAS	ON-SITE BIOTREATMENT AREAS AND PERVIOUS SURFACES
	DETENTION VAULT	SITE WIDE COMPLIANCE

VESTING TENTATIVE TRACT MAP NO. 8659

OVERALL STORMWATER CONTROL PLAN

TM 3.4.0

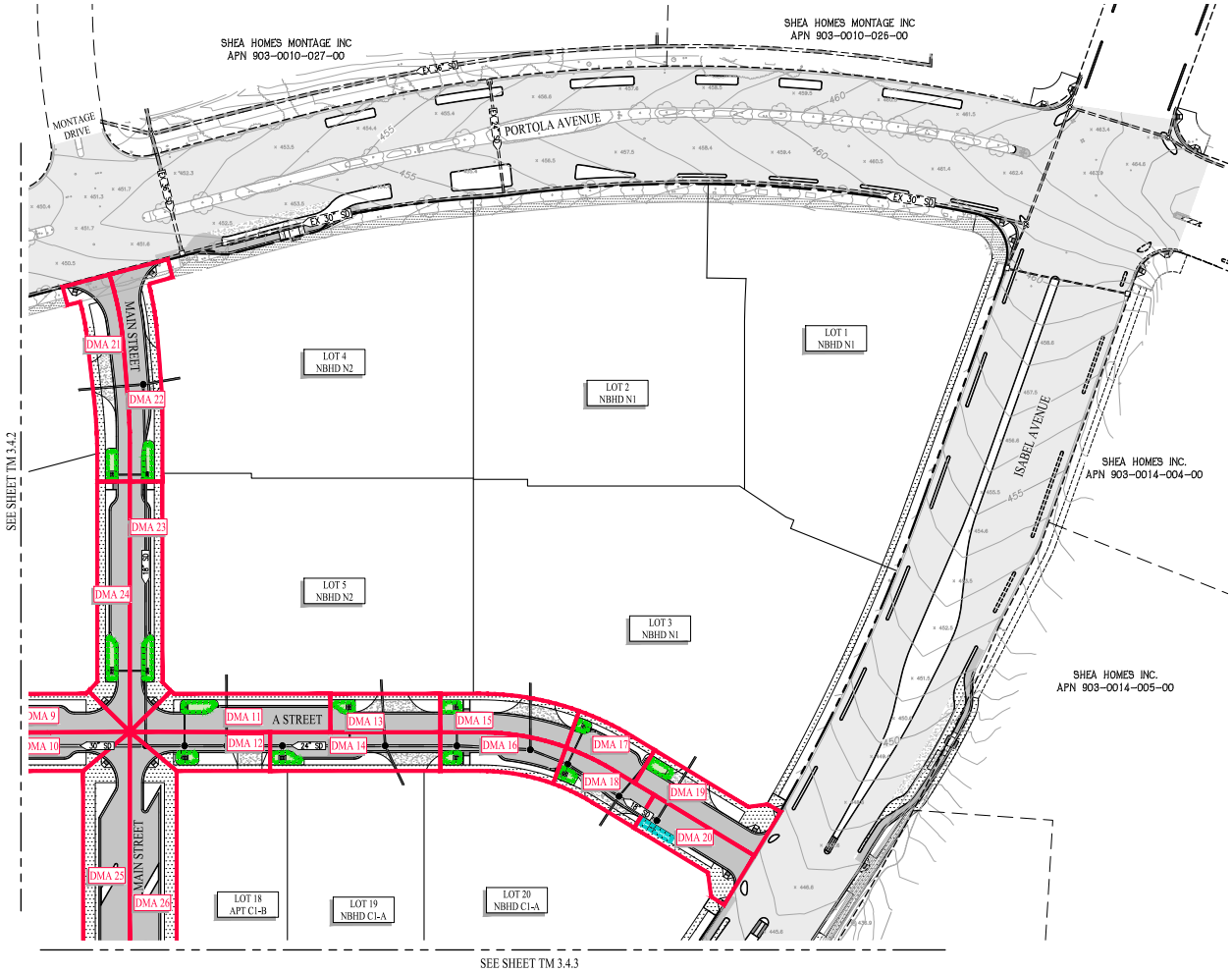
ISABEL PORTOLA
OWNER, LLC

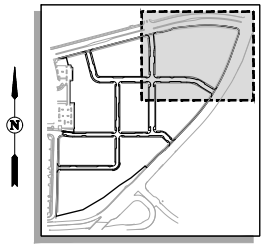
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 60 120 240

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- EX 24" SD — EXISTING STORM DRAIN
- 12" SD — PROPOSED STORM DRAIN
- PROPOSED FIELD INLET
- PROPOSED BIORETNETION AREA – FULLY CURBED CONDITION (SEE DETAIL SHEET TM 3.4.5)
- PROPOSED BIORETNETION AREA – SLOPED CONDITION (SEE DETAIL SHEET TM 3.4.5)
- EXISTING PAVEMENT TO REMAIN

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY STORMWATER CONTROL PLAN TM 3.4.1

ISABEL PORTOLA OWNER, LLC

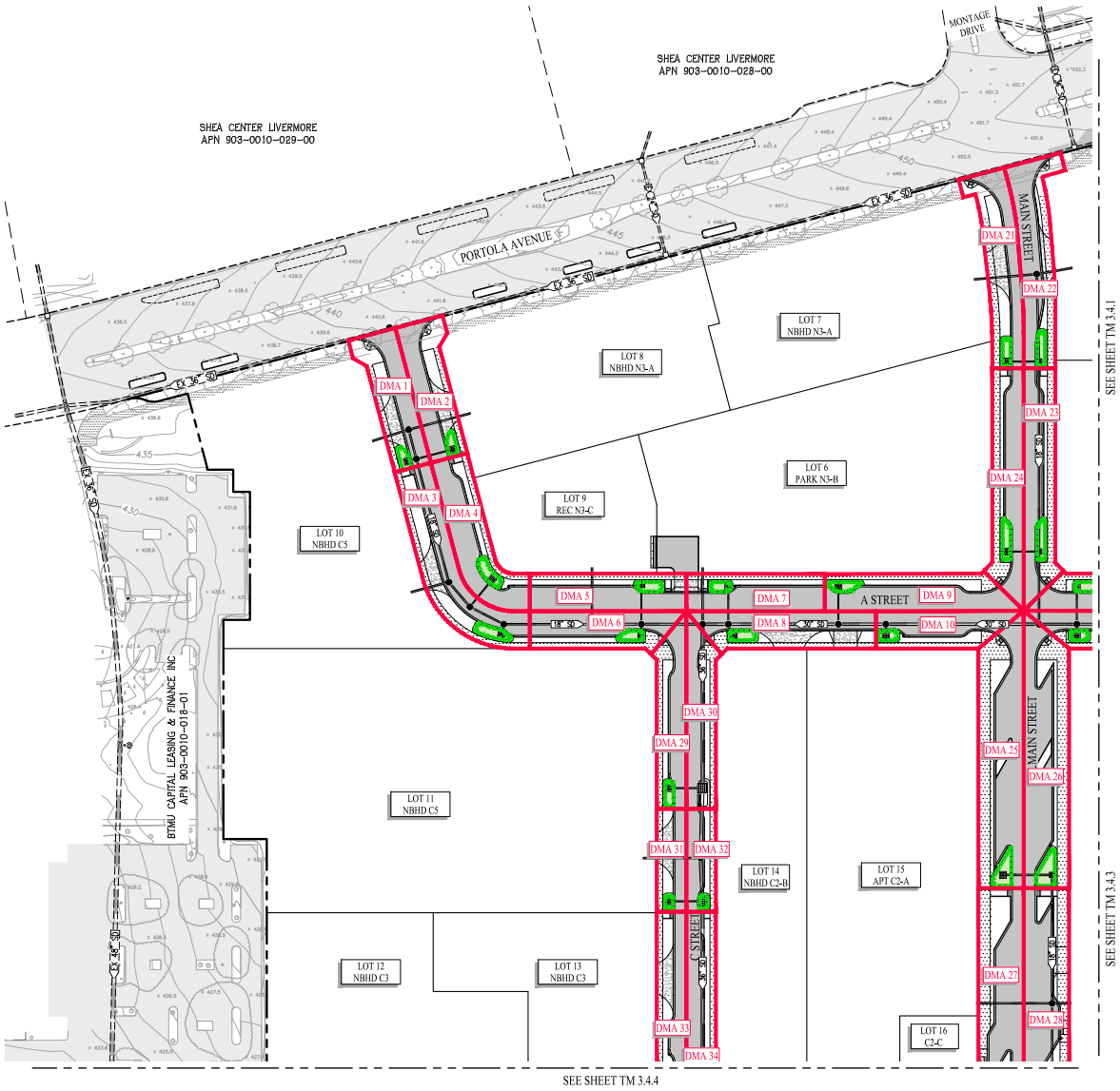
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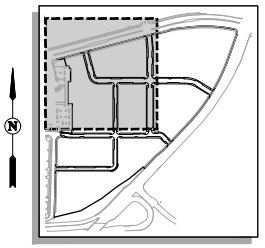
LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY STORMWATER CONTROL PLAN TM 3.4.2

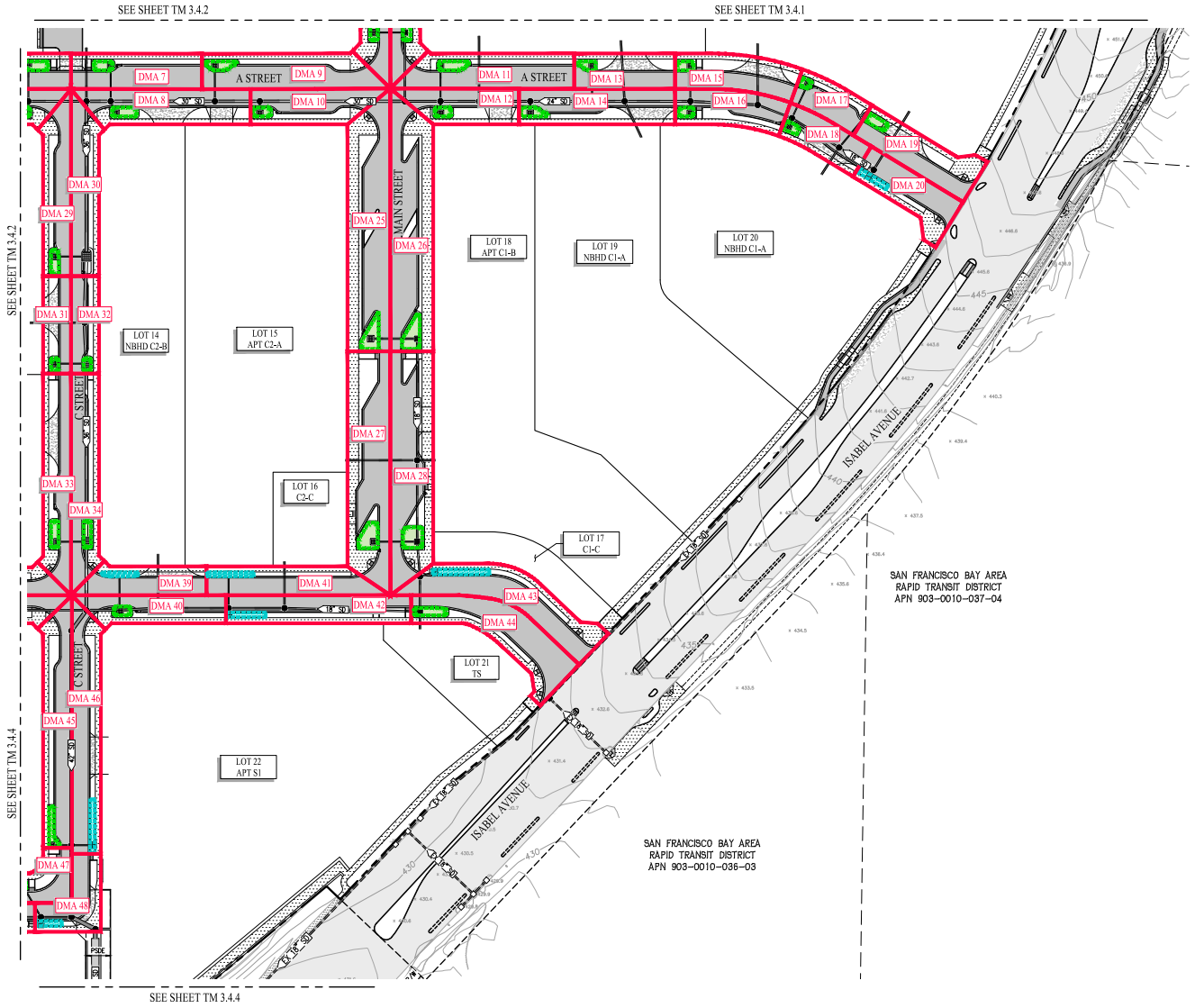
ISABEL PORTOLA
OWNER, LLC

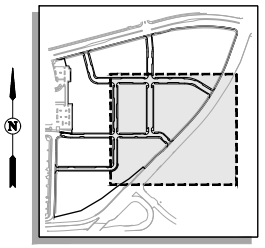
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

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EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY STORMWATER CONTROL PLAN TM 3.4.3

ISABEL PORTOLA OWNER, LLC

cbg

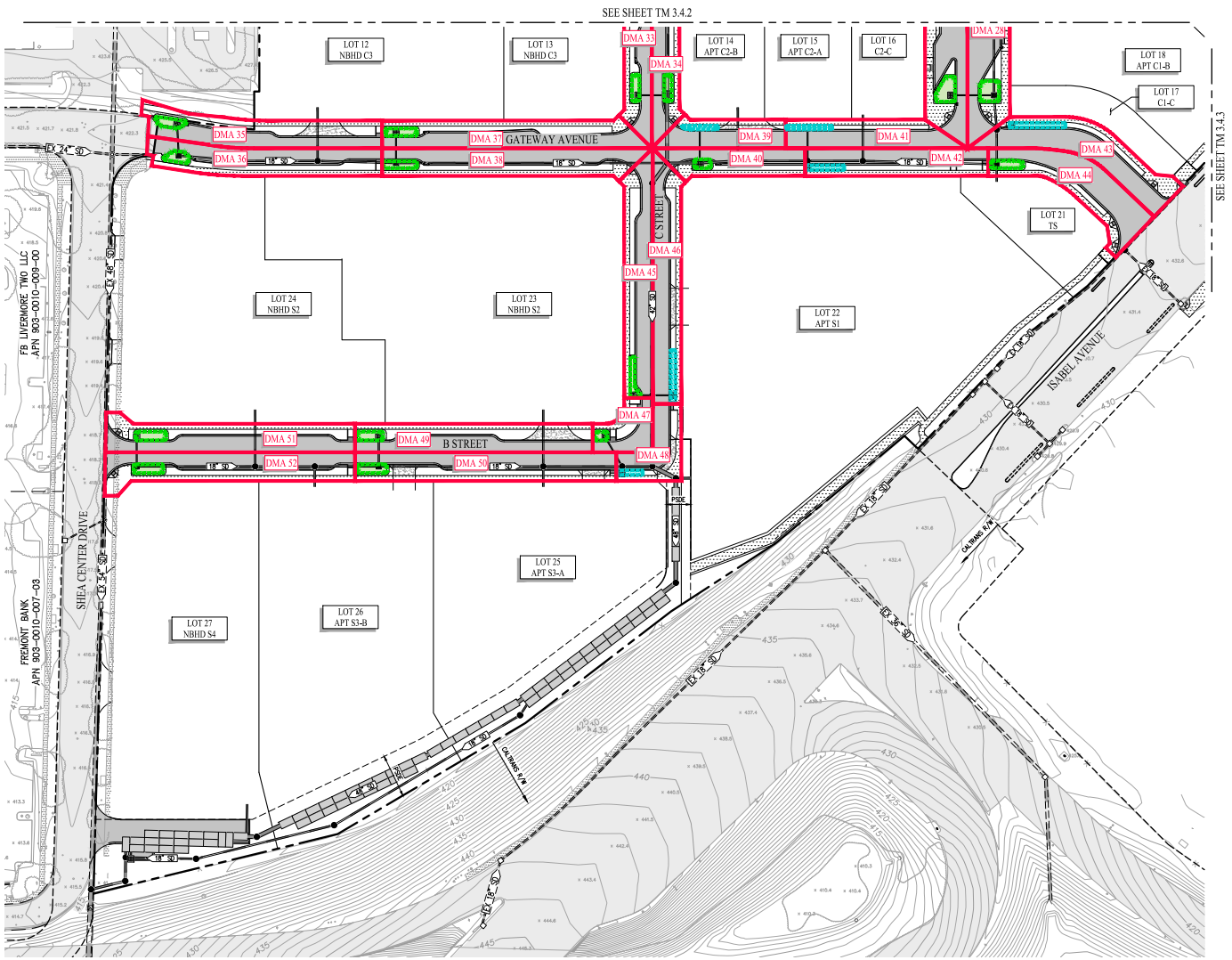
LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

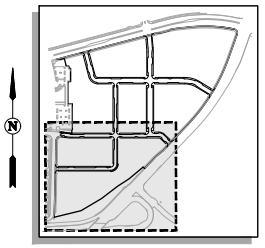
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06-28-24 | 3591-000

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EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

PRELIMINARY STORMWATER CONTROL PLAN

TM 3.4.4

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

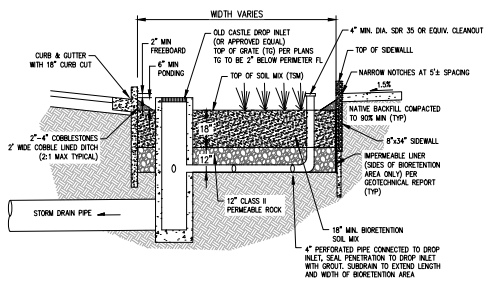
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2802

EXHIBIT E

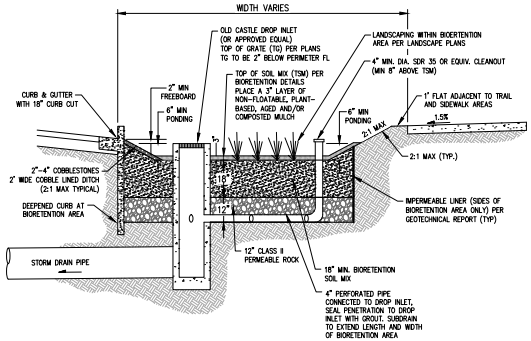
DRAINAGE MANAGEMENT SUMMARY TABLE - BACKBONE STREETS

DMA #	TOTAL AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	TOTAL PERVIOUS AREA (SF)	REQUIRED BIORETENTION AREA (SF) 4% MIN	PROVIDED BIORETENTION AREA (SF)
1	5,658	4,860	798	198	198
2	5,697	4,860	837	198	217
3	8,671	6,599	2,072	272	308
4	6,786	5,580	1,206	228	318
5	6,039	5,079	960	207	235
6	5,479	4,682	797	190	208
7	5,339	4,493	846	183	184
8	6,724	5,835	889	237	246
9	6,925	5,783	1,142	236	247
10	4,805	3,977	828	162	179
11	6,742	5,655	1,087	231	274
12	4,399	3,606	793	147	165
13	4,108	3,445	663	140	153
14	6,371	5,368	1,003	219	222
15	5,020	4,072	948	167	171
16	4,520	3,582	938	147	150
17	3,054	2,455	599	101	101
18	3,594	3,221	373	130	142
19	5,500	4,783	717	194	210
20	4,794	4,330	464	175	175
21	7,001	5,545	1,456	228	229
22	7,480	6,707	773	271	276
23	7,453	6,397	1,056	260	309
24	7,447	6,399	1,048	260	309
25	12,080	10,082	1,998	411	450
26	12,080	10,116	1,964	412	487
27	11,322	9,453	1,869	386	463
28	11,253	9,823	1,430	399	447
29	5,508	4,468	1,040	183	211
30	5,508	4,467	1,041	183	187
31	3,137	2,546	591	104	109
32	3,137	2,436	701	100	109
33	6,713	5,448	1,265	223	226
34	6,720	5,424	1,296	222	227
35	7,995	6,366	1,629	261	267
36	7,735	6,002	1,733	247	249
37	8,364	6,561	1,803	270	272
38	8,382	6,730	1,652	276	279
39	3,959	3,701	258	149	150
40	4,564	3,764	800	154	168
41	5,516	4,800	716	195	200
42	5,960	4,746	1,214	195	210
43	7,938	7,013	925	284	303
44	7,467	6,465	1,002	263	270
45	7,961	6,479	1,482	265	268
46	8,125	7,016	1,109	285	290
47	2,973	2,271	702	94	125
48	3,818	3,373	445	137	141
49	7,995	6,236	1,759	256	258
50	8,787	7,170	1,617	293	294
51	8,662	6,963	1,699	285	293
52	8,756	7,075	1,681	290	291
TOTAL	342,021	284,307	57,714	11,603	12,470



BIORETENTION AREA IN LANDSCAPE - FULLY CURBED

NOT TO SCALE



BIORETENTION AREA - SLOPED

NOT TO SCALE

Oldcastle Infrastructure

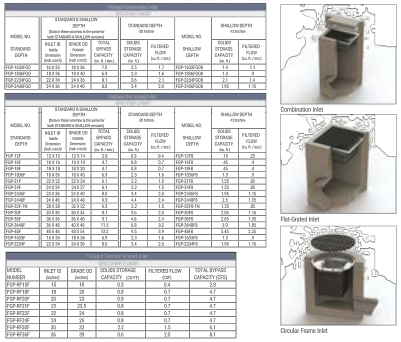
STORM WATER

FLOGARD®

Catch Basin Insert Filter

Catch basin insert designed to capture sediment, gross solids, trash and petroleum hydrocarbons from low ("first flush") flows, even during the most extreme weather conditions

Example Types, Sizes and Capacities: Additional sizes, including regional and custom options are available.

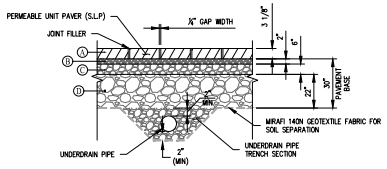


INLET FILTRATION

TRASH CAPTURE DEVICE

NOT TO SCALE

(TO BE INSTALLED ON ALL FIELD INLETS AND CATCH BASINS)

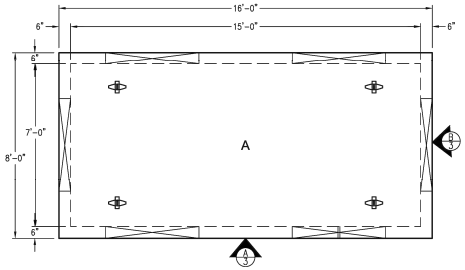


GAP WIDTH (IN)	JOINT FILLER AGGREGATE
1/4	ASTM NO. 9

LAYER	MATERIAL TYPE	THICKNESS (IN)
A	PERMEABLE UNIT PAVERS	3 1/8
B	LEVELING COURSE ASTM NO. 8	2
C	BASE COURSE ASTM NO. 57	6
D	RESERVOIR COURSE ASTM NO. 2	22

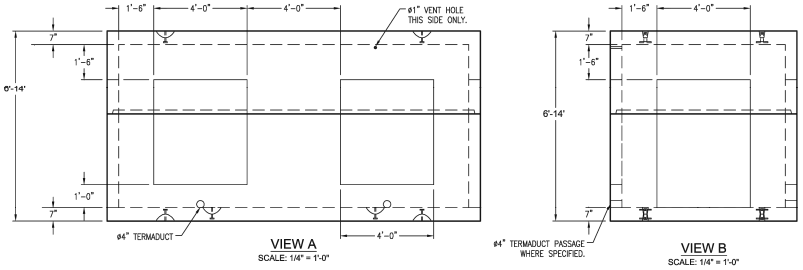
PERMEABLE UNIT PAVERS

NOT TO SCALE



STORM CAPTURE PLAN VIEW

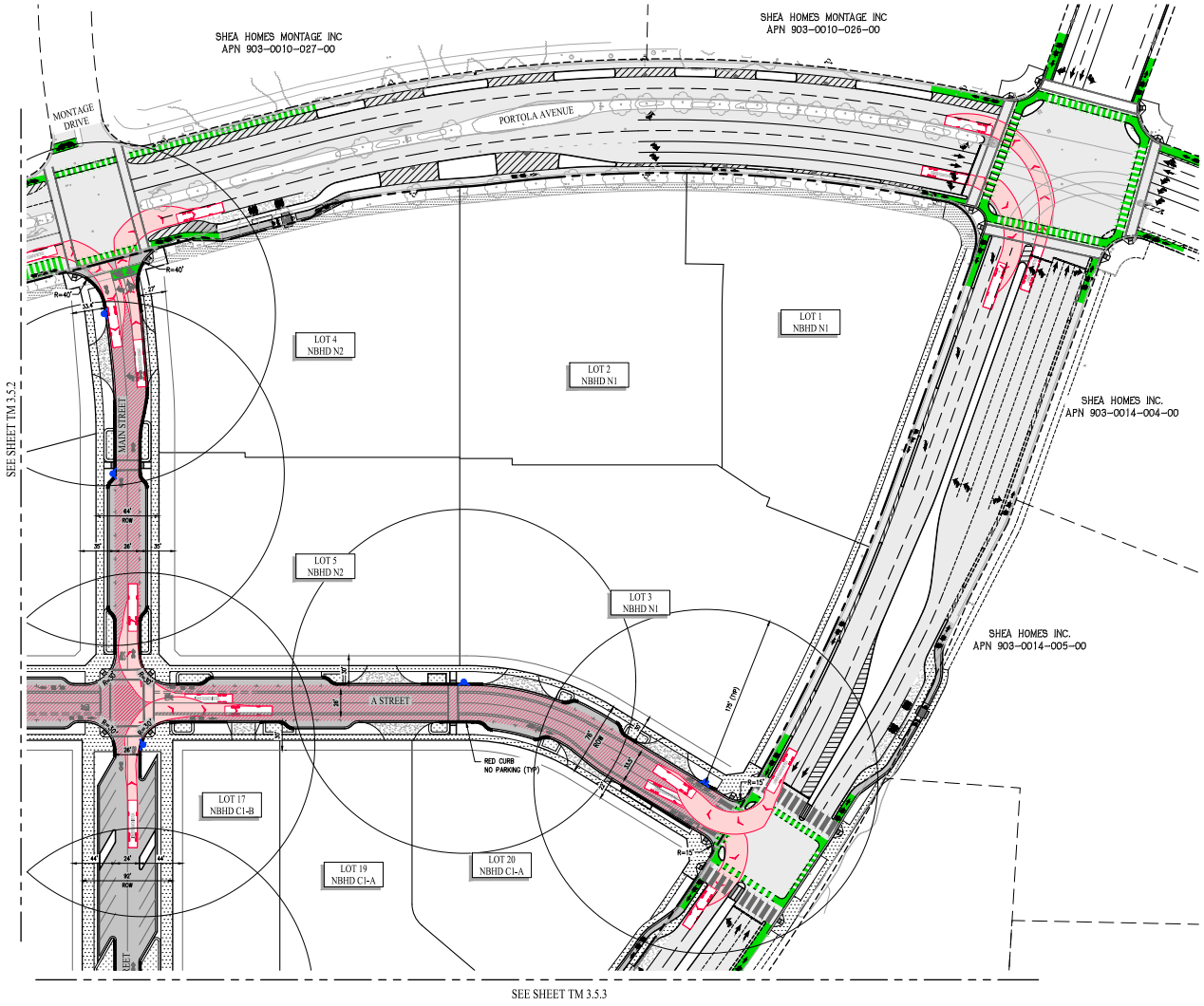
SCALE: 1/4" = 1'-0"

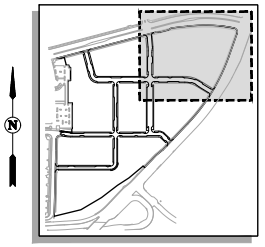


CONCEPTUAL VAULT MODULE

NOT TO SCALE

EXHIBIT E



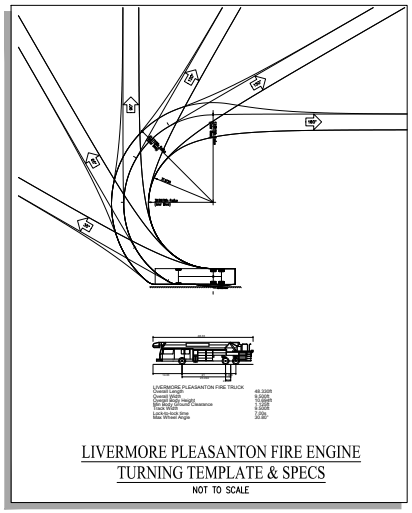


INDEX MAP
NOT TO SCALE

LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT
- RED CURB

* CURB SHALL BE PAINTED RED WITH LETTERING READING "NO PARKING – FIRE LANE". TEXT SHALL BE A MINIMUM OF 4" TALL AND SHALL BE PLACED EVERY 30' OR PORTION THEREOF, ON TOP OF DESIGNATED CURBS. INSTALL R26F (NO STOPPING FIRE LANE) SIGNS AT 100' INTERVALS. ALL NEW R26F SIGNS (NO STOPPING FIRE LANE) TO BE INSTALLED SHALL INCLUDE TEXT AT THE BOTTOM OF THE SIGN WHICH READS "CVC 22500.1"



LIVERMORE PLEASANTON FIRE ENGINE
TURNING TEMPLATE & SPECS
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

FIRE ACCESS PLAN TM 3.5.1

ISABEL PORTOLA
OWNER, LLC

cbg

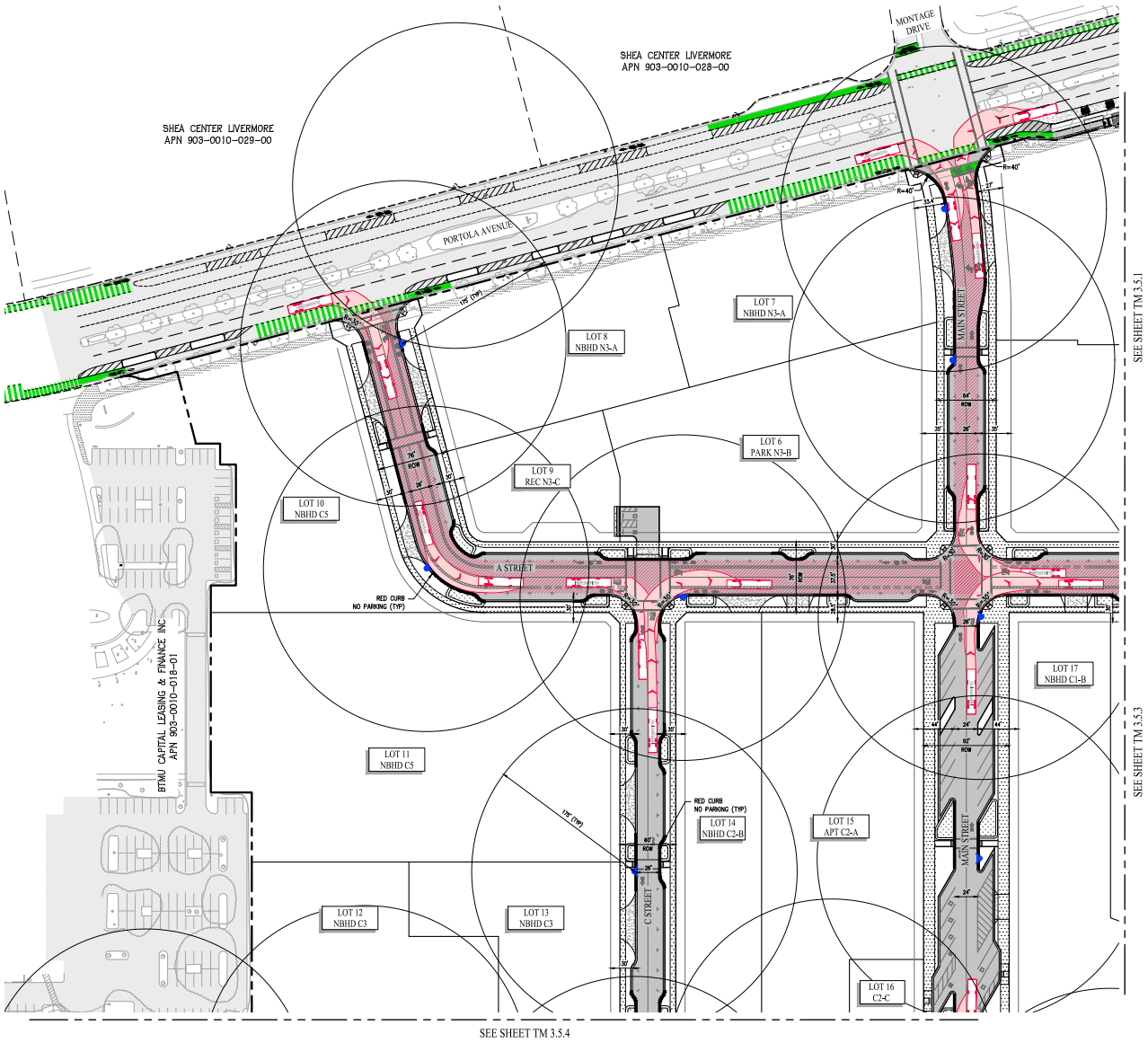
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

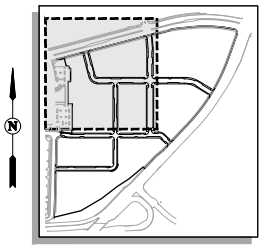
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EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

FIRE ACCESS PLAN TM 3.5.2

ISABEL PORTOLA
OWNER, LLC

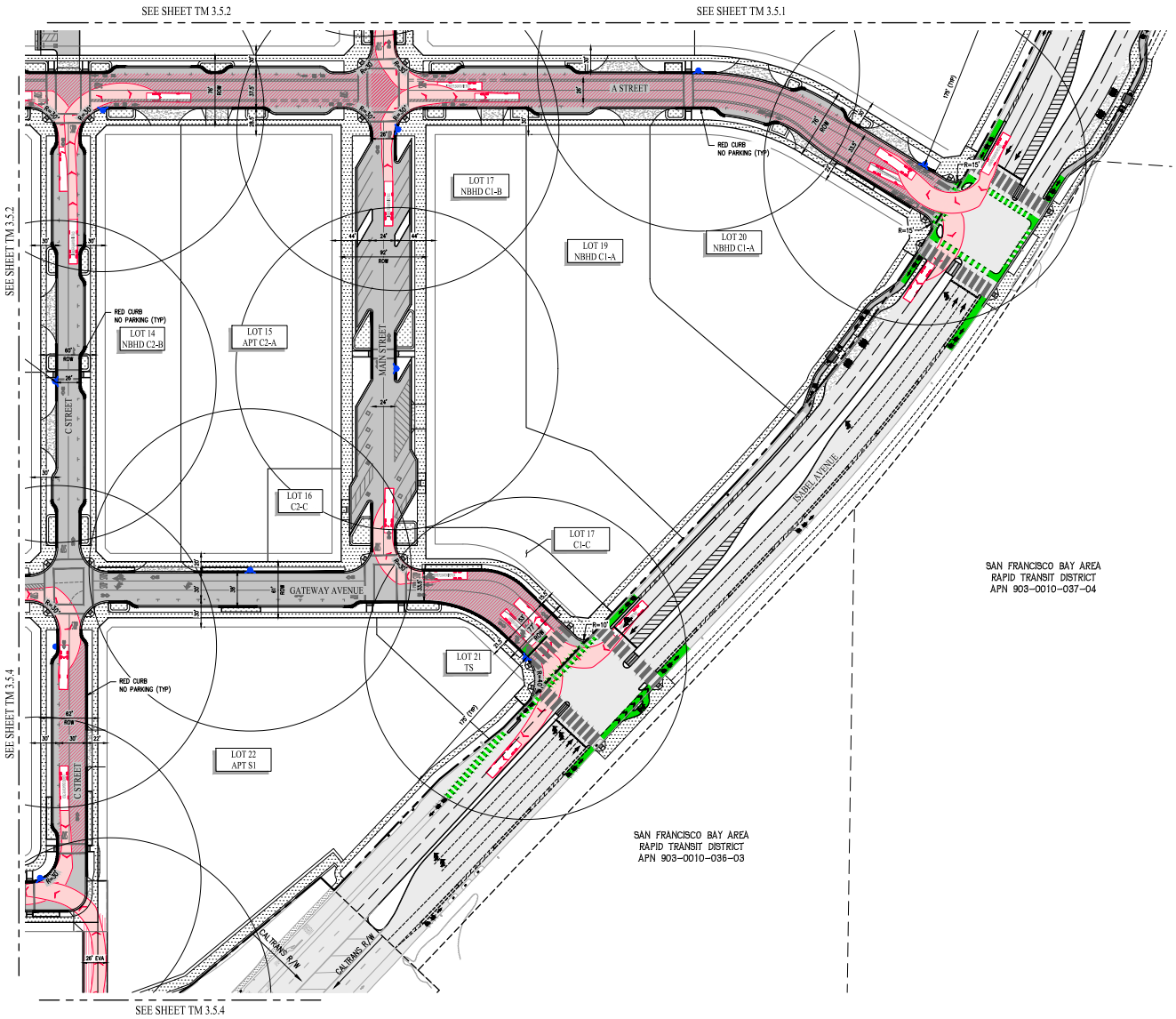
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

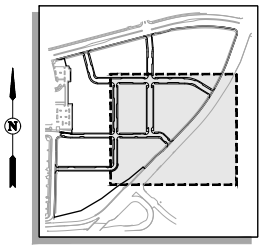
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06-28-24 | 3591-000

2805

EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

FIRE ACCESS PLAN TM 3.5.3

ISABEL PORTOLA
OWNER, LLC

cbg

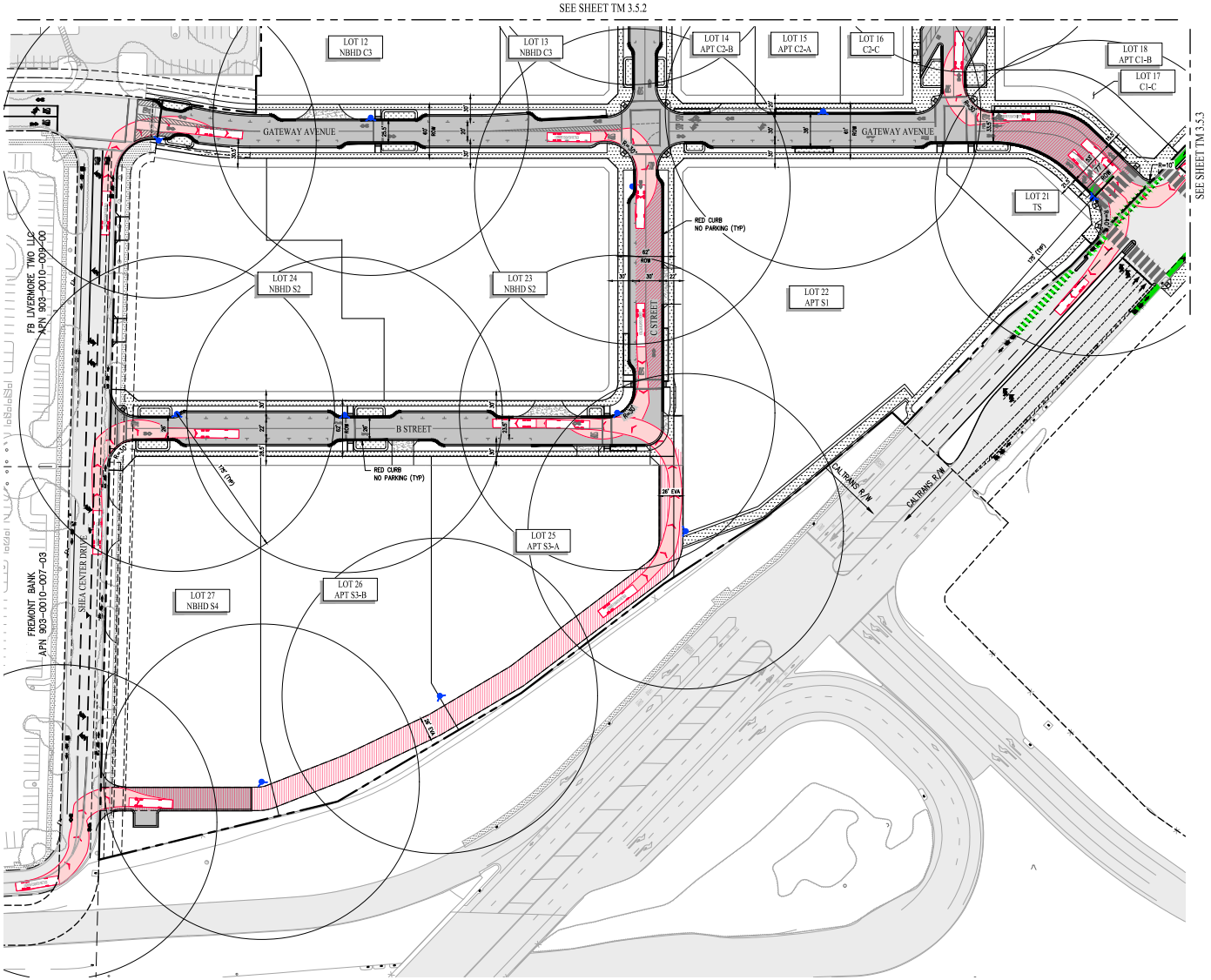
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ISABELCROSSING
LIVERMORE, CALIFORNIA

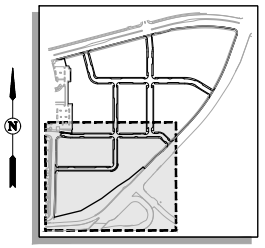
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EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

FIRE ACCESS PLAN TM 3.5.4

ISABEL PORTOLA OWNER, LLC

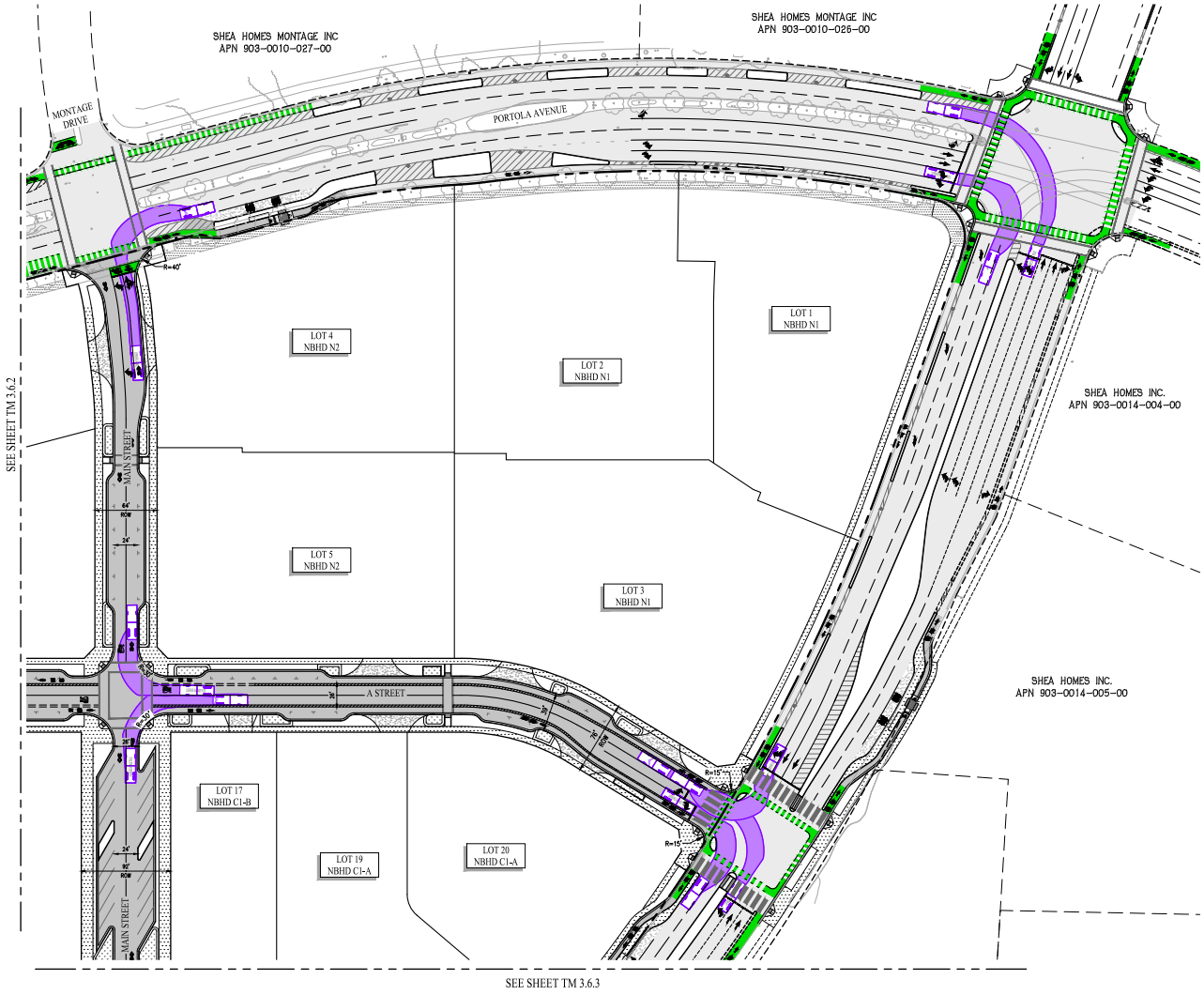
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LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

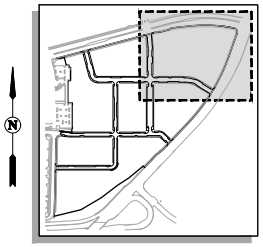
EXHIBIT E



LEGEND

PROPOSED PROPERTY LINE

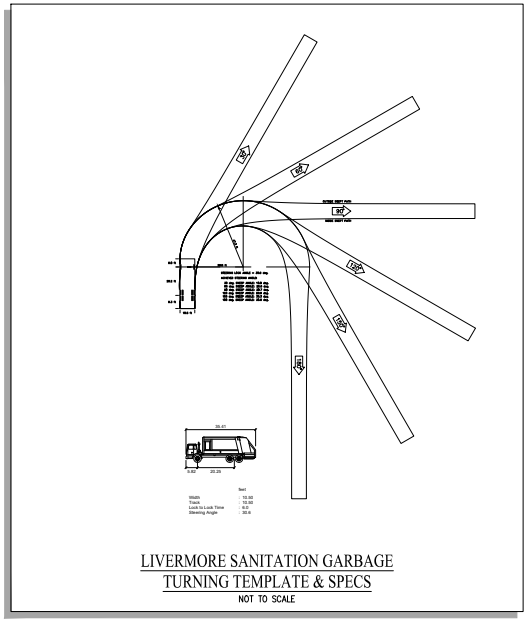
ADJACENT PROPERTY LINE



INDEX MAP

NOT TO SCALE

NOTE:
TRASH COLLECTION AND ENCLOSURES – ALL PARCELS WITHIN C1-A, C2-B, C3, C5, N(ALL), S2 AND S4 WILL HAVE PRIVATE COLLECTION PICK-UP WITH TRASH BINS LOCATED WITHIN PRIVATE GARAGES. ALL PARCELS WITHIN C1-B , C2-A, S1, S3-A AND S3-B WILL HAVE BUILDING TRASH CHUTES WITH CENTRAL TRASH ENCLOSURES LOCATED WITHIN THE COMMON GARAGES.



LIVERMORE SANITATION GARBAGE
TURNING TEMPLATE & SPECS

NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

GARBAGE ACCESS PLAN TM 3.6.1

ISABEL PORTOLA
OWNER, LLC

cbg

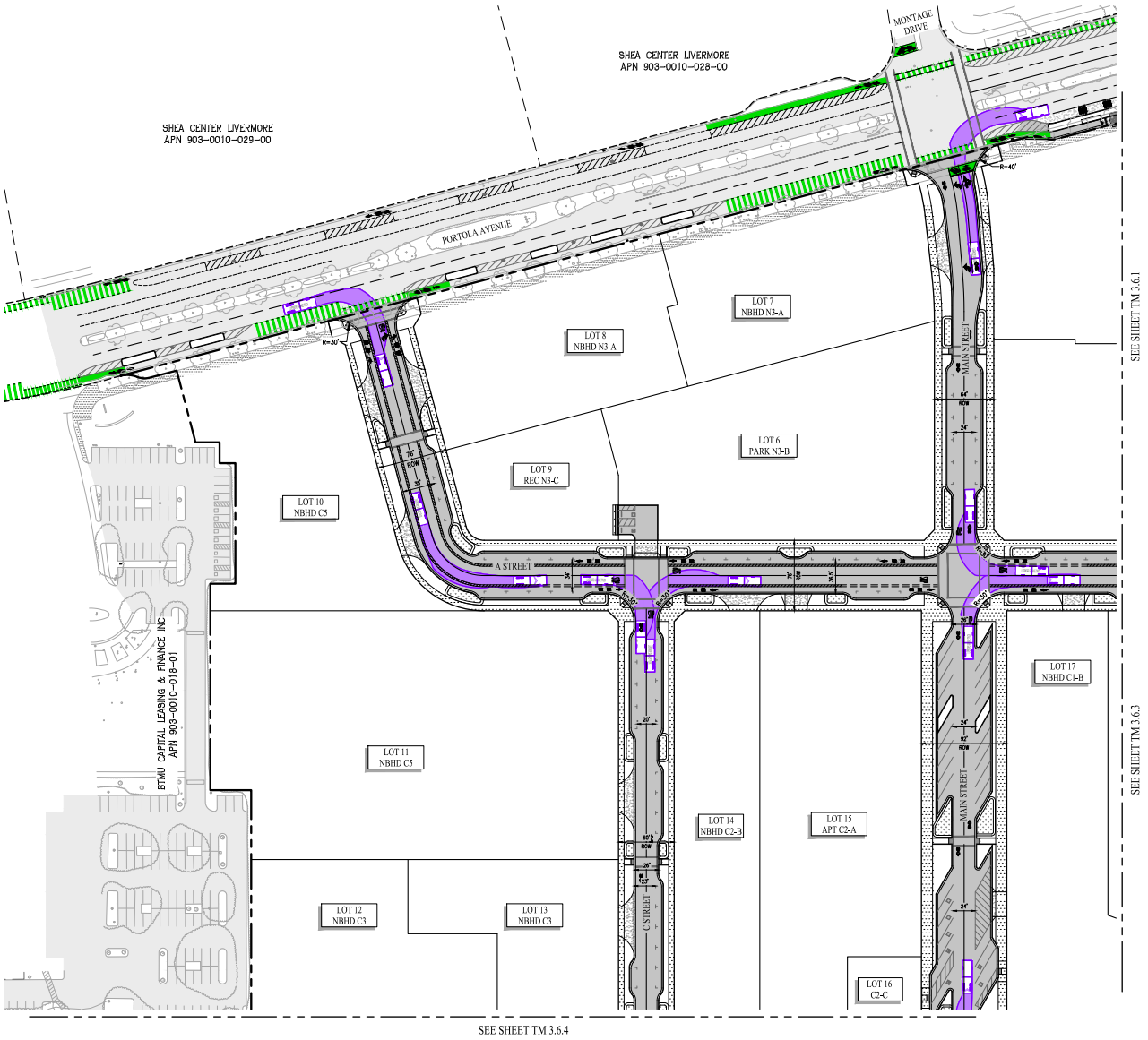
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

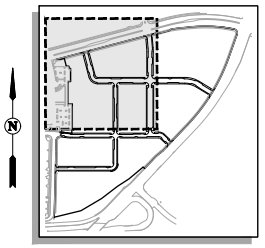
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06-28-24 | 3591-000

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EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

GARBAGE ACCESS PLAN TM 3.6.2

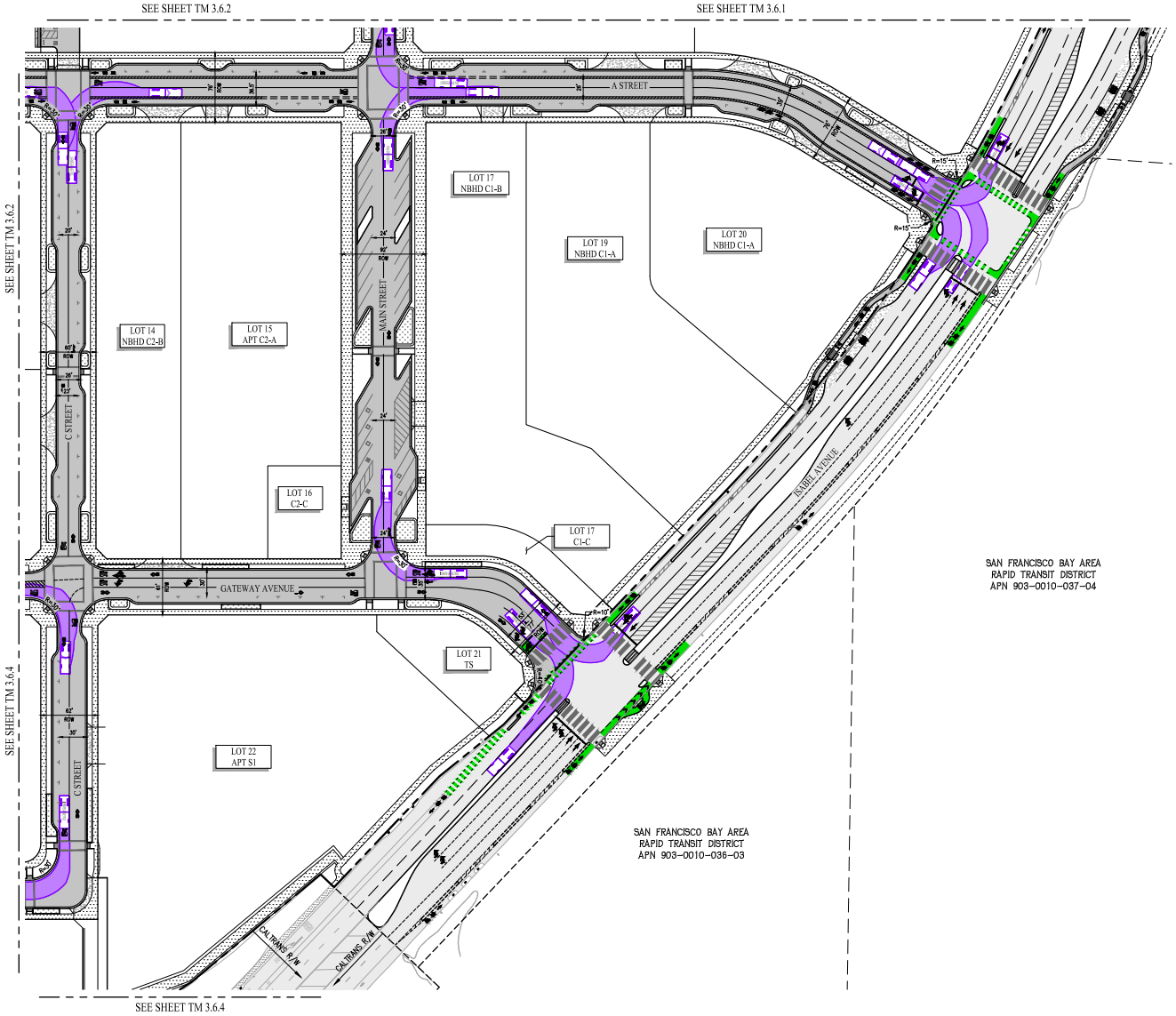
ISABEL PORTOLA
OWNER, LLC

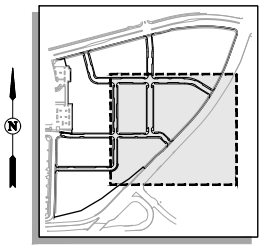
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

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EXHIBIT E





INDEX MAP
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

GARBAGE ACCESS PLAN TM 3.6.3

ISABEL PORTOLA
OWNER, LLC

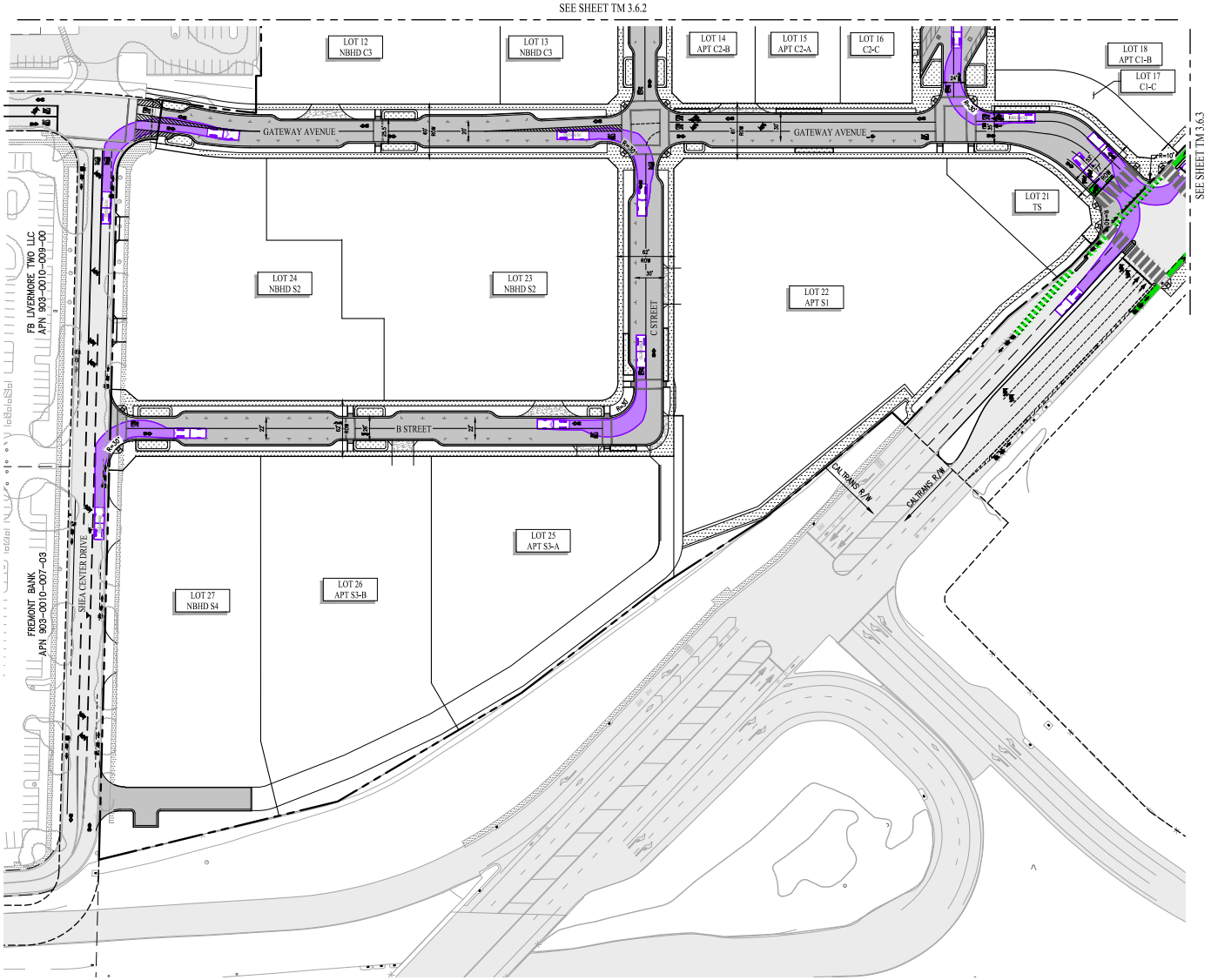
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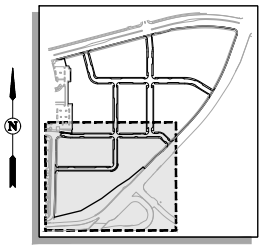
LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

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EXHIBIT E





VESTING TENTATIVE TRACT MAP NO. 8659

GARBAGE ACCESS PLAN TM 3.6.4

ISABEL PORTOLA
OWNER, LLC

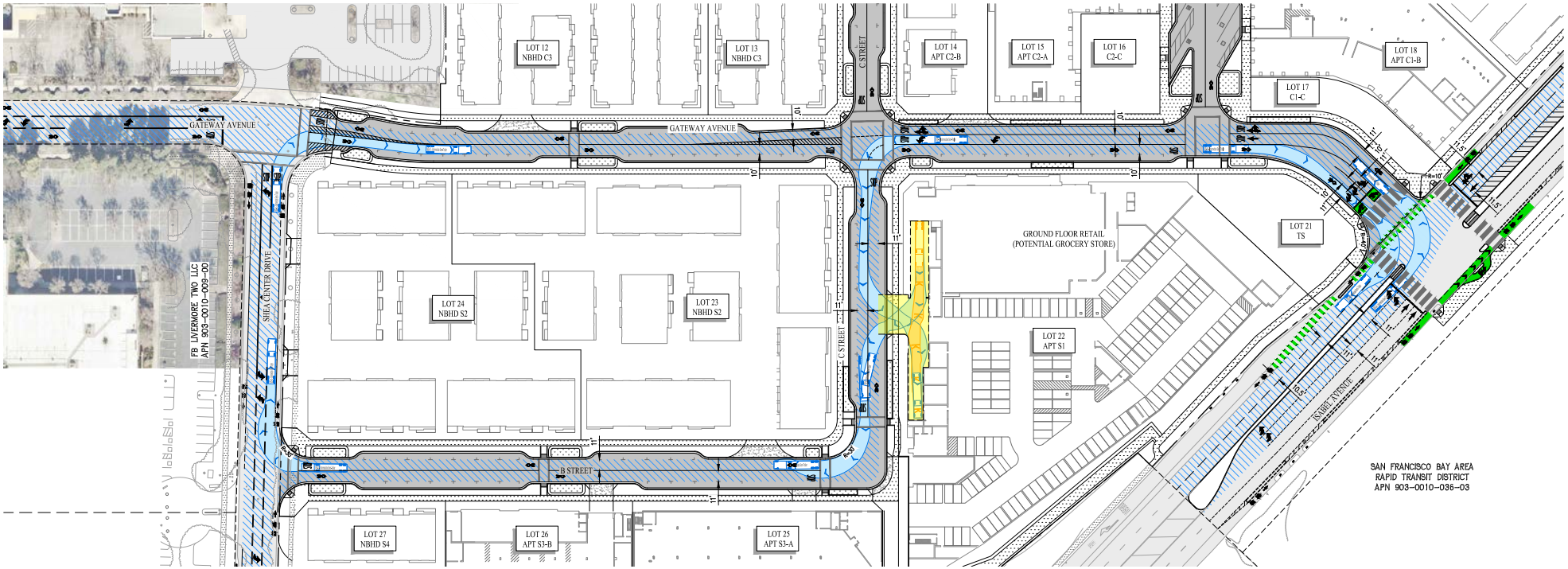
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

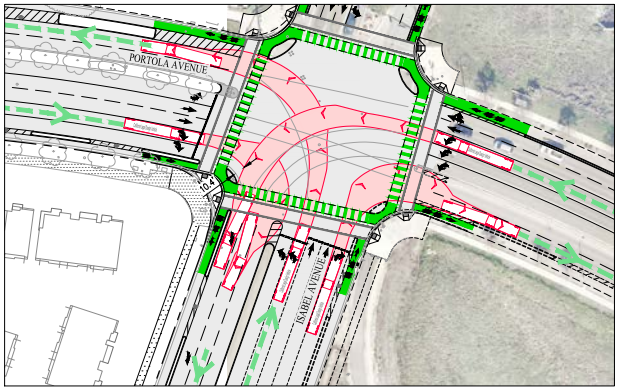
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06-28-24 | 3591-000

EXHIBIT E



WB-40 TRUCK ROUTE
SCALE: 1" = 50'

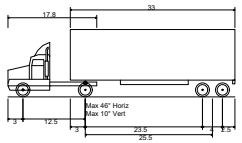


CA 65 TRUCK ROUTE - PORTOLA AVENUE @ ISABEL AVENUE
SCALE: 1"=50'

LEGEND

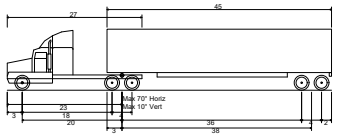
- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- WB 40 TRUCK ROUTE
- WB 40 TRUCK LOADING DOCK/ACCESS WITHIN S1*

NOTE:
*TRAFFIC MANAGEMENT PLAN REQUIRED FOR USE AND ROUTING OF WB 40 TRUCKS TO S1 TO BE SUBMITTED WITH BACKBONE INFRASTRUCTURE CONSTRUCTION DOCUMENTS



WB-40 - Intermediate Semi-Trailer	
Overall Length	45.499ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	20.30°

WB 40 TRUCK SPECS
NOT TO SCALE



California Legal Design Vehicle	
Overall Length	65.000ft
Overall Width	8.500ft
Overall Body Height	12.227ft
Min Body Ground Clearance	1.422ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	26.30°

CA 65 TRUCK SPECS
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

WB-40 & CA-65 (TRUCK) ROUTE TM 3.7.1

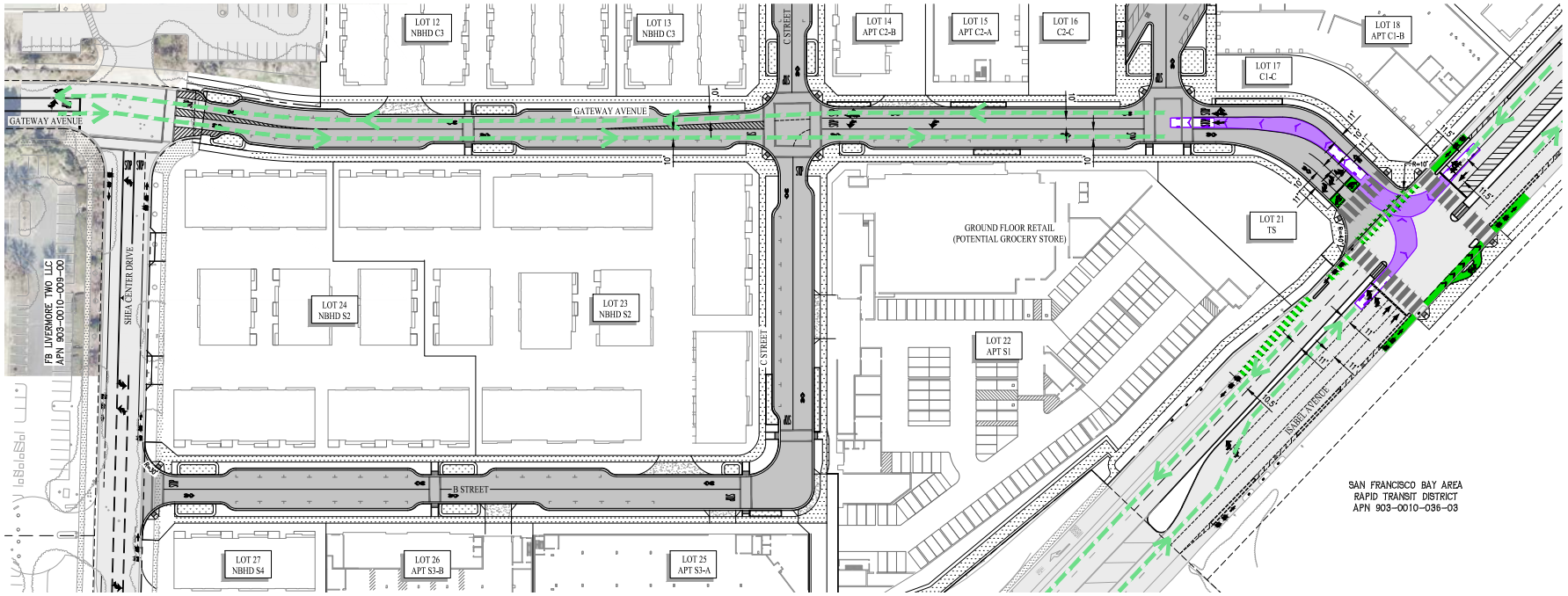
ISABEL PORTOLA
OWNER, LLC

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ISABELCROSSING
LIVERMORE, CALIFORNIA

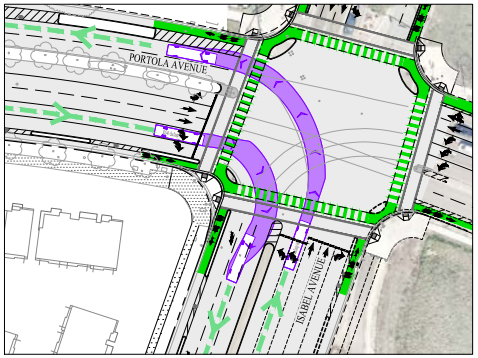
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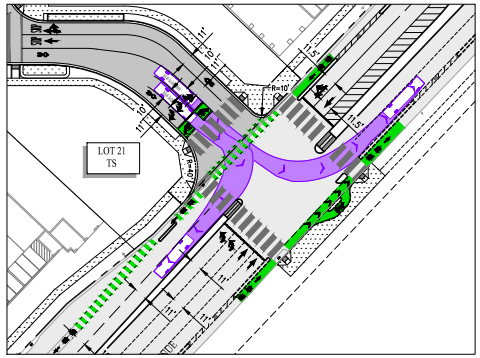
EXHIBIT E



BUS ROUTE
SCALE: 1" = 50'



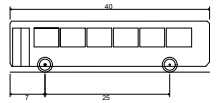
BUS ROUTE - PORTOLA AVENUE @ ISABEL AVENUE
SCALE: 1"=50'



BUS ROUTE - GATEWAY AVENUE @ ISABEL AVENUE
SCALE: 1"=50'

LEGEND

PROPOSED PROPERTY LINE
ADJACENT PROPERTY LINE
BUS 40 ROUTE



BUS-40 - Bus Design Vehicle	
Overall Length	40.000ft
Overall Width	8.500ft
Overall Body Height	10.228ft
Min Body Ground Clearance	1.158ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	44.30°

BUS 40 SPECS
NOT TO SCALE

VESTING TENTATIVE TRACT MAP NO. 8659

BUS ROUTE TM 3.7.2

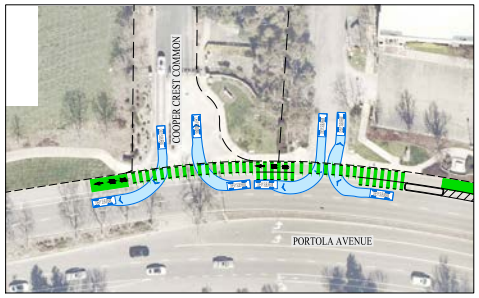
ISABEL PORTOLA
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LIVERMORE, CALIFORNIA

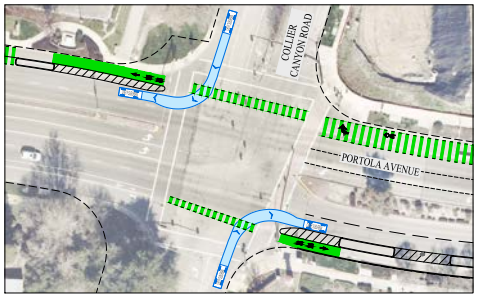
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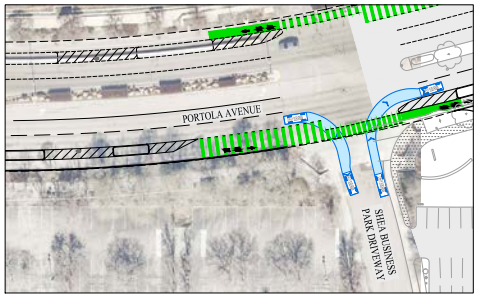
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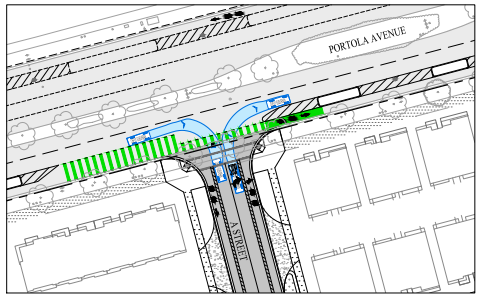
PORTOLA AVENUE @ COOPER CREST COMMON
SCALE: 1"=50'



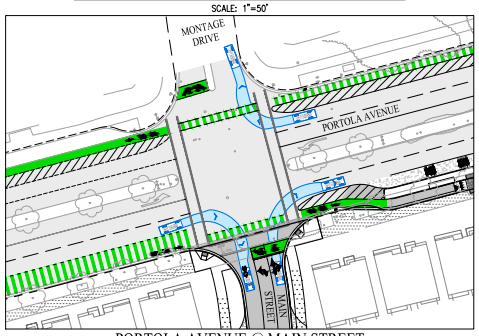
PORTOLA AVENUE @ COLLIER CANYON ROAD
SCALE: 1"=50'



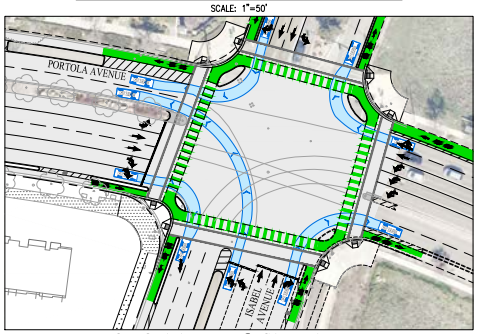
PORTOLA AVENUE @ SHEA BUSINESS PARK DRIVEWAY
SCALE: 1"=50'



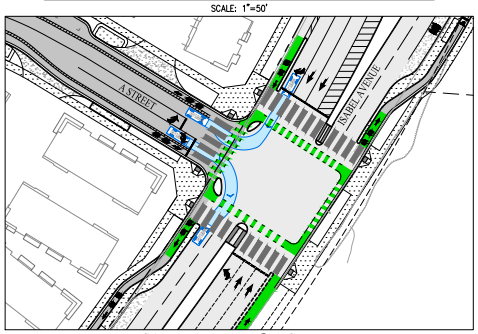
PORTOLA AVENUE @ A STREET
SCALE: 1"=50'



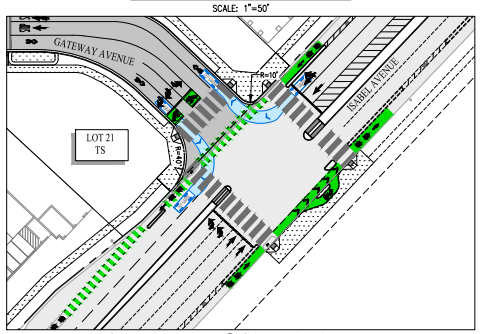
PORTOLA AVENUE @ MAIN STREET
SCALE: 1"=50'



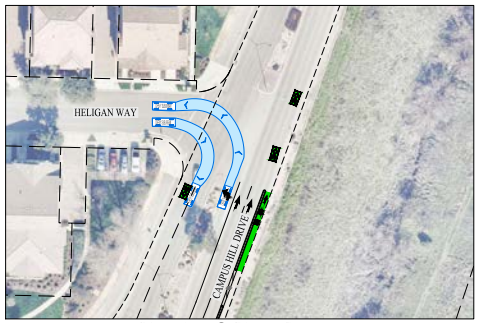
PORTOLA AVENUE @ ISABEL AVENUE
SCALE: 1"=50'



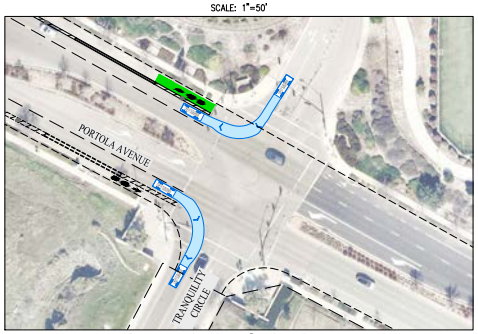
ISABEL AVENUE @ A STREET
SCALE: 1"=50'



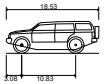
ISABEL AVENUE @ GATEWAY AVENUE
SCALE: 1"=50'



HELIGAN LANE @ CAMPUS HILL DRIVE
SCALE: 1"=50'



TRANQUILITY CIRCLE @ PORTOLA AVENUE
SCALE: 1"=50'



CHEVY SUBURBAN

Overall Length	18.530ft
Overall Width	6.590ft
Overall Body Height	6.399ft
Min Body Ground Clearance	0.750ft
Track Width	5.680ft
Lock-to-lock time	6.00s
Max Wheel Angle	30.20°

PASSENGER CAR SPECS
NOT TO SCALE

LEGEND

PROPOSED PROPERTY LINE

ADJACENT PROPERTY LINE

VESTING TENTATIVE TRACT MAP NO. 8659

PASSENGER CAR TM 3.7.3

ISABEL PORTOLA OWNER, LLC

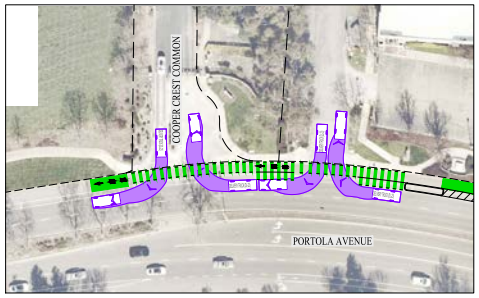
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LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

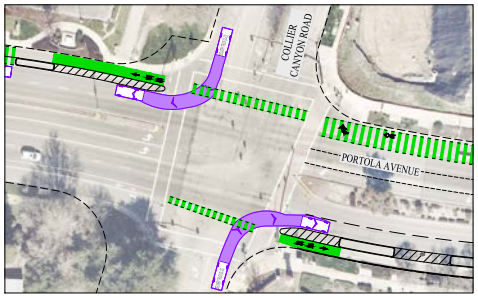
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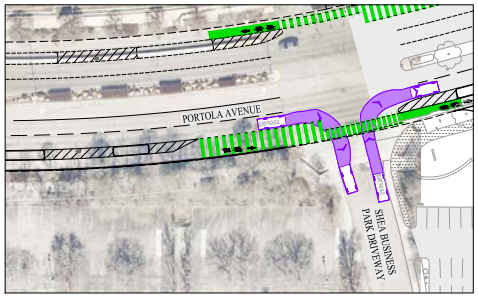
EXHIBIT E



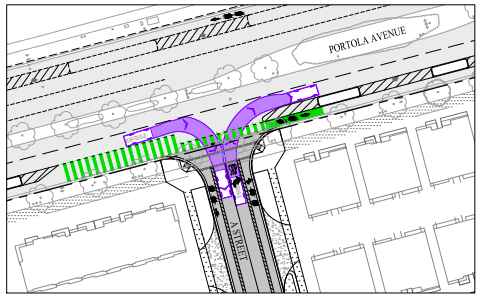
PORTOLA AVENUE @ COOPER CREST COMMON
SCALE: 1"=50'



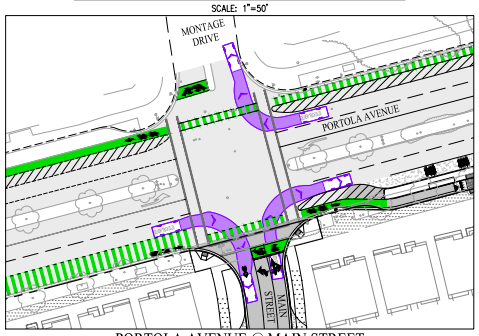
PORTOLA AVENUE @ COLLIER CANYON ROAD
SCALE: 1"=50'



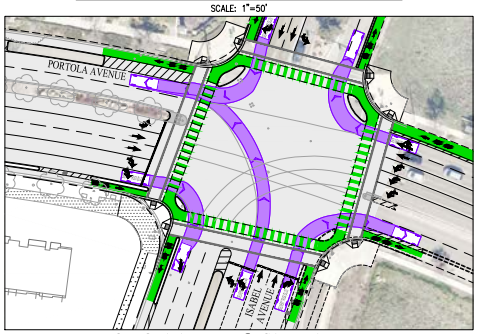
PORTOLA AVENUE @ SHEA BUSINESS PARK DRIVEWAY
SCALE: 1"=50'



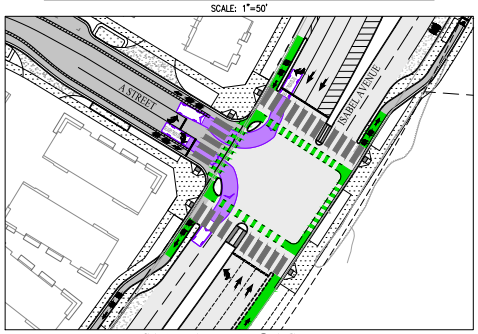
PORTOLA AVENUE @ A STREET
SCALE: 1"=50'



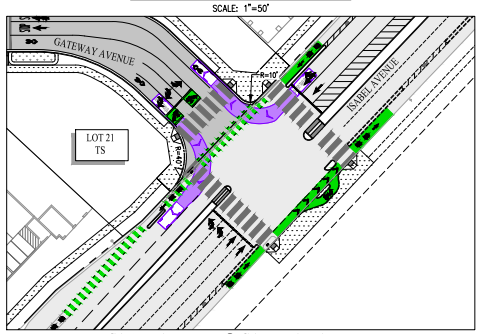
PORTOLA AVENUE @ MAIN STREET
SCALE: 1"=50'



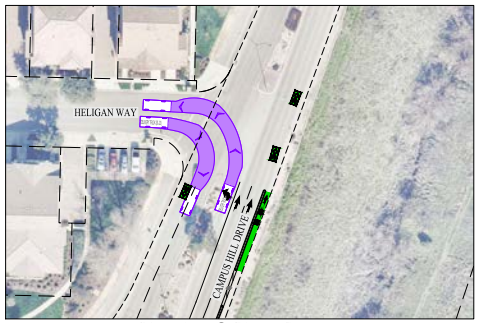
PORTOLA AVENUE @ ISABEL AVENUE
SCALE: 1"=50'



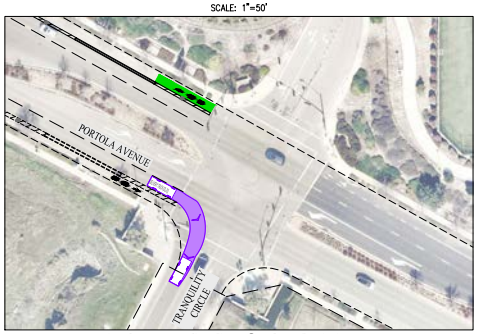
ISABEL AVENUE @ A STREET
SCALE: 1"=50'



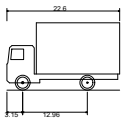
ISABEL AVENUE @ GATEWAY AVENUE
SCALE: 1"=50'



HELIGAN LANE @ CAMPUS HILL DRIVE
SCALE: 1"=50'



TRANQUILITY CIRCLE @ PORTOLA AVENUE
SCALE: 1"=50'



LEGEND

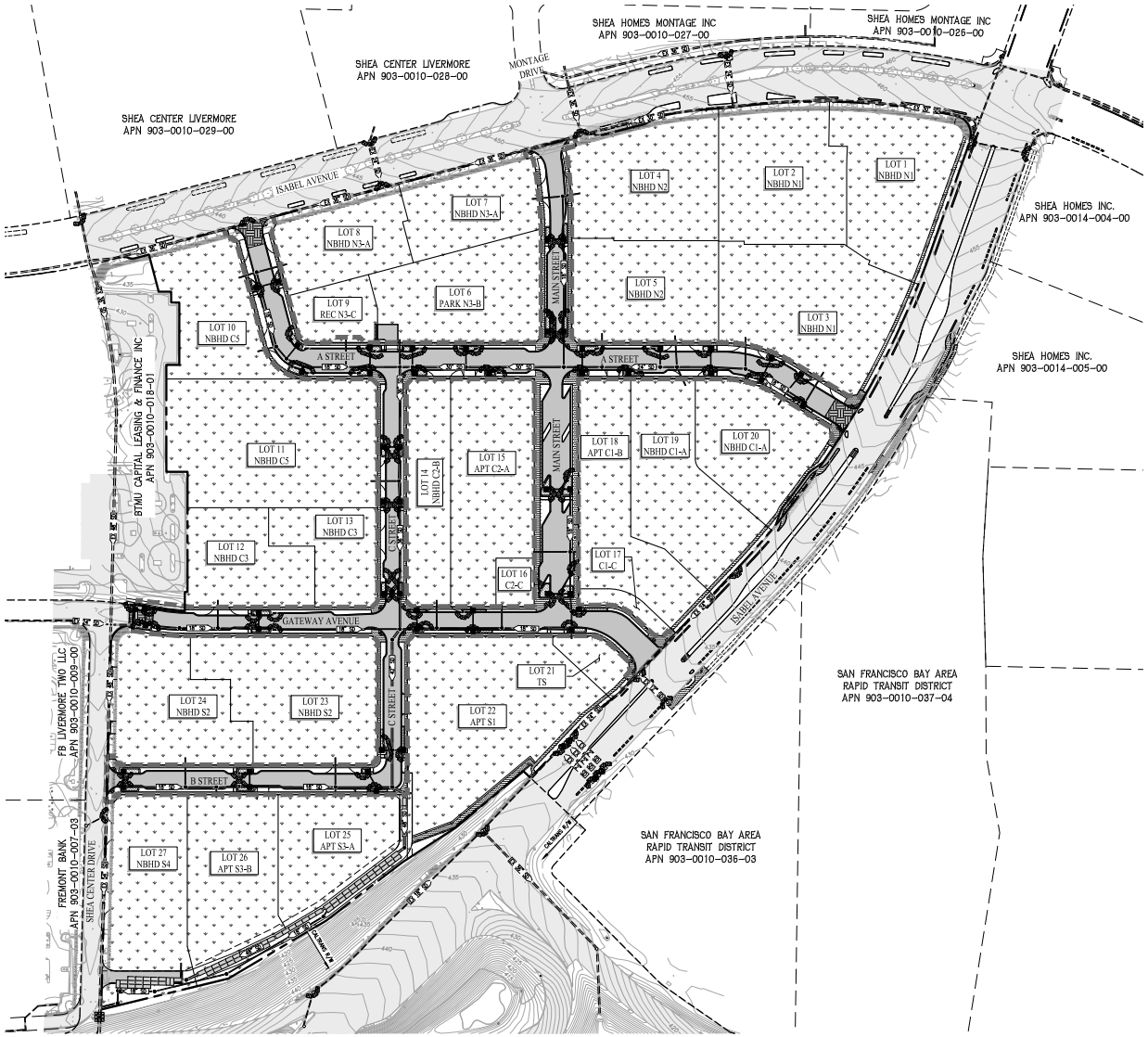
PROPOSED PROPERTY LINE

ADJACENT PROPERTY LINE

DELIVERY TRUCK (DL-23)	
Overall Length	22.600ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.455ft
Track Width	8.500ft
Lock-to-lock time	5.00s
Wall to Wall Turning Radius	29.000ft

DELIVERY TRUCK (DL-23) SPECS
NOT TO SCALE

EXHIBIT E



LEGEND

- DIRECTION OF FLOW WITH STORM DRAIN INSTALLED
- FIELD INLET PROTECTION – (SE-10)
- CURB INLET PROTECTION – (SE-10)
- SILT FENCE – (SE-1)
- FIBER ROLL – (SE-5)
- HYDROSEED MIX OR HYDROMULCH – (EC-4 OR EC-3)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT – (TC-1)
- STABILIZED CONSTRUCTION ROAD – (TC-2)
- CHECK DAMS – (SE-4)
- FIELD INLET
- CURB CUT
- 15" SD — PROPOSED STORM DRAIN
- EX 18" SD — EXISTING STORM DRAIN
- (S) — STORMWATER DISCHARGE SAMPLING LOCATION*

NOTE:

* STORMWATER DISCHARGE SAMPLING LOCATIONS ARE SUBJECT TO CHANGE AND WILL BE REMOVED, RELOCATED OR ADDED AT THE QSP'S DISCRETION.

VESTING TENTATIVE TRACT MAP NO. 8659

EROSION CONTROL PLAN

TM 3.8

ISABEL PORTOLA
OWNER, LLC

cbg

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LIVERMORE, CALIFORNIA

0 60 120 240

06-28-24 | 3591-000

2816

EXHIBIT E



VESTING TENTATIVE TRACT MAP NO. 8659

PHASE 1 PROJECT INFRASTRUCTURE TM 3.9.0

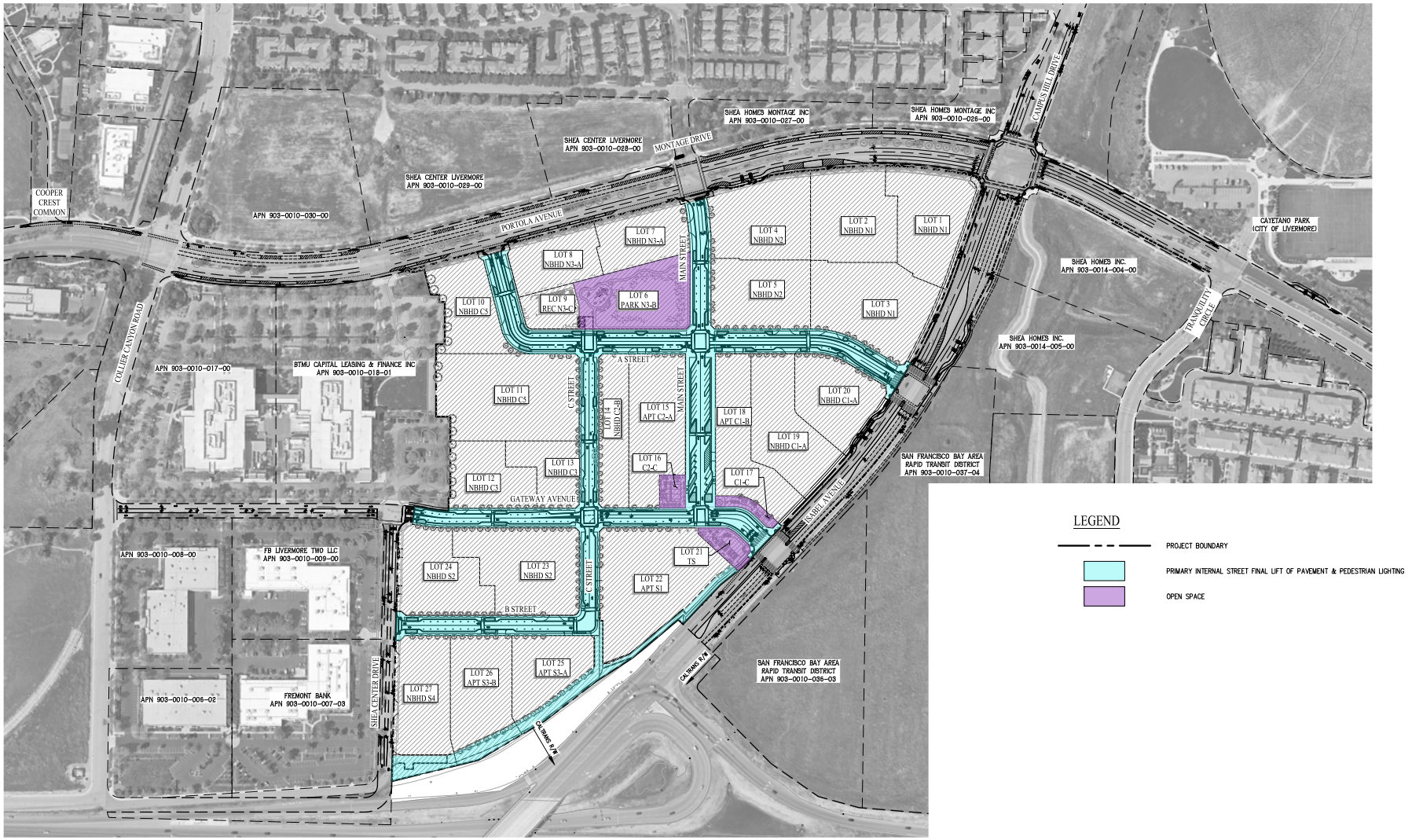
ISABEL PORTOLA OWNER, LLC

LIVERMORE ISABELCROSSING LIVERMORE, CALIFORNIA

0 75 150 300

06-28-24 | 3591-000

EXHIBIT E



VESTING TENTATIVE TRACT MAP NO. 8659

PHASE 2 PROJECT INFRASTRUCTURE TM 3.9.1

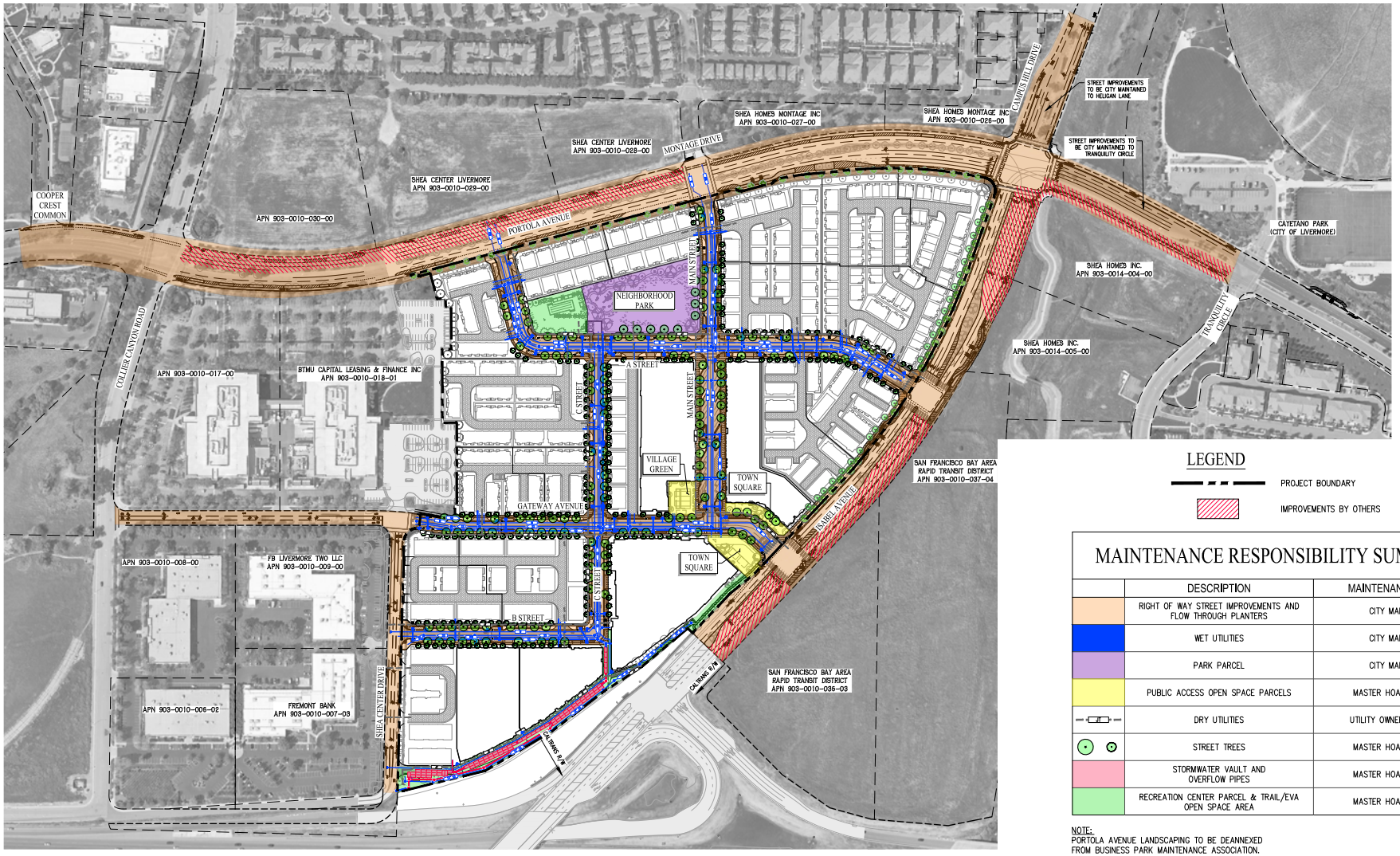
ISABEL PORTOLA
OWNER, LLC

LIVERMORE
ISABELCROSSING
LIVERMORE, CALIFORNIA

0 75 150 300

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EXHIBIT E



LEGEND

PROJECT BOUNDARY

IMPROVEMENTS BY OTHERS

MAINTENANCE RESPONSIBILITY SUMMARY

	DESCRIPTION	MAINTENANCE ENTITY
	RIGHT OF WAY STREET IMPROVEMENTS AND FLOW THROUGH PLANTERS	CITY MAINTAINED
	WET UTILITIES	CITY MAINTAINED
	PARK PARCEL	CITY MAINTAINED
	PUBLIC ACCESS OPEN SPACE PARCELS	MASTER HOA MAINTAINED
	DRY UTILITIES	UTILITY OWNER MAINTAINED
	STREET TREES	MASTER HOA MAINTAINED
	STORMWATER VAULT AND OVERFLOW PIPES	MASTER HOA MAINTAINED
	RECREATION CENTER PARCEL & TRAIL/EVA OPEN SPACE AREA	MASTER HOA MAINTAINED

NOTE:
PORTOLA AVENUE LANDSCAPING TO BE DEANNEXED FROM BUSINESS PARK MAINTENANCE ASSOCIATION.

VESTING TENTATIVE TRACT MAP NO. 8659

PROPOSED INFRASTRUCTURE MAINTENANCE RESPONSIBILITIES

TM 4.0

ISABEL PORTOLA OWNER, LLC

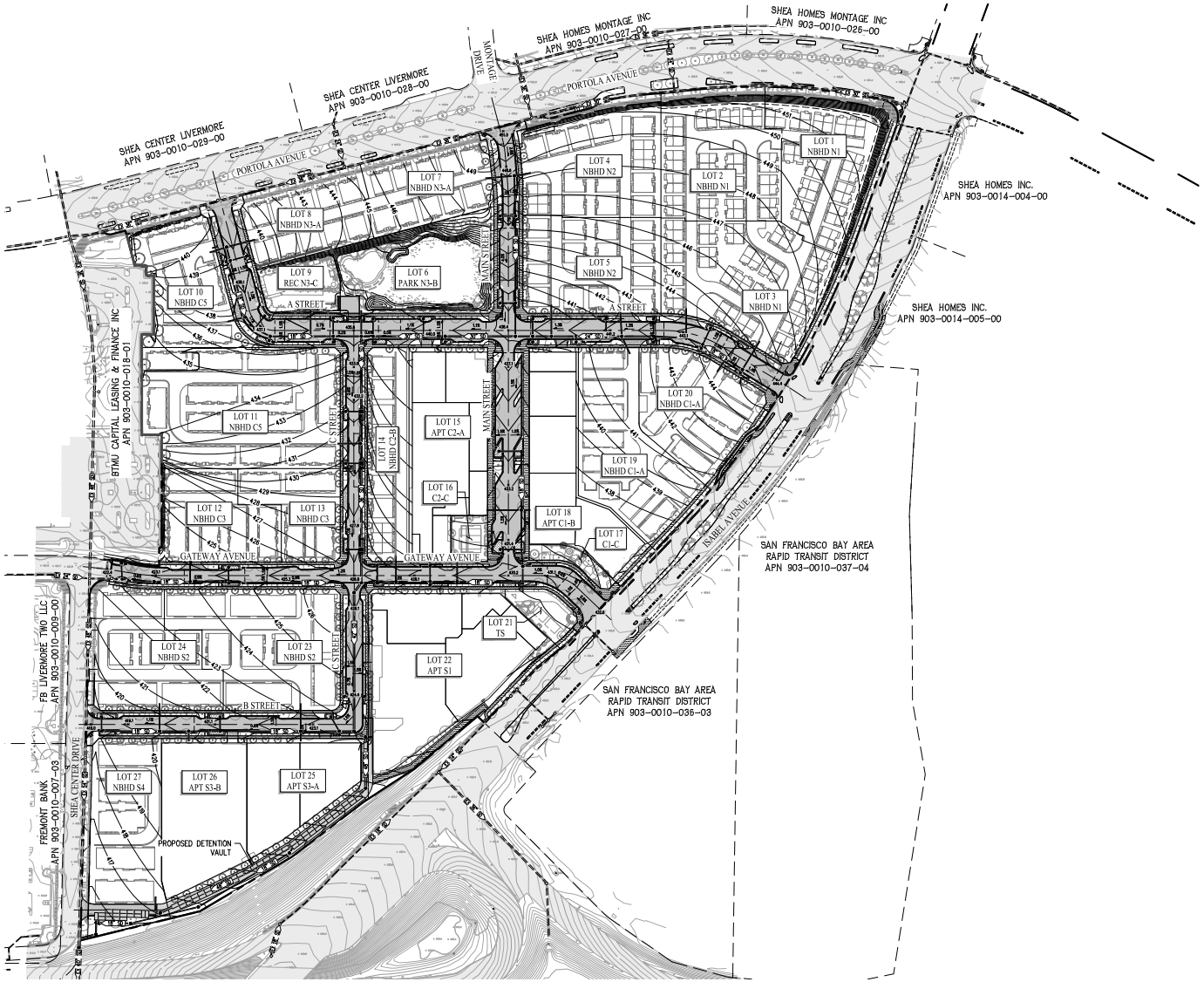
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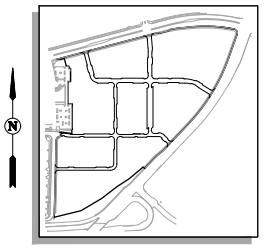
LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

0 75 150 300

06-28-24 | 3591-000

EXHIBIT E





INDEX MAP
NOT TO SCALE

CONCEPTUAL MASTER PLAN

MASTER GRADING PLAN

C1.0

ISABEL PORTOLA
OWNER, LLC

cbg

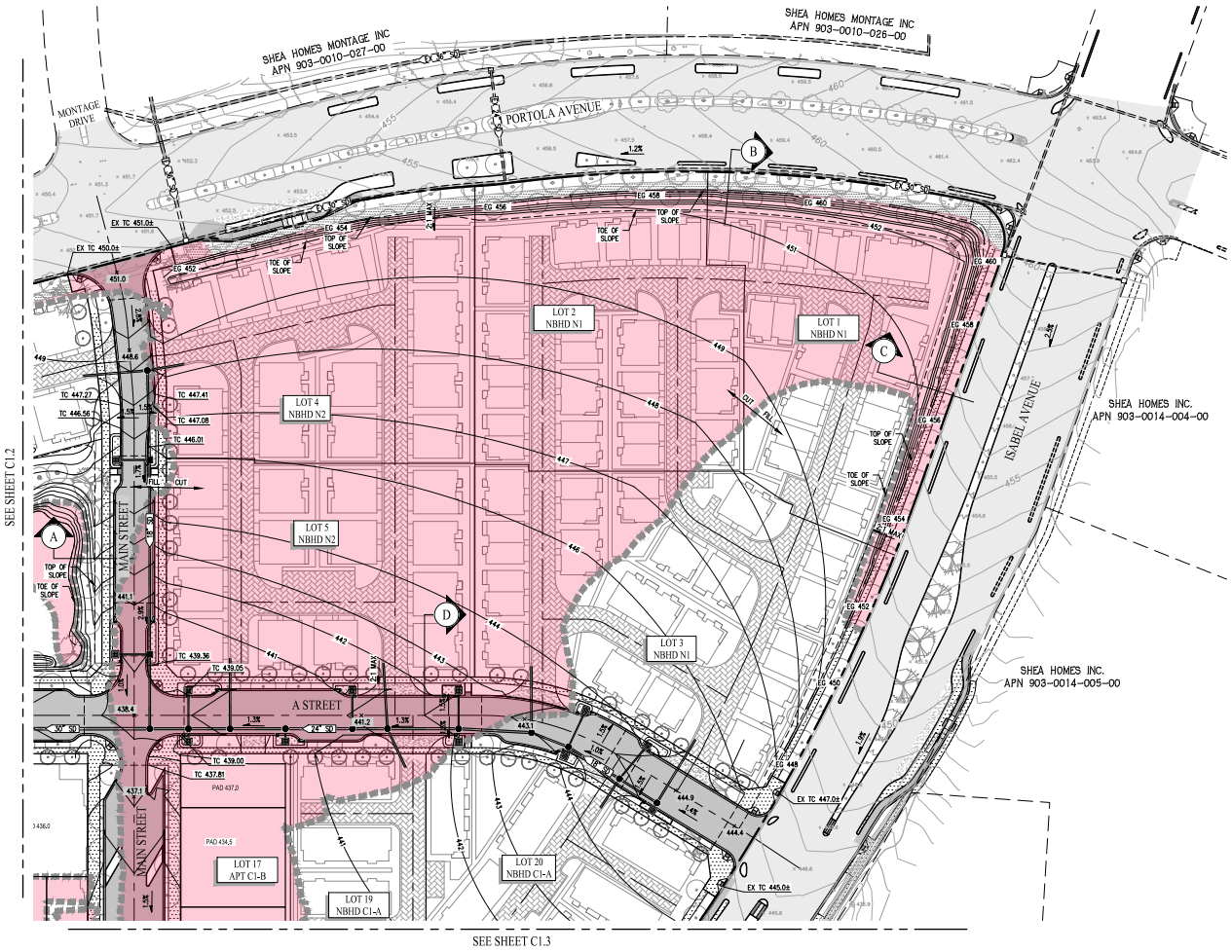
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 60 120 240

06-28-24 | 3591-000

2820

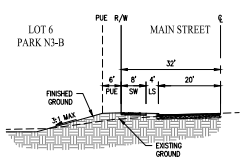
EXHIBIT E



LEGEND

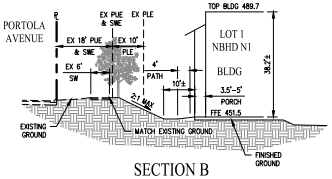
CUT/FILL LINE

CUT AREAS



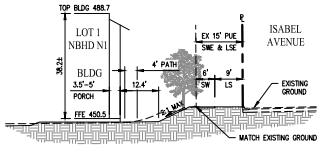
SECTION A

SCALE: 1"=20'



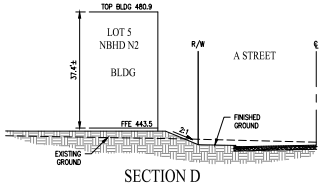
SECTION B

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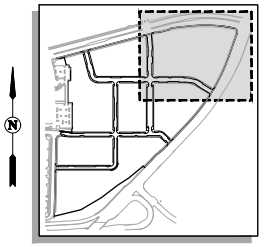
SECTION C

SCALE: 1"=20'



SECTION D

SCALE: 1"=20'



INDEX MAP

NOT TO SCALE

CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.1

ISABEL PORTOLA
OWNER, LLC

cbg

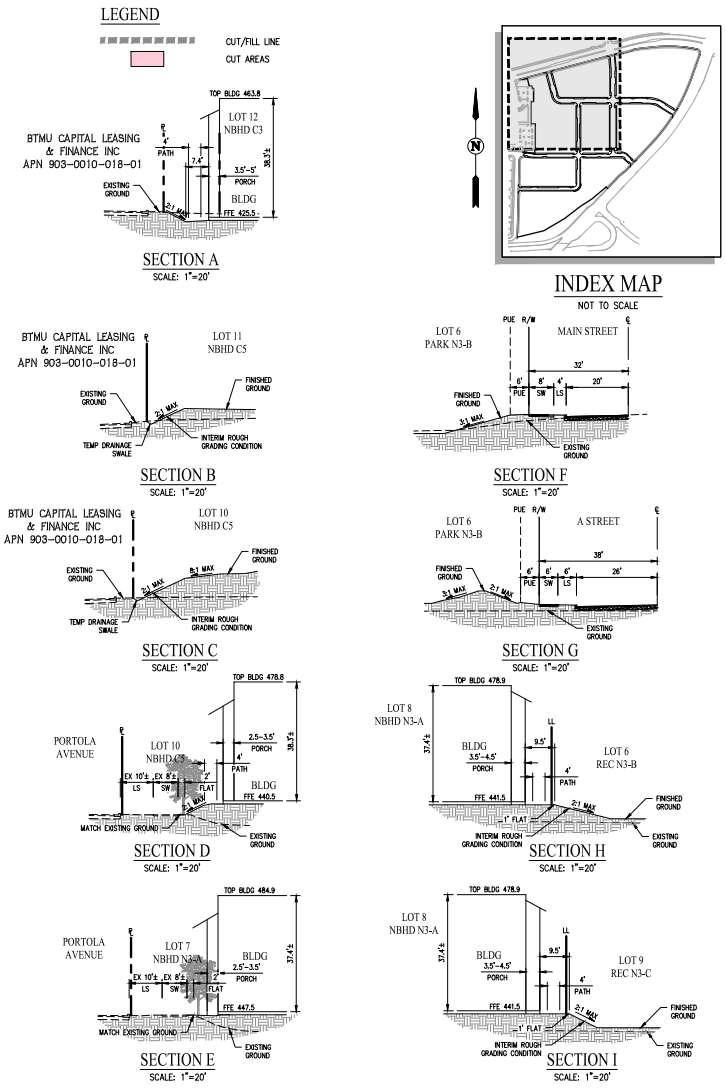
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

EXHIBIT E





CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.2

ISABEL PORTOLA
OWNER, LLC

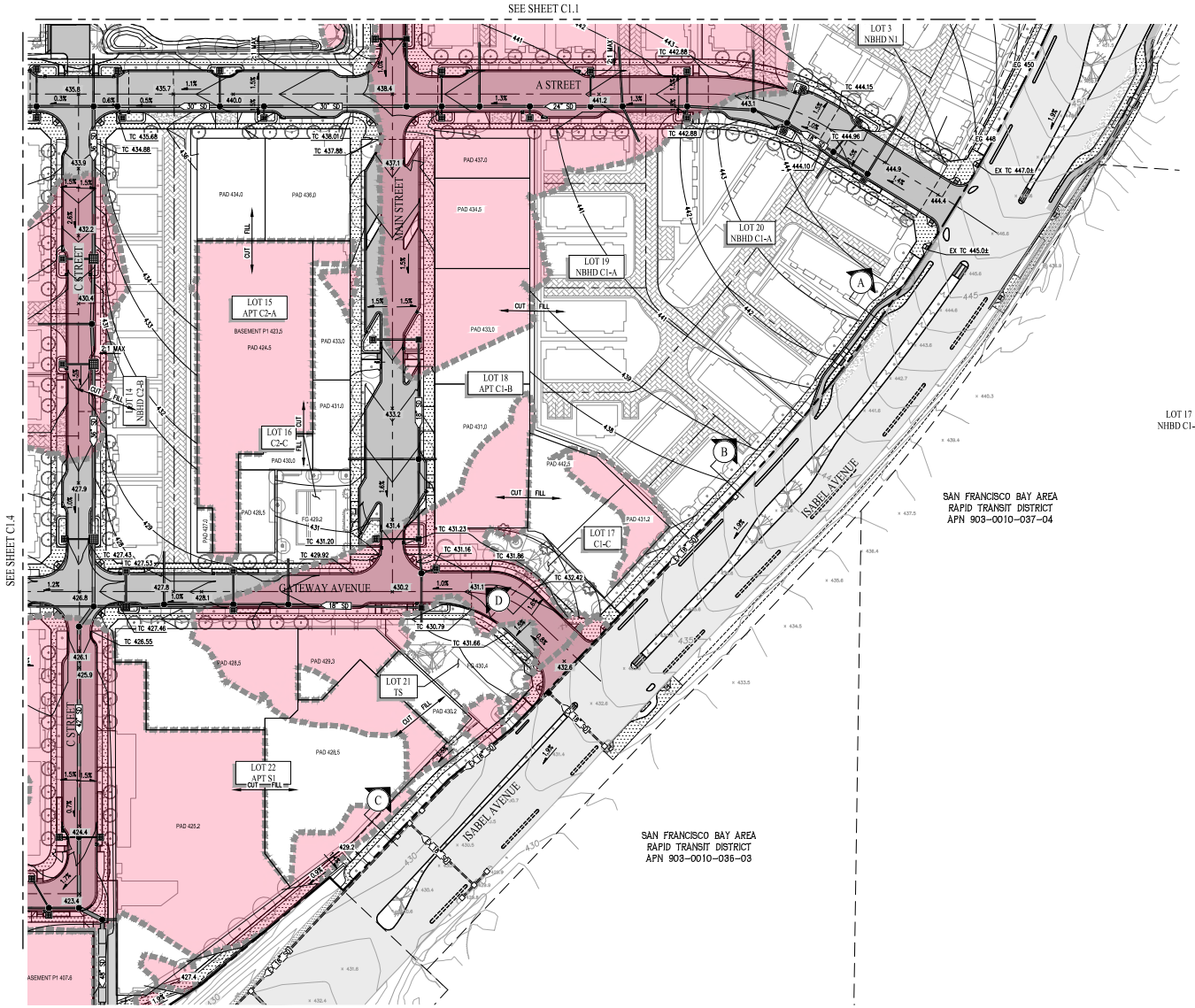
LIVERMORE
ISABEL CROSSING
LIVERMORE, CALIFORNIA

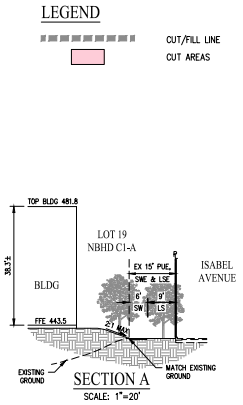
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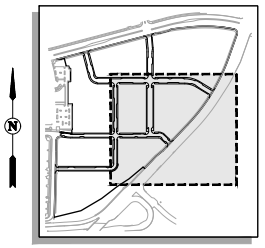
06-28-24 | 3591-000

2822

EXHIBIT E







C1.3

CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

ISABEL PORTOLA OWNER, LLC

cbg

LIVERMORE ISABEL CROSSING LIVERMORE, CALIFORNIA

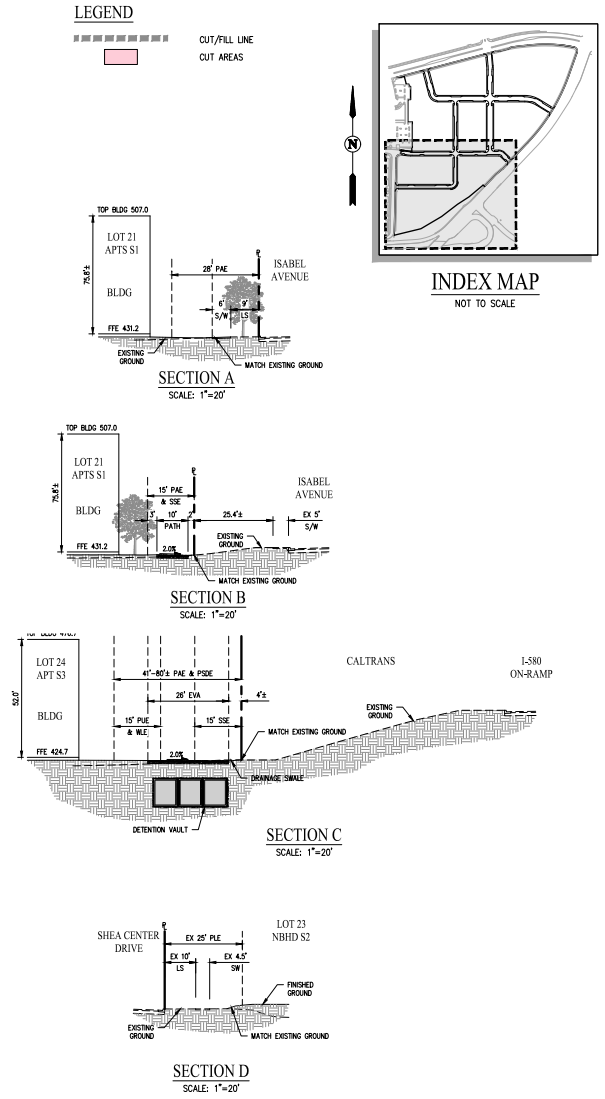
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06-28-24 | 3591-000

2823

EXHIBIT E





CONCEPTUAL MASTER PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

C1.4

ISABEL PORTOLA OWNER, LLC

cbg

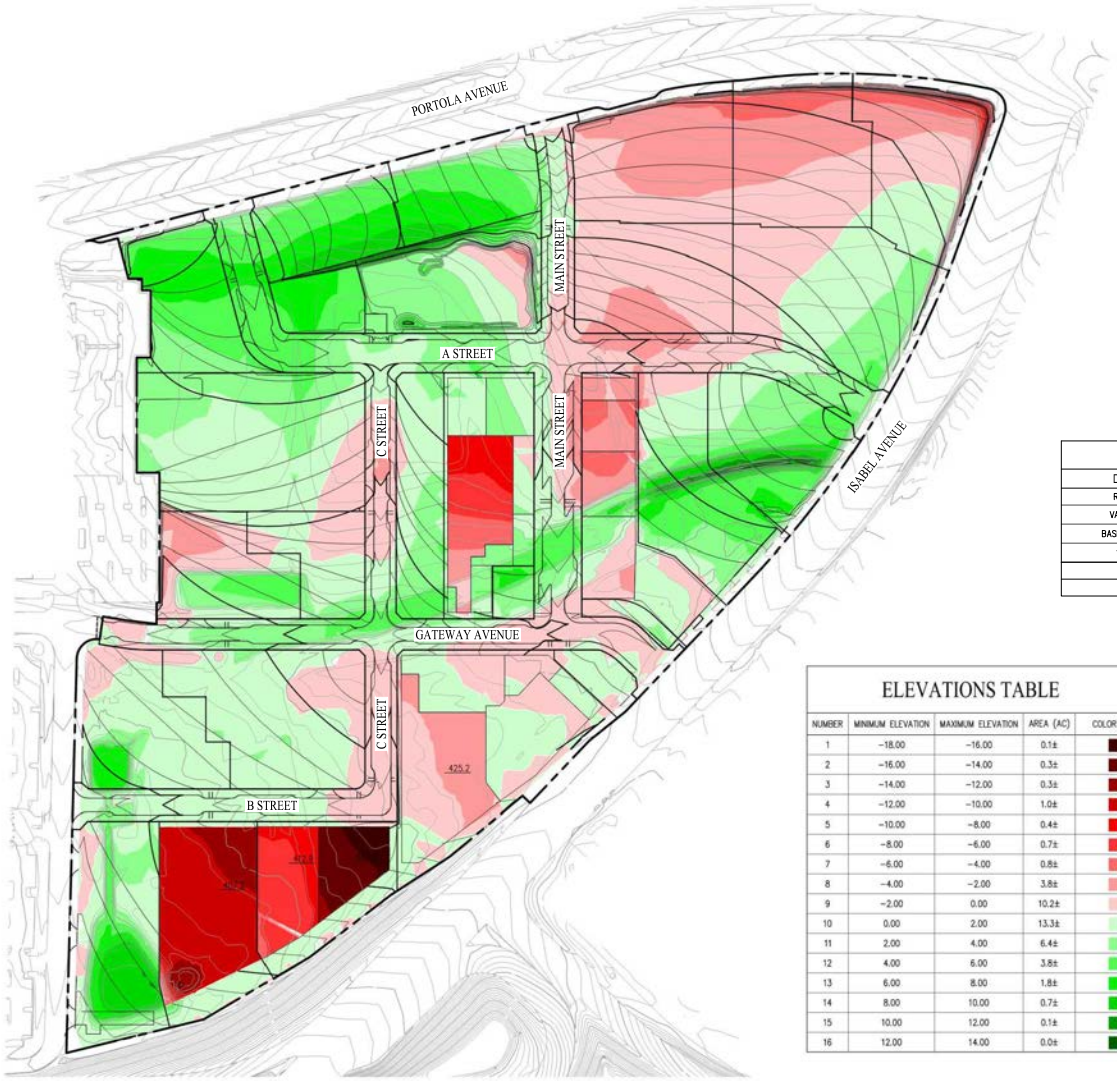
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

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06-28-24 | 3591-000

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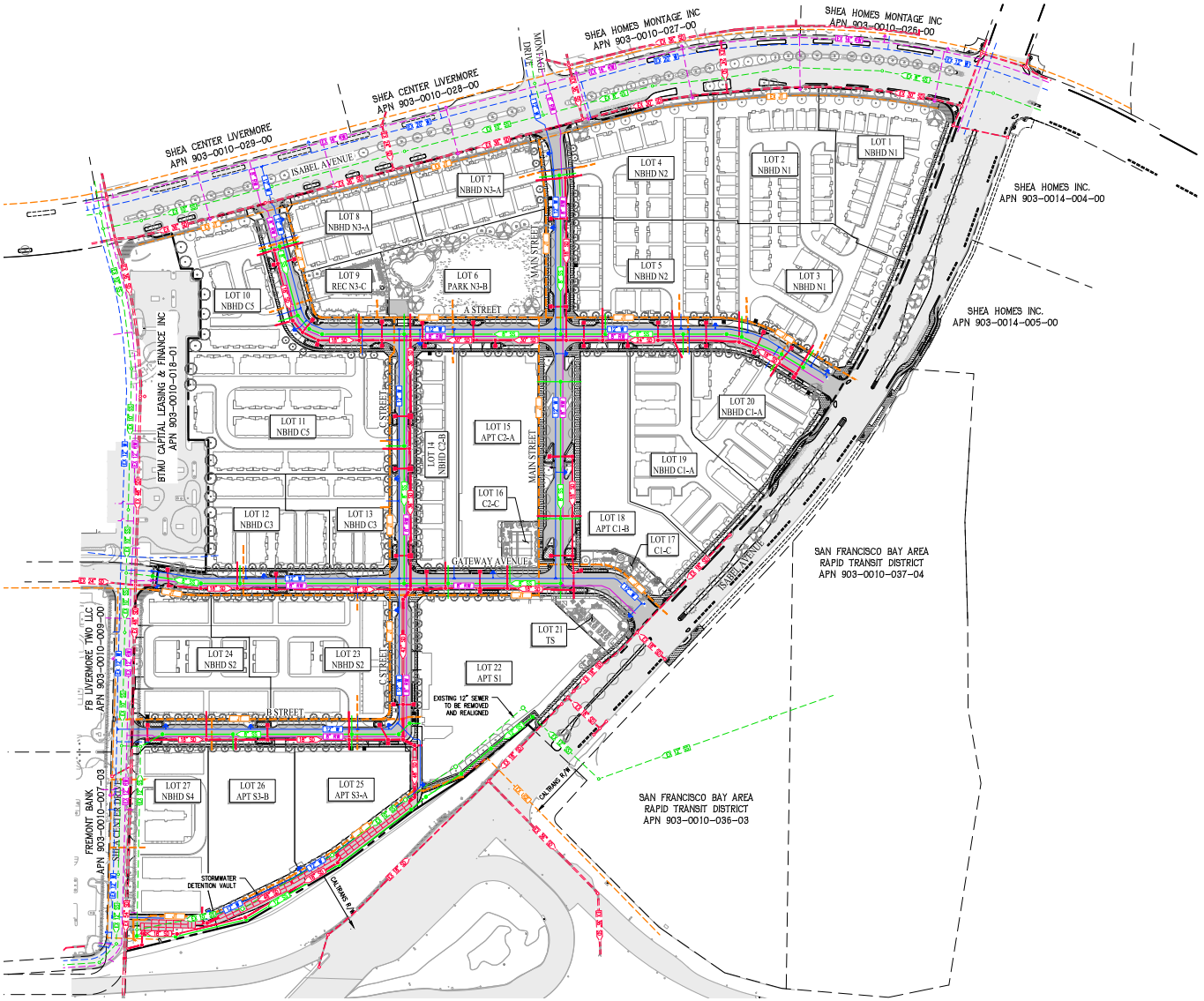
EXHIBIT E



EARTHWORK SUMMARY		
DESCRIPTION	CUT (CY)	FILL (CY)
RAW EARTHWORK	99,600	89,100
VAULT EXCAVATION	5,100	
BASEMENT EXCAVATION	53,500	
15% SHRINKAGE	23,800	
NET	182,000	89,100
OFFHAUL	93,100	

ELEVATIONS TABLE				
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA (AC)	COLOR
1	-18.00	-16.00	0.1±	
2	-16.00	-14.00	0.3±	
3	-14.00	-12.00	0.3±	
4	-12.00	-10.00	1.0±	
5	-10.00	-8.00	0.4±	
6	-8.00	-6.00	0.7±	
7	-6.00	-4.00	0.8±	
8	-4.00	-2.00	3.8±	
9	-2.00	0.00	10.2±	
10	0.00	2.00	13.3±	
11	2.00	4.00	6.4±	
12	4.00	6.00	3.8±	
13	6.00	8.00	1.8±	
14	8.00	10.00	0.7±	
15	10.00	12.00	0.1±	
16	12.00	14.00	0.0±	

EXHIBIT E



LEGEND

EXISTING	PROPOSED
	PROJECT BOUNDARY
SS	SANITARY SEWER PIPE
W	POTABLE WATER PIPE
RW	RECYCLED WATER PIPE
SD	STORM DRAIN PIPE
JT	JOINT TRENCH
	UNDERGROUND ELECTRICAL
OHW	OVERHEAD WIRE
	N1 PARCEL NAME
	POTABLE WATER FIRE HYDRANT
	RECYCLED WATER FIRE HYDRANT
	STORMWATER HYDROMODIFICATION VAULT

CONCEPTUAL MASTER PLAN

C2.0

MASTER UTILITY PLAN

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cbg

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LIVERMORE, CALIFORNIA

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EXHIBIT E



	LAND USE	PROPOSED STORMWATER FACILITIES
	GREEN STREETS	BIOTREATMENT AREAS
	ON-SITE TOWNHOMES	ON-SITE PERVIOUS PAVERS (ALLEYS)
	ON-SITE HIGH DENSITY	ON-SITE BIOTREATMENT/FLOW THROUGH PLANTER AREAS
	OPEN SPACE AREAS	ON-SITE BIOTREATMENT AREAS AND PERVIOUS SURFACES
	DETENTION VAULT	SITE WIDE COMPLIANCE

CONCEPTUAL MASTER PLAN

MASTER STORMWATER CONTROL PLAN

C3.0

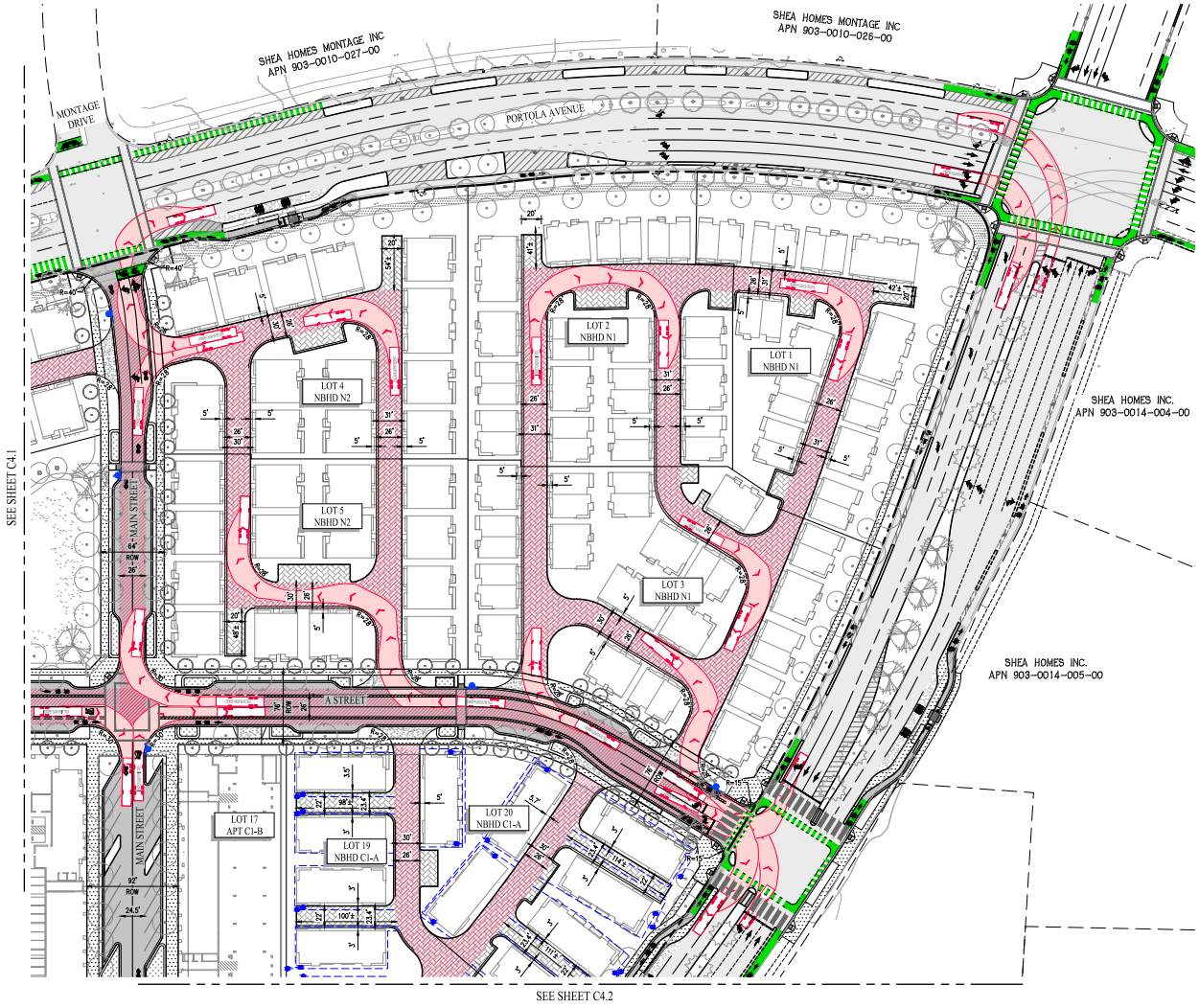
ISABEL PORTOLA
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LIVERMORE, CALIFORNIA

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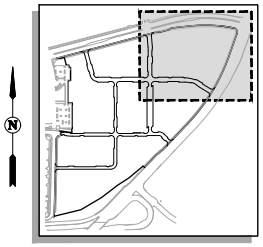
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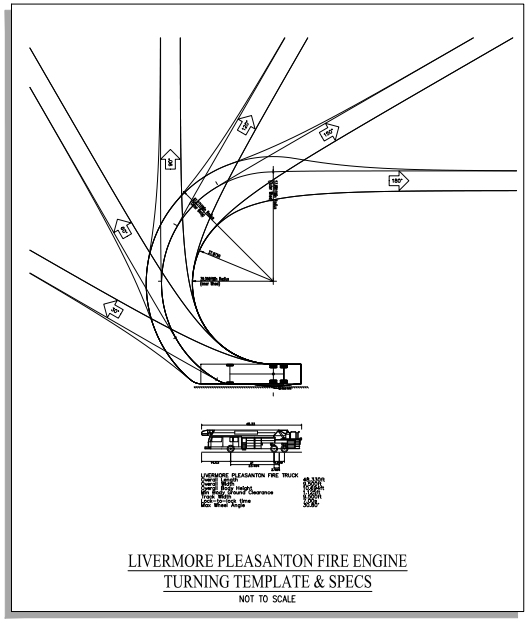
LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

NOTE:
SEE SHEET C4.1 FOR LIVERMORE SANITATION GARBAGE TRUCK TURNING TEMPLATE AND SPECS.



LIVERMORE PLEASANTON FIRE ENGINE
TURNING TEMPLATE & SPECS
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.0

ISABEL PORTOLA
OWNER, LLC

cbg

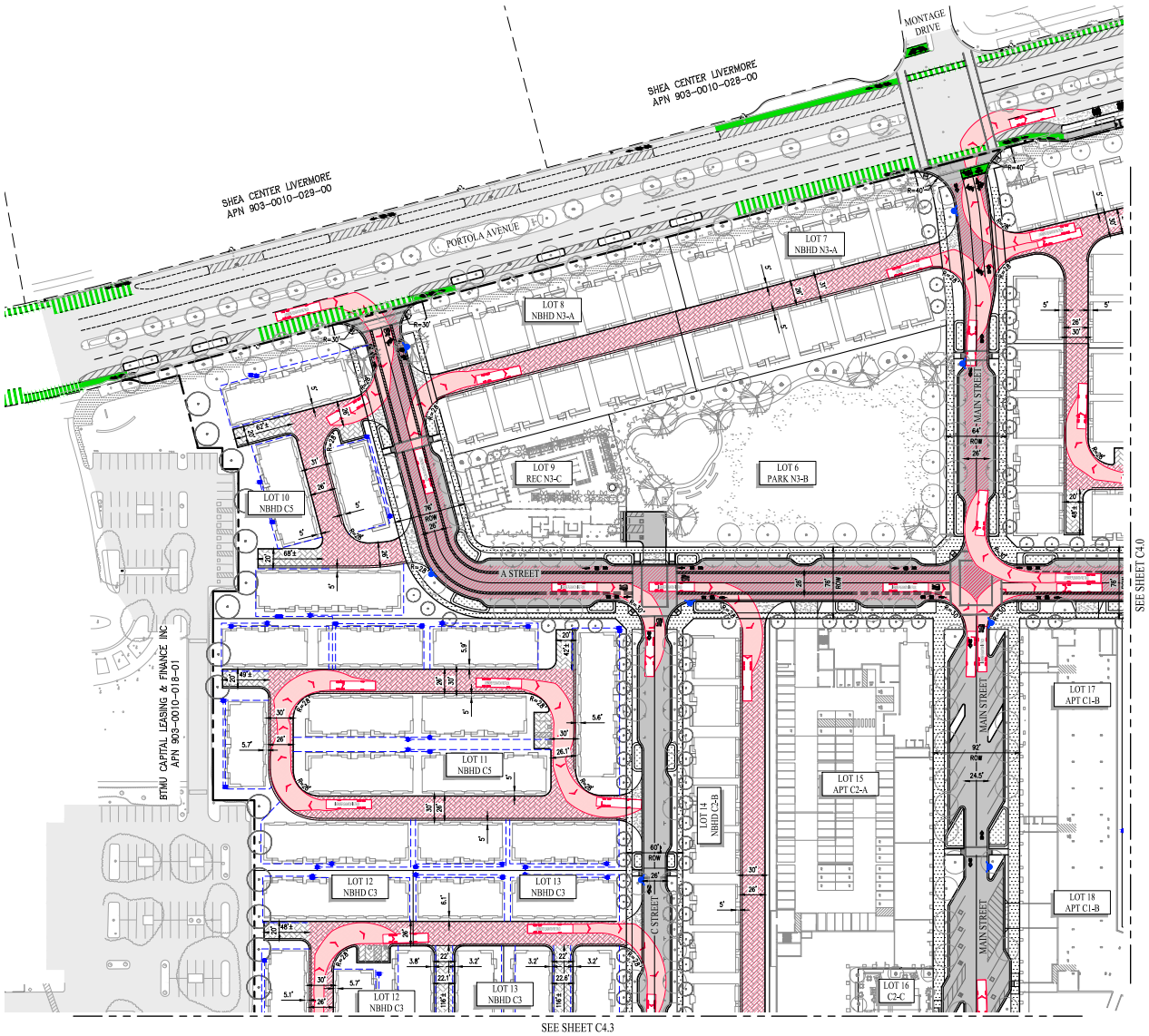
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ISABELCROSSING
LIVERMORE, CALIFORNIA

0 30 60 120

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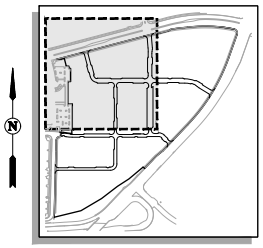
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EXHIBIT E



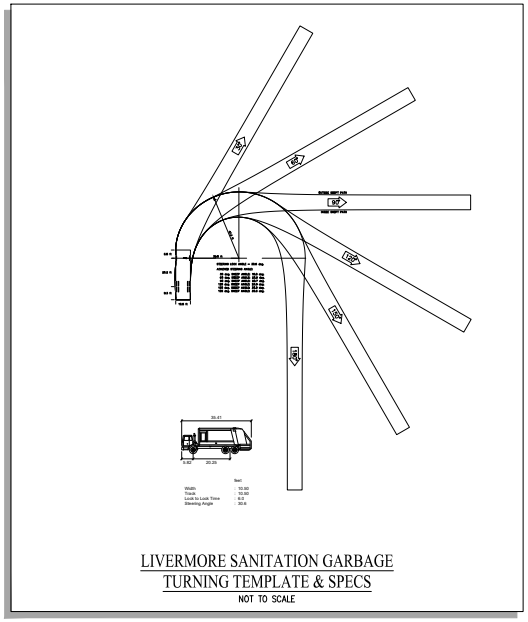
LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

NOTE:
TRASH COLLECTION AND ENCLOSURES – ALL PARCELS WITHIN C1-A, C2-B, C3, C5, N(ALL), S2 AND S4 WILL HAVE PRIVATE COLLECTION PICK-UP WITH TRASH BINS LOCATED WITHIN PRIVATE GARAGES. ALL PARCELS WITHIN C1-B , C2-A, S1, S3-A AND S3-B WILL HAVE BUILDING TRASH CHUTES WITH CENTRAL TRASH ENCLOSURES LOCATED WITHIN THE COMMON GARAGES.



LIVERMORE SANITATION GARBAGE
TURNING TEMPLATE & SPECS
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.1

ISABEL PORTOLA
OWNER, LLC

cbg

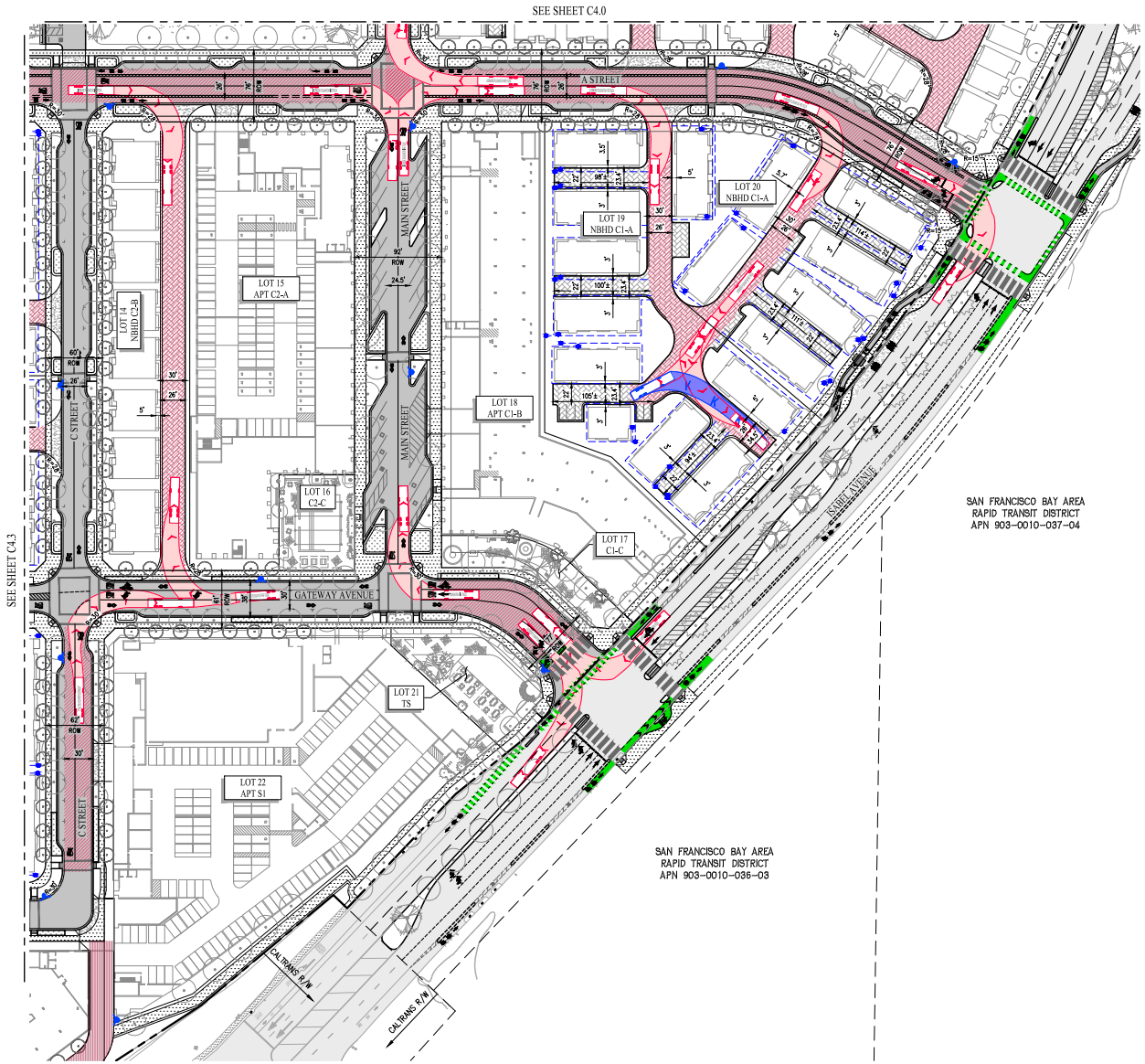
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ISABEL CROSSING
LIVERMORE, CALIFORNIA

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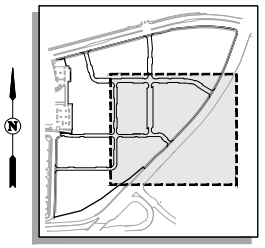
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EXHIBIT E

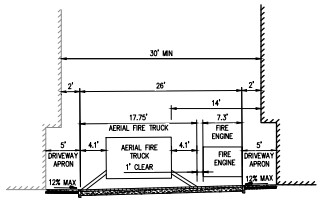


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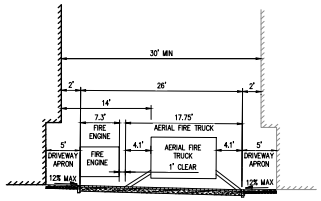
- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE



IN-TRACT AERIAL ACCESS CROSS SECTION VIEW - RIGHT BUILDING
SCALE: 1"=10'



IN-TRACT AERIAL ACCESS CROSS SECTION VIEW - LEFT BUILDING
SCALE: 1"=10'

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.2

ISABEL PORTOLA OWNER, LLC

cbg

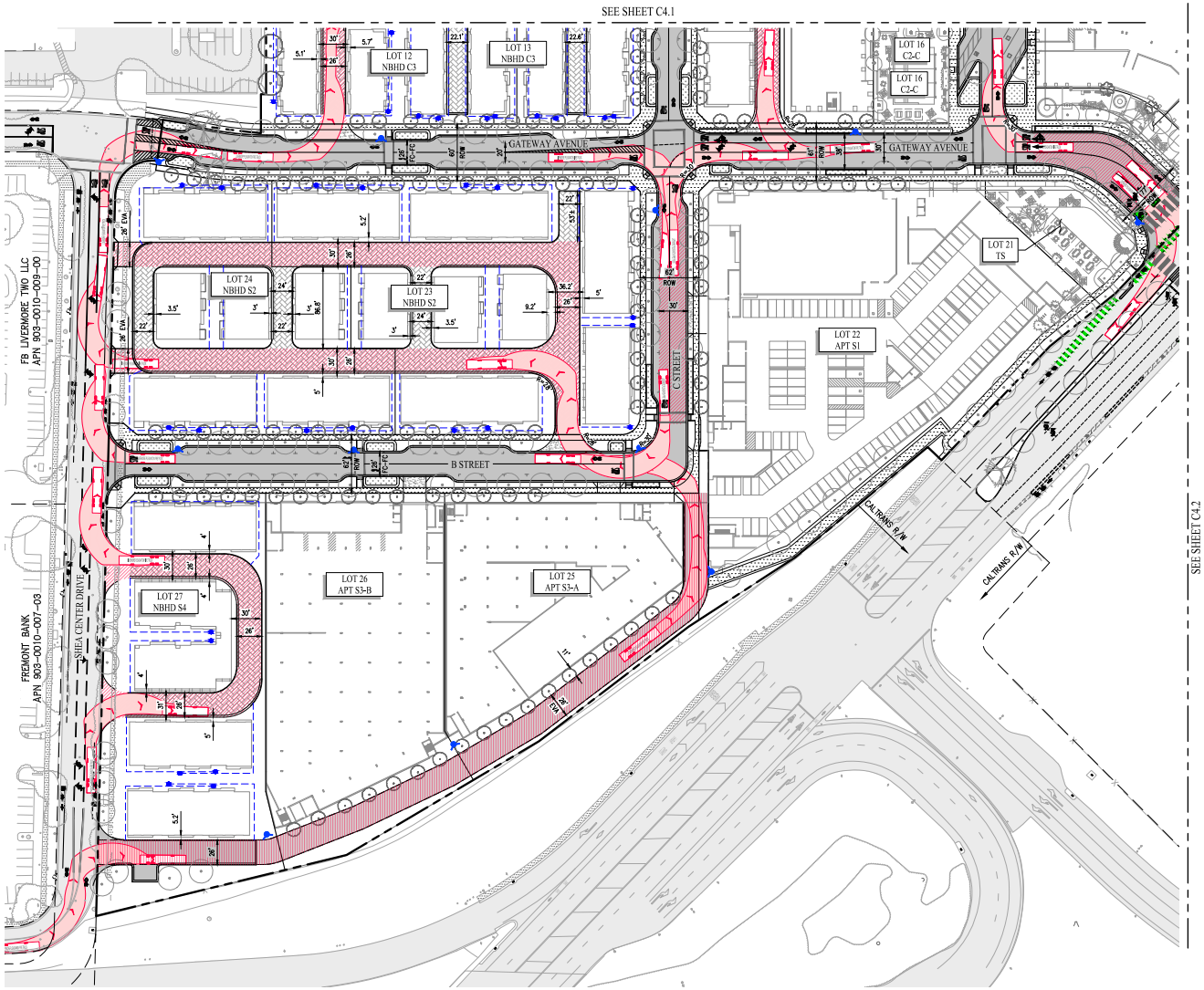
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LIVERMORE, CALIFORNIA

0 30 60 120

06-28-24 | 3591-000

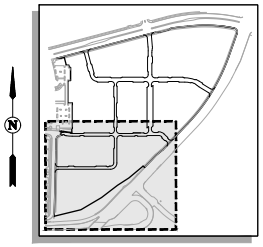
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EXHIBIT E



LEGEND

- PROPOSED PROPERTY LINE
- ADJACENT PROPERTY LINE
- FIRE HOSE PULL (150' MAX)
- 26' AERIAL APPARATUS STAGING AREA
- PROPOSED POTABLE FIRE HYDRANT
- EXISTING POTABLE FIRE HYDRANT



INDEX MAP
NOT TO SCALE

CONCEPTUAL MASTER PLAN

FIRE & GARBAGE ACCESS PLAN

C4.3

ISABEL PORTOLA OWNER, LLC

cbg

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LIVERMORE, CALIFORNIA

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2831

EXHIBIT F



Proposed INSP Land Use

- Village
- Core
- Open Space
- Neighborhood Commercial
- Office Core
- Ground Floor Retail
- Ground Floor Retail/Office

*NOTE: Parcel S1. The INSP Table 2-3: Development Standards Commercial Categories permits Mixed Use Projects with the evaulation as part of a Conditional Use Permit. We are proposing a Mixed Use building with ground floor retail/office and stacked flat condos above.
(Residential "Core" standards applied to residnetial units)

CONCEPT DESIGN

MASTER PLAN COMPARISON - LUP PROPOSED

SP-3

ISABEL PORTOLA OWNER, LLC

WHA.

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LIVERMORE, CALIFORNIA

06-07-24 | 2022015

2832

CONDITIONS OF APPROVAL

Vesting Tentative Tract Map 8659 (SUB) 22-008, Development Agreement (DA) 22-001, Consistency Determination (CD) 24-004, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Specific Plan Amendment (SPPA) 24-001, Master Sign Program Amendment (MSP) 24-001, and Development Code Amendment (DCA) 24-001

Hearing to consider the "Isabel Crossing" mixed-use development Project on approximately 45 acres within the Isabel Neighborhood. The Project is a Master Plan for the Neighborhood's core and includes 1,299 residential units, including 363 units affordable to individuals and families of lower, median, and moderate incomes, ~90,000 square feet of ground-floor commercial, office, and amenity space, an approximately 1.5-acre neighborhood park with an additional ~0.5 acres of public plaza space, new bike lanes, street improvements, street trees, public art, and utility infrastructure. The residential units consist of for sale townhomes and duplexes and mid-rise condominiums and rental apartments. The Project also includes a 20-year Development Agreement between the City and Developer, a new community facilities district to finance Project infrastructure, and Specific Plan amendments. The Project is seeking relief under state housing/streamlining laws.

Location: Southwest corner of Isabel Avenue and Portola Avenue (APNs: 903-10-46 through 903-10-54)

Recommended by Planning Commission: July 2, 2024

Approved by City Council: _____

A. PROJECT AUTHORIZATION

1. The project shall be in conformance with all City Ordinances, rules, regulations, and policies except as set forth in the Project's Development Agreement ("DA"), Vesting Tentative Tract Map ("VTTM"), and Specific Plan Amendment ("SPPA") (collectively, the "Project Approvals"). The conditions listed below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.

2. Approval is limited to conformance of the land uses allowed in the Village, Core, Neighborhood Commercial, Office Core, Ground Floor Retail/Overlay Flex Space, and Open Space zoning designations in Subarea 3b and 3c of the Isabel Neighborhood Specific Plan, in accordance with the Project Approvals. Use of the property shall be limited to those permitted by the Isabel Neighborhood

Specific Plan as it exists now and pursuant to the Project Approvals, as the same may be amended in the future.

3. Vesting Tentative Tract Map 8659 and associated Site Plan Design Review and all other project approvals shall expire 20 years from the effective date of the Development Agreement 22-001, pursuant to any time extensions in the Development Agreement.

B. PROJECT SPECIFIC CONDITIONS

The applicant shall respond in writing to all conditions contained in this document and its attachments. Responses shall describe how the condition has been met and shall, where applicable, direct the plan checker to the page and/or drawing detail that demonstrates compliance with the condition. A copy of these responses shall be provided with each set of revised plans.

1. The following subsequent approvals are or may be required:
    a. A staff-level Site Plan Design Review for in-tract landscaping within each planning area is required prior to building permit issuance of the first building in all planning areas.
    b. If the Site Plan Design Review for in-tract landscaping is processed with another entitlement requiring a public hearing, then a public hearing may also be required. The review authority for subsequent Site Plan Design Review applications shall be as established in Livermore Development Code Table 9.3 (Review Authority for Site Plan and Design Review).
    c. A Tentative Map is required for any proposed small-lot land subdivision prior to Building Permit issuance of the first building in each Planning Area, subject to Livermore Development Code review process requirements. A public hearing is typically required for approval of a Tentative Map per the Development Code.
2. Prior to Improvement Plan approval, applicant shall revise landscape plan to ensure 20 percent of all onsite trees have a 24-inch box size or larger, as approved by the Community Development Department Director.
3. Prior to Improvement Plan approval, applicant shall revise landscape plan to ensure all shrubs shall have a minimum 5-gallon size, as approved by the Community Development Department Director.
4. Prior to sign installation, applicant shall submit for, and receive approval of, all required sign design review and building permit applications.
5. Prior to Improvement Plan approval, applicant shall demonstrate the project's use of recycled water for irrigation purposes, as approved by the City Engineer. All onsite irrigation shall use recycled water.
6. Prior to Building Permit approval, the applicant shall submit a photometric plan that demonstrates adequate site lighting. Exterior parking areas shall maintain a minimum light level of one foot-candle at the parking surface.

Pathways and private open space areas shall be sufficiently illuminated for safety, but respectful of the residential context, as approved by the Community Development Department Director.

7. Prior to the first Building Permit approval, applicant shall submit an acoustical study showing the project is consistent with all applicable state, INSP and GP standards. All acoustical study recommendations shall be incorporated into the submittal of the Building Permit applications.
8. Prior to Building Permit approval, building plans shall show that all rooftop mechanical equipment be designed to be fully screened from public view by roof parapet or architecturally integrated roof screen. Construction drawings shall include section drawings and roof plans demonstrating conformance with this requirement. To the extent practical, all ground-mounted mechanical equipment shall be relocated to roof areas. Ground mounted equipment shall be fully screened from public view, as approved by the Community Development Department Director.
9. All exterior furnishings and equipment in planning areas C1-C, C2-C, TS, and N3-B shall require review and approval of Community Development Director prior to issuance of a a Building Permit and final inspection.
10. Project shall conform to all applicable INSP Policies as listed in Attachment 2.
11. Project shall conform to all required Mitigation Measures listed in the INSP EIR Addendum MMRP (Attachment 3).
12. Project shall conform to all requirements listed in Development Agreement 22-001.
13. Prior to Improvement Plan approval, the Plans shall show that all trees adjacent to public infrastructure shall use control features like root barriers and engineered soils to prevent infrastructure damage, as approved by the Community Development Department Director.
14. Prior to Improvement Plan approval, the applicant shall demonstrate on the landscape plans compliance with the City's Water Efficient Landscape Ordinance (WELO), as approved by the Community Development Department Director.
15. Prior to Improvement Plan approval, exterior backflow preventers shall be screened from public view with landscape or by other appropriate means, as approved by the Community Development Department Director.
16. The project applicant and/or contractor shall treat any human remains encountered during ground-disturbing activities in accordance with California Health and Safety Code Section 7050.5.
17. Prior to receiving a Building Permit for excavation, grading or construction on development site, the applicant shall contact the Alameda County Vector Control Services District to determine if any pre-baiting requirements are necessary to control migration of vermin to adjacent property.
18. All project appliances shall be electric, as set forth in the 2018 Isabel Neighborhood Specific Plan Environmental Impact Report Mitigation,

Monitoring, and Reporting Program, subject to applicable Building Code exceptions.

19. Prior to occupancy of the Town Square on the southwest corner of Isabel and Gateway Avenue, applicant shall work with the City to implement site features to mitigate noise along Isabel Avenue. Site features shall include berms, landscaping, low walls, glass partitions, or other features as determined by the Community Development Department Director.
20. Transportation Management Agency/ Transportation Demand Management
    a. Prior to the Project's first Certificate of Occupancy, Developer shall submit, and the City shall approve, the Project's Master Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs) for consistency with this condition. The CC&Rs shall include the following, as approved by the Director:
        i. The HOA shall implement all provisions of Isabel Neighborhood Specific Plan (Specific Plan) Policy P-TRA-22.
        ii. The HOA shall work cooperatively with the City and all other HOAs in the Specific Plan to implement Specific Plan Policy P-TRA-22.
        iii. The HOA, in conjunction with all other Specific Plan HOAs, shall bear applicable Transportation Management Agency/ Transportation Demand Management costs associated with Specific Plan Policy P-TRA-22.
    b. The Transportation Management Agency shall be formed within 180 days of HOA formation, subject to the Force Majeure provisions of the DA and extensions agreed to in writing by the Director.

21. Pursuant to Government Code Section 65867.5 (c), a sufficient water supply shall be available for the Project. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90 days of a request.
22. <u>To the extent practicable, the pedestrian trail located on the east side of Planning Area S1 should be designed to accommodate bicyclists and should connect directly to Isable Avenue (Condition added by Planning Commission on July 2, 2024).</u>
23. <u>In all locations where feasible, pedestrian curb ramps shall be directional (Condition added by Planning Commission on July 2, 2024).</u>
24. <u>To the extent practicable, the pedestrian bulb outs along Isabel Avenue shall be extended to shorten crossing distance (Condition added by Planning Commission July 2, 2024).</u>
25. <u>Project bike racks shall be evenly distributed across the site and shall be located within 50 feet commercial entries (Condition added by Planning Commission July 2, 2024).</u>
26. <u>Community Development Department staff shall coordinate with Livermore Amador Valley Transit Authority staff to explore bus stops within the Project site, where feasible (Condition added by Planning</u>

Commission July 2, 2024).

27. To the extent practicable, A Street and Gateway Avenue should be modified to ensure dedicated bicycle lanes are located along the curb face, and separated from the travel lane with automobile parking (Condition added by Planning Commission July 2, 2024).

C. GENERAL CONDITIONS OF APPROVAL

1. Development shall conform to the approved plans as shown in Exhibit B-1. Exhibit B-1 plans shall include but are not limited to subdivision, master landscape, and architectural plans reviewed and approved by the Planning Commission and City Council and amended by the applicant to reflect any changes indicated above in the Project Specific Conditions or required by the City in the approval process.

2. The development impact fees (subject to annual increases) are vested with the Development Agreement.
3. The Community Development Department may approve minor amendments to the permit, provided that the permit is still in substantial conformance with the original approval and all requirements of Development Agreement 22-001.
4. Approval of the Site Plan Design Review and Tentative Tract Map entitlements is not an authorization to commence construction. Building construction, alterations, repairs, sign erection, or occupancy shall not be permitted without prior approval of the Building Division through issuance of any required permits.
5. To the extent permitted by law, the project applicant shall defend, indemnify and hold harmless the City, its City Council, its officers, boards, commissions, employees and agents from and against any claim, action, or proceeding brought by a third party against the indemnified parties and the applicant to attack, set aside, or void the approval of the project or any permit authorized hereby for the project, including (without limitation) reimbursing the City its attorney's fees and costs incurred in defense of the litigation. The City may, in its sole discretion, elect to defend any such action with attorneys of its choice.

D. ENGINEERING DIVISION

1. Development shall conform to the attached Engineering Considerations, dated June 27, 2024 (Attachment 1).

E. BUILDING DIVISION

1. Each project shall conform to CA codes adopted at time of project Building permit submittal.
2. Commercial spaces shall submit separate Tenant Improvement applications than the shell permits based on use.
3. Community pool shall submit separate plans for Alameda County Health approval in addition to City of Livermore approval.

F. FIRE DEPARTMENT

The Fire Prevention Bureau reviews building/civil drawings for conceptual on-site fire mains and fire hydrant locations only. Plan check comments and approval DO NOT include: 1.) Installation of the on-site fire mains and fire hydrants. Specific installation drawings submitted by the licensed underground fire protection contractor shall be submitted to the Fire Prevention Bureau for approval; and 2.) Backflow prevention or connections to the public water mains.

1. FIRE HAZARDS: The project developer shall keep the site free of fire hazards from the start of lumber construction until the final inspection.

2. FIRE CODE: All construction shall conform to the requirements of the 2022 Livermore Fire Code and local ordinances. All required permits shall be obtained prior to work commencement.

3. SITE SAFETY: Site safety during construction shall be in accordance with Fire Code chapter 33.

4. FIRE SPRINKLERS: Automatic fire sprinklers shall be installed in all occupancies in accordance with the 2022 Livermore Building, Fire and Residential Codes with local amendments and ordinances.

5. EMERGENCY RESPONDER RADIO: Emergency responder radio coverage shall be provided in accordance with section 510 of the Fire Code.

6. FIRE PROTECTION FACILITIES: Prior to any construction framing, the applicant shall provide adequate fire protection facilities, including, but not limited to a water supply and water flow in conformance to the City's Fire Department Standards able to suppress a major fire.

7. WATER FLOW AND CONTROL VALVES: All fire sprinkler system water flow and control valves shall be complete and serviceable prior to final inspection. Prior to the occupancy of a building having a fire alarm system, the Fire Department shall test and witness the operation of the fire alarm system.

8. ELECTRICAL CONDUIT: Electrical conduit shall be provided to each fire protection system control valve including all valve(s) at the water connections. The Livermore-Pleasanton Fire Department requires electronic supervision of all valves for automatic sprinkler systems and fire protection systems.

9. LISTED: All commercial, industrial, and multi-family residential occupancies shall have valve tamper and water flow connected to a listed Central Station Service in accordance with NFPA 72. Fire Department plan check includes specifications, monitoring, installation, and alarm company certificates. Fire alarm control panel and remote annunciation shall be at location(s) approved by the Fire Prevention Bureau. All systems shall be point identified by individual device and annunciated by device type and point.

10. HAZARDOUS MATERIALS: Should any operation or business activity involve the use, storage or handling of hazardous materials, the firm shall be responsible for contacting the Livermore-Pleasanton Fire Department prior to commencing operations. Please contact the Hazardous Materials Coordinator at 925/454-2361.

11. FIRE HYDRANTS: Fire hydrants shall be installed at spacing not greater than 300 feet in industrial and commercial developments. Fire hydrants shall be installed at spacing not greater than 400 feet in residential developments.

12. FIRE LANE MARKING: On-site access ways, turn arounds, and internal drives shall be designated as fire lanes and identified as such by red curb striping and posted with signs at locations approve by the Fire Department. Signs shall be according to State standards and read “No Parking – Fire Lane” and must be shown on the plans. The red curb striping, sign location(s), and sign language shall be included in the building permit submittal for review and approval by the Livermore-Pleasanton Fire Department prior to building permit issuance.

    a. The following schedule for NO PARKING signs shall apply:

Width	*Requirements*
36 feet or greater	No requirements
Between 28 and 36 feet	Post one side
Between 20 and 28 feet	Post both sides
Less than 20 feet	Not permitted
Cul-de-Sac	Not permitted

13. EMERGENCY VEHICLE ACCESS ROADS: Access roads shall have 13 feet, 6 inches unobstructed vertical clearance, 20 feet of unobstructed width (26 feet where occupied building floors exceed 30 feet height), and inside turning radius of 31 feet and outside turning radius of 51 feet. Unobstructed shall mean a clear travel way, excluding parking width, and designed for an emergency vehicle weight of 70,000 pounds under all weather conditions. Unobstructed width shall not include the width of rolled curbs, sidewalks, or non-drivable surfaces. All exterior portions of buildings must be within 200 feet of an access road. Yard and parking area may be able to be located farther than 200 feet from access roads, depending on the specific use.

14. PREMISES IDENTIFICATION: Address numbers shall be installed on the front or primary entrance for all buildings. Minimum building address character size shall be 12-inch high by 1-inch stroke. In all cases address numerals shall be of contrasting background and clearly visible in accordance with the Livermore-Pleasanton Fire Department Premises Identification Standards. This may warrant field verification and adjustments based upon topography, landscaping or other obstructions.

15. FINAL INSPECTION: Prior to request for final inspection, all access roads, on-site access and fire hydrants shall be provided. All fire hydrants shall be accepted, inspected and tested to applicable City Standards.

G. LIVERMORE MUNICIPAL AIRPORT

1. Prior to the first Certificate of Occupancy for each planning area, Developer or Successor shall submit and gain approval of form 7460-1 (or any other required forms or approvals) from the Federal Aviation Administration (FAA), and shall provide documentation of such approval to the City, as approved by the Community Development Department Director and Airport Manager.
2. Prior to commencement of all crane operations, Developer or Successor shall submit and gain approval of form 7460-1 (or any other required forms or approvals) from the Federal Aviation Administration (FAA), and shall provide documentation of such approval to the City, as approved by the Community Development Department Director and Airport Manager.
3. Prior to approval of any grading or building permit, Developer or Successor shall submit, and the City shall approve, a complete Dust Control Plan, as approved by the City Engineer and Airport Manager.
4. Prior to approval of Final Map, Developer shall show Avigation Easements on the Final Map, as approved by the City Engineer and Airport Manager.
5. Prior to the Project's first Occupancy, Developer or Successor shall cause to be recorded the required deed notification as provided in the Livermore Executive Airport - Airport Land Use Compatibility Plan, Chapter 3.3.4.6, on all properties in the Project site for which this discretionary development permit is issued, and provide proof of recordation, as follows:

   NOTICE OF AIRPORT IN VICINITY

   This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are

associated with the property before you complete your purchase and determine whether they are acceptable to you.

6. Residential and commercial buildings greater than 30 feet in height shall provide emergency apparatus aerial access within a minimum of 15 feet and a maximum of 30 feet of the face of the building from an interior drive aisle or a public street, unless alternative emergency access is approved by LPFD.
7. Downturned lights shall be used to mitigate glare.

H. WATER RESOURCES DIVISION

1. The project shall install full trash capture devices on the storm drainage system for this project. Full trash capture systems must be on the San Francisco Regional Water Quality Control Board's approved list : https://www.sfestuary.org/approved-trash-capture-devices/

2. Any future tenants in the commercial portion of this "mixed-use" project that is a "food service establishment" must comply with the Livermore Municipal Code 13.32.330, which states the following:

> *New and Existing Food Service Establishments. All new food service establishments are required to install, operate, and maintain an approved type and adequately sized grease interceptor with a minimum capacity of 750 gallons necessary to maintain compliance with the objectives of this chapter.*
>
> *Any existing food service establishment that does not have an approved grease interceptor with a minimum capacity of 750 gallons with planned modifications that include a building permit evaluation of $50,000 or greater will be required to install a grease interceptor pursuant to the requirements of this chapter… Grease interceptors shall be installed at a location where it shall be easily accessible for inspection, cleaning, and removal of intercepted grease. All such grease interceptors shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability. Use of biological or chemical additives for grease remediation or as a supplement to grease interceptor or grease trap maintenance is prohibited. Sanitary wastes from water closets, urinals, garbage disposals, and high temperature dishwashers are not allowed to be connected to sewer lines intended for grease interceptor service.*

3. The applicant shall construct a separate grease waste sewer line for the commercial portion of this requirement to facilitate future tenants' compliance with this requirement if necessary.

I. ENVIRONMENTAL SERVICES DIVISION

1. For parcels that have building trash chutes and central trash enclosures within the common garages, Developer or Successor shall ensure that containers and service for recyclable and organic materials is at the same or at an equally convenient location as garbage.

J. LIVERMORE SANITATION

1. For Planning Areas C1-B, C2-A, S1, S3-A, and S3-B, Developer or Successor shall establish a trash bin and cart staging area. Signage and/or striping shall be provided at each staging area to indicate trash pickup days and no parking time frames, as approved by the Community Development Department and Livermore Sanitation.
2. The designated staging areas shall be within the Public Right-of-Way, directly adjacent to, or in line with, each garage or trash enclosure entrance, and located in the general vicinity of each location specific in the attached Staging Area Map (Attachment 4), or such other location recommended by the applicant's waste management consultant and approved by the Director in consultation with Livermore Sanitation.
3. Prior to the first Certificate of Occupancy of Planning Areas C1-B, C2-A, S1, S3-A, and S3-B, Developer or Successor shall provide Livermore Sanitation and the Community Development Department Director a plan to establish all staging areas, signage, and pickup schedules that will be subject to Community Development Department review and approval.
4. Given the residential proximity to the commercial uses, accounts will be serviced after 6:00am on each pickup day.

M. POLICE DEPARTMENT

1. Prior to occupancy of Planning Areas C1-B, C2-A, S1, S3-A, and S3-B, Developer or Successor shall prepare and submit a Security Plan, as approved by the Police Department.
2. The Project shall conform to Livermore Municipal Code Chapter 15.18, Building Security.
3. The Project shall implement all Law Enforcement Assets described in the Development Agreement.

Exhibits:

A: Engineering Considerations
B: Specific Plan Policy Matrix
C: Isabel Neighborhood Specific Plan Environmental Impact Report Mitigation, Monitoring, and Reporting Program
D: Livermore Sanitation Trash Staging Exhibit

DATE: June 27, 2024

ENGINEERING CONSIDERATIONS - EXHIBIT "A"
(Subject to revision prior to final approval
by Planning Commission and City Council)

TENTATIVE TRACT: 8659 (SUB22-008)
Isabel Crossings

LOCATION: 359 Portola Avenue

APPLICANT: Isabel Portola Owner LLC (Harridge)

Note: Special conditions are shown in standard type. Standard conditions that apply to this project are shown in italics. In addition, standard conditions of approval for this project are listed in Section II of the Development Plan Check and Procedures Manual.

1. DEFINITIONS

For the purpose of this agreement, the following words shall have the meanings respectively ascribed to them by this section:

Developer: *Person(s) or Corporation(s) signing final map(s) and subdivision agreement(s)*

Improvement Plans: *Construction drawings for required public and private improvements*

Services: *Utility lateral, or any portions of a conduit cable or duct, between a utility distribution line and the site it serves*

Project: *The work to be performed by Developer*

2. VESTING TENTATIVE MAP

Approval or conditional approval of this vesting tentative map shall not limit the City Engineer's ability to require workable designs on future grading and improvement plans based upon these Engineering Considerations and the City's standard engineering specifications and details.

3. GENERAL

The project shall be in conformance with all City Ordinances, rules, regulations, and policies except as set forth in the Development Agrrement. *The conditions listed below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.* If the following conditions conflict with the Development Agreement, Veting Tentative Map, or the resolutions adopted as part of the Project approvals (collectively "Project Approvals"), the Project Approvals shall control over the conditions

All required improvements shall be constructed in accordance with the Development Agreement.

In accordance with Development Agreement 22-001 (DA), the Developer has agreed to design and construct various improvements and amenities as specified in the Isabel Neighborhood Specific Plan. These Engineering Considerations provide additional requirements for the design and construction of these improvements and amenities.

In order to provide for future construction of a pedestrian crossing of Isabel Avenue for public access to the future Valley Link Station, the Developer shall dedicate easements to the City for the public access, construction and operation of this crossing on the final map within the Town Square. The final location of this easement will be determined by the City Engineer working with the Developer.

In order to provide public access to the proposed multi-use trail at the southern end of the project, the Developer shall dedicate a public access easement over the trail on the final map as depicted on th Tentative Map.

In order to provide for the access to emergency vehicles at the southern end of the project, the Developer shall dedicate a emergency vehicle access easement over the trail on the final map as depicted on the Tentative Map.

In accordance with the Isabel Neighborhood Specific Plan, the Developer shall construct a neighborhood park at the northwest corner of Main Street and A Street. Because this park is intended to accommodate a variety of public programs and events. The park may include passive open space, playgrounds, picnic area, and pathways. Because LARPD will be maintaining and programming this park, the Developer shall design and construct this park per LARPD standards. LARPD approval signature will be required on the final plan set for the park. The developer shall dedicate the plaza parcels to the City on the final map.

In accordance with the Isabel Neighborhood Specific Plan, the Developer shall design and construct three plazas. Two located on Gateway Avenue at the entrance to the neighborhood and at the northwest corner of Main Street and Gateway Avenue. These plazas are central to the neighborhood and will serve as community gathering spaces. The plazas may include but are not limited to outdoor dining spaces, public art, kiosks, and specialty street furniture and lighting that encourages socialization and may include fountains. The developer shall dedicate the park parcel to the City on the final map.

In accordance with the DA, the Developer shall install Law Enforcement Assets that connect to the Livermore Police Department's Real Time Awareness Center. These assets shall be located on City traffic signals, streetlights, or other infrastructure, as approved by the Director, Police Chief, and Administrative Services Director.

In accordance with the Isabel Neighborhood Specific Plan, the Developer shall establish a Transportation Management Association (TMA). The purpose of the TMA is to provide strategies to help make alternative modes of transportation as convenient, affordable and safe as solo

driving. The strategies that may be included in the TMA are outlined in Chapter 3 of the Isabel Neighborhood Specific Plan.

A. IMPROVEMENT PLANS - Exhibit A-1

An engineered improvement plan shall be prepared by the Developer for approval by the City's Departments (including the Community Development, Public Services, Fire, and Police Department), which shall include, but not necessarily be limited to, existing site conditions, dedications, grading plans, street design and grades, curb, gutter, sidewalk and driveway grades, and type, size and location of all public works improvements as herein required. Approval of this tentative map does not constitute approval of the details shown thereon.

B. STANDARDS FOR IMPROVEMENT PLANS AND MAPS

All improvement plans and maps shall conform to the following City of Livermore documents except as modified by these engineering considerations:

1. *City of Livermore Standard Specifications and Details*
2. *Development Plan Check and Procedures Manual*

Completed final map and improvement plan checklists from the manual entitled "City of Livermore, Development Plan Check and Procedures Manual" shall be submitted with the first plan check submittal for each phase.

C. STANDARD CONDITIONS OF APPROVAL IN THE DEVELOPMENT PLAN CHECK AND PROCEDURES MANUAL

All of the standard conditions of approval for subdivisions and major projects as listed in Part II of the City of Livermore Development Plan Check and Procedures Manual apply except for the following: A-2, A-4, A-3, A-10, B-7, B-8, B-9, B-10, B-11, B-12, B-13, B-14, and B-16.

D. WORK IN OTHER JURISDICTIONS

The Developer is responsible for obtaining permits and approvals for construction work and property acquisition that are required by agencies other than the City of Livermore.

Creek improvements may be subject to requirements of any or all of the following agencies: (1) California Department of Fish and Game, (2) the Army Corps of Engineers, (3) the Regional Water Quality Control Board, (4) State Department of Water Resources (5) the U.S. Fish and Wildlife Service, and (6) Alameda County Flood Control and Water Conservation District (Zone 7).

Portions of Isabel Avenue are within Caltrans right-of-way. Any construction within the Caltrans right-of-way will require a permit from Caltrans prior to construction. Other than the proposed Caltrans embankment landscaping, the project has been designed to avoid constructing improvements in the Caltrans right-of-way.

4. STREETS

A. SPECIFIC REQUIREMENTS:

The Developer shall offer easements and dedications for, and shall improve his share of the ultimate street widths for the following named streets in accordance with the City's General Plan:

Isabel Avenue

Isabel Avenue is a major street in the General Plan. Along the project frontage Isabel Avenue is currently a 4-lane road with a striped median to accommodate turning lanes and a Class IIa bike lane in each direction.

The intersection of Isabel Avenue and Portola Avenue shall be redesigned and constructed as a protected intersection to provide for enhanced safety provisions for bicyclists and pedestrians moving through the intersection. The redesign of the intersection shall include but is not limited to the extension of the bike lane around the intersection that is protected with corner islands and bicycle signals. Final design features to be approved by the City Engineer. The revised intersection design shall be coordinated with the Shea Aura Tract 8612 (SUB21-007) project across the street.

The Isabel Neighborhood Specific Plan (INSP) requires that the existing bike lanes on Isabel Avenue be replaced with a new Class IV separated bike lane with buffer along the project frontage. Installation of this Class IV bike lane will include a physically raised barrier.

The Class IV bike lane will be comprised of an 8’ bike lane and 3’ median buffer. The median buffer shall have 6” deep curbs and be filled with landscaping and a decorative surface treatment subject to the review and approval of the Community Development Department. The buffer area shall be designed with a combination of median buffer planters and open segments to provide cyclists with both a travel lane separated from traffic and periodic openings with breakaway bollards to enter and exit the buffered bike lane. The median buffer planters shall be approximately 60’ in length and 3’ wide and have 6” deep curbs. The Developer shall provide a minimum of 3 samples of proposed decorative surface treatments for the median buffer during the design phase for review and approval by the Community Development Department.

Final design of the Class IV bike lane shall include but is not limited to appropriate transitions to and from the existing Class IIa to the Class IV bike lane; modifications to signing and striping; any surface treatments and/or structures, and any necessary utility services needed for the maintenance of the median buffer.

To accommodate the space needed for the Class IV bike lane the lane configurations on Isabel Avenue will vary depending on location.

Intersection with Portola Avenue:

At the intersection with Portola Avenue the lane configuration shall be constructed as follows:

8’ Class IV bike lane
3’ raised buffer median
11.5’ merge lane
11.5’ travel lane
11.5’ travel lane
9’ raised median
11.5’ left turn lane
11.5’ left turn lane
11.5’ travel lane
11.5’ travel lane
11.5’ right turn lane
3’ raised buffer median
8’ Class IV bike lane

The Developer shall be responsible for constructing the 9’ median but will need to coordinate its construction with the Developer of Shea Aura Tract 8612 (SUB21-007) by locating the Isabel Avenue’s lane configurations in their ultimate locations.

The raised median shall expand in size and eventually taper down a 6’ width at the intersection of Isabel and A Street where the lane configuration transitions as follows:

8’ Class IV bike lane
3’ raised buffer median
11’ right turn lane
11.5’ travel lane
11.5’ travel lane
11’ striped future left turn lane
6’ raised median
11.5’ travel lane
11.5’ travel lane
3’ raised buffer median
8’ Class IV bike lane

Just north of the intersection with A Street, the Developer shall construct a northbound bus stop and turnout with a raised platform to accommodate the Class IV bike lane in accordance with Figure 17 in FHWA’s Separated Bike Lane and Planning Design Guide. The Developer shall install the appropriate transitions for the bike lane into and out of the bus stop.

Intersection with A Street:

The intersection of Isabel Avenue and A Street shall be designed and constructed as a protected intersection to provide for enhanced safety provisions for bicyclists and pedestrians moving through the intersection. The design of the intersection shall include but is not limited to the extension of the bike lane around the intersection that is protected with corner islands and bicycle signals. Final design features to be approved by the City Engineer.

South of the intersection of Isabel Avenue and A Street, the lane configuration shall be constructed as follows:

8’ Class IV bike lane
3’ raised buffer median (minimum)
11.5’ travel lane
11.5’ travel lane
10’ raised median
11’ left turn lane
11.5’ travel lane
11.5’ travel lane
3’ raised buffer median
8’ Class IV bike lane

Just south of the intersection with A Street, the Developer shall construct a southbound bus stop and turnout with a raised platform to accommodate the Class IV bike lane in accordance with Figure 17 in FHWA’s Separated Bike Lane and Planning Design Guide. The Developer shall install the appropriate transitions for the bike lane into and out of the bus stop.

Intersection with Gateway Avenue:

North of the intersection with Gateway Avenue the lane configuration shall be constructed as follows:

8’ Class IV bike lane
3’ raised buffer median
11.5’ travel/right turn lane
11.5’ travel lane
11’ striped future left turn lane
8’ raised median
11.5’ travel lane
11.5’ travel lane
3’ raised buffer median
8’ Class IV bike lane

South of the intersection with Gateway Avenue the lane configuration shall transition as follows:

6’ Class IV bike lane
3’ raised buffer median
11’ travel lane
11’ travel lane
11’ striped future left turn lane
5’ raised median
11’ left turn lane
11’ left turn lane

11’ travel lane
11’ travel lane
3’ raised buffer median
6’ Class IV bike lane

The median shall then extend out to a width of 22.5’ and terminate at the Caltrans right-of-way limit.

Streetlights on Isabel Avenue shall be installed along the project frontage and within the Isabel Avenue median in accordance with City Standards and Details. The project frontage streetlights shall be installed in accordance with Details ST-14A and ST14B. The median streetlights shall be double mast arm and shall be installed in accordance with Details ST-14A and ST-14B.

Portola Avenue

Portola Avenue is a major street in the General Plan. Along the project frontage Portola Avenue is a 4-lane road with a landscaped median to accommodate turning lanes and a Class IIa bike lane in each direction.

The Isabel Neighborhood Specific Plan (INSP) requires that the existing bike lane at the project location be replaced with a new Class IV separated bike lane with buffer along the project frontage in the eastbound direction. Installation of this Class IV bike lane will include a physically raised barrier.

To accommodate the Class 4 bike lane the lane configuration of Portola Avenue shall be modified in segments as follows:

Eastbound - West of Montage (south of median)

12’ travel lane
12’ travel lane
8.5’ buffer
8’ bike lane

East of Montage (north to south)
8’ bike lane
9’ buffer
11’ travel lane
12 travel lane
12’ turn lane
10’ existing median
11’ travel lane
12’ travel lane
8’ bike lane
3.5’ minimum buffer

The buffer for this section shall expand as necessary to accommodate the existing bus turn out

East of Isabel (north to south)

8’ bike lane
9’ buffer
11’ travel lane
11’ travel lane
10’ existing median
11’ turn lane
11’ travel lane
11’ travel lane
11’ turn lane
11’ turn lane
3.5’ buffer
6’ bike lane

Isabel to Cayetano Park entrance (north of median)

8’ bike lane
2’ buffer
10’ travel/turn lane
10’ travel lane
1l’ turn lane
10’ turn lane
11’ turn lane

The Class IV bike lane will be comprised of a bike lane and buffer area of varying width as noted above. The buffer area shall be designed with a combination of median buffer planters and open segments to provide cyclists with both a travel lane separated from traffic and periodic openings with breakaway bollards to enter and exit the buffered bike lane. The median buffer planters shall be approximately 60’ in length and varying width and have 6” deep curbs. Where feasible, each median buffer planter shall be planted with 3 street trees per standard detail L-3G with groundcover and/or hardscape per standard detail L-2B. Median buffer planting shall be reviewed and approved by the Community Development Department. City Engineer may modify the final lane widths shown above as needed to fit within available right-of-way.

Final design of the Class IV bike lane shall include but is not limited to appropriate transitions to and from the existing Class IIa to the Class IV bike lane; modifications to signing and striping; traffic signal timing, irrigation of planter area, any surface treatments and/or structures, and any necessary utility services needed for the maintenance of the median buffer planter.

Per Development Agreement 22-001, the Developer shall install additional Class IV bike lanes at the following locations:

1. Westbound on North Canyons Parkway and Portola Avenue completing the segment of Class

IV bike lanes installed with Denova Amarone Tract 8657 and Shea Serenity Tract 8613
2. Westbound on Portola Avenue completing the segment of Class IV bike lane between Shea Serenity Tract 8613 and Campus Hill Drive.
3. Westbound between Campus Hill drive and just beyond the entrance to Cayetano Park.
4. Eastbound between Collier Canyon Road and the project frontage.

To further enhance bicycle safety, the Developer shall install bike boxes at the intersection of Portola Avenue and Montage Drive.

Portola Avenue along the tract boundary shall be given a 1-1/2" A.C. overlay across the full width. Key cutting will be required at the conform points and along the gutter.

Isabel Avenue and Portola Avenue shall include relinquishment of abutter's rights on the final map.

Campus Hill Drive

In order to maximize the functionality of the redesigned intersection of Isabel Avenue and Portola Avenue as a protected intersection, the Developer shall extend the Class IV bike lane on both sides of Campus Hill Drive up to Heligan Lane.

Due to the right-of-way constraints of Campus Hill Drive, the Class IV bike lane shall be comprised of an 8’ bike lane on the west side and a 6’ bike lane on the east side with 2’ buffers on both sides.

Final design of the Class IV bike lane shall include but is not limited to appropriate transitions to and from the Class IV bike lane; modifications to signing and striping; traffic signal timing, irrigation of planter area, any surface treatments and/or structures, and any necessary utility services needed for the maintenance of the median buffer planter.

Main Street

Main Street is the primary street within the project and is meant to serve the commercial core of the Isabel Neighborhood Specific Plan. It is intended to contribute to street life and provide a sense of identity for the neighborhood. The streetscape for Main Street shall include but is not limited to design features such as specialty stamped concrete sidewalk, specialty streetlights and lighting, specialty wayfinding signs, kiosks, planters, trash and recycling receptacles, public art, special event banners and benches. During the design phase the Developer shall provide a minimum of 3 stamped concrete samples for the review and approval of the Community Development Department. The streetlights on Main Street shall include secondary outlets to provide for additional power for special events.

The Developer shall construct Main Street in two segments as follows:

Between Gateway and A Street, Main Street shall be comprised of a 92’ right-of way width that shall contain will 2 – 12’ travel lanes with 18’ wide angled parking on both sides with landscaped islands interspersed among the parking stalls. Along the edge of pavement 4’ planter strips shall be installed with 12’ sidewalks on both sides of the street. The sidewalk along Main Street shall be

decorative stamped concrete and shall extend around the corners onto Gateway Avenue. During the design phase the Developer shall provide a minimum of 3 stamped concrete samples for the review and approval of the Community Development Department.

The intersection of Mainstreet and Gateway Avenue shall be an all-way stop controlled intersection.

Between A Street and Portola Avenue, Main Street shall narrow to a 64' right-of-way width that shall contain 2 – 12' travel lanes with 8' parallel parking on both sides. Along the edge of pavement 4' planter strips shall be installed with 8' sidewalks on both sides of the street.

Streetlights on Main Street between Gateway Ave and A Street shall be decorative and installed in accordance with City Standards and Detail ST-14F. This will serve to identify this segment of Main Street as part of the core of the Isabel Neighborhood Specific Plan.

Streetlights on Main Street between A Street and Portola Avenue and shall be decorative and installed in accordance with City Standards and Detail ST-14D.

Gateway Avenue

Gateway Avenue is a Pedestrian Street in the Isabel Neighborhood Specific Plan. Pedestrian Streets are intended to serve as the entry point into the Isabel Neighborhood and be the main walking route within the neighborhood that is comfortable for pedestrians. Between Isabel Avenue and Main Street, Gateway Avenue shall have specialized streetscape features that include but is not limited to planter boxes, specialty lighting, benches, public art, special event banners, and wayfinding signage for pedestrians, bicyclists and drivers. Other specialty streetscape features may include specialty paving at intersections to enhance the visibility of pedestrian crossings.

The right-of-way width for Gateway Avenue varies in width from 77' to 60'. In general, Gateway Avenue shall be comprised of two travel lanes with pedestrian serving features such as 6' sidewalks and 6' planter strips on both sides of the street. 8' parallel parking shall be provided in designated parking bays where space is available.

Between Isabel Avenue and Main Street, Gateway Avenue shall have a right-of-way width of 77' to include additional travel lanes to accommodate traffic entering and exiting the neighborhood. Additionally, Gateway Avenue shall include a bike box at the intersection with Isabel Avenue to facilitate left turns for bicyclists onto Isabel Avenue. No parking will be allowed for this segment of Gateway Avenue.

Between Main Street and C Street Gateway Avenue shall have a right-of-way width of 61'. This segment of Gateway Avenue shall be comprised of a 10' travel/turn lane, 2 – 10' travel lanes and 8' parking bay along the south side of the street. The planter strips shall be narrowed in this segment to fit within the 61' right-of-way width.

Between C Street and Shea Center Drive

Between C Street and Shea Center Drive Gateway Avenue shall have a right-of-way width of 60'.

This segment of Gateway Avenue shall be comprised of 2 – 10' travel lanes and 8' parking bays along both sides of the street.

In accordance with the Isabel Neighborhood Specific Plan, Class III bike lanes shall be installed within the entire Gateway Avenue right-of-way from Isabel Avenue to Collier Canyon Road. Class III bike lanes share the travel way with vehicles. The Developer shall sign and stripe the Class III bike lane within Gateway in locations that are deemed appropriate by the City Engineer.

Streetlights on Gateway Avenue between Isabel Avenue and C Street shall be decorative and installed in accordance with City Standards and Detail ST-14F. This will serve to identify this segment of Gateway Avenue as part of the core of the Isabel Neighborhood Specific Plan.

Streetlights on the remainder of Gateway Avenue shall be decorative and installed in accordance with City Standards and Detail ST-14D.

A Street

A Street is a Bicycle Street in the Isabel Neighborhood Specific Plan. Bicycle Streets are intended to provide connection to the City's bicycle and trail network through Class II bike lanes. Bicycle streets have narrow travel lanes and parking bays on both sides where space is available. Bicycle streets also have planter strips and sidewalk on both sides. A Street shall have a 76' right-of-way width that is comprised of 2-10' travel, 2- 6' Class II bike lanes separated from the travel lanes by 2' striped buffers. The parking bays shall be 8' wide and the planter strip and sidewalk for A Street shall be 6' wide.

Streetlights on A Street shall be decorative and installed in accordance with City Standards and Detail ST-14D.

B and C Streets

B and C Streets are Pedestrian treets in the Isabel Neighborhood Specific Plan. These streets shall have a 62' right-of-way width comprised of 2- 11' travel lanes with 8-foot parking bays, 6' planter strips and 6' sidewalk on both sides.

Streetlights on B and C Streets shall be decorative and installed in accordance with City Standards and Detail ST-14D.

Shea Center Drive

In accordance with the Isabel Neighborhood Specific Plan, Class II bike lanes shall be installed within the Shea Center Drive right-of-way in both directions from Gateway Avenue to Constitution Drive. The Developer shall sign and stripe the Class II bike lane within Shea Center Drive. To accomplish this the street shall be restriped for 2- 10' travel lanes, 2- 6' bike lanes and a 10' dual left turn lane.

Mid-block Crossings

Where mid-block crossings are proposed on any street the Developer shall install Rectangular Rapid Flashing Beacons (RRFB) to increase safety at these locations. Installation shall include all utility connections and services.

Emergency Vehicle Access

The Developer shall construct and dedicate an easement for a 26 feet wide Emergency Vehicle Access as shown on the Tentative Map.

Additionally, prior to the start of framing for any buildings, full street sections shall be installed to provide access for emergency vehicles during construction of the buildings. Full street sections shall include installation of fire hydrants, utilities and curb and gutters.

CASp Certification for Public Walkways/Sidewalks

The Developer shall have a certified CASp Specialist review and certify that the design for all pedestrian improvements within the public right-of-way or a public easement complies with the following applicable regulations: American with Disabilities Act (ADA) requirements, the Public Rights-of-Way Accessibility Guidelines (PROWAG), and the requirements found in Chapter 11B of the 2019 California Building Code. If an accessibility design cannot meet the above listed applicable standards, the Developer shall propose and the CASp Specialist shall concur with a design exception request for approval by the City Engineer or their designee. In addition, the Developer shall have the certified CASp Specialist inspect and certify that pedestrian improvements are installed per the CASp certified design. Pedestrian improvements include new trails, walkways, sidewalks, accessible ramps, connections between existing and new pedestrian improvements, and modifications to existing pedestrian improvements within or adjacent to the project site, as shown on the approved plans.

5. TRAFFIC SIGNALS

Install fully traffic actuated traffic signals per current City and Caltrans standards and using equipment as specified by the City Engineer at the following intersections:

Isabel Avenue and Portola Avenue - redesign as a protected intersection

Isabel Avenue and Gateway – design as a protected intersection with a bike box on Gateway Avenue

Isabel Avenue and Street A – modify to accommodate striping for the Class IV bike lanes

Portola and Main Street/Montage Drive - modify to accommodate striping for the Class IV bike lanes and add bike boxes on Main Street and Montage Drive

Traffic signals shall be in operation seven days prior to the first occupancy or at the approval of the

City Engineer.

6. TRAFFIC IMPACT FEE CREDITS AND REIMBURSEMENTS:

In accordance with Development Agreement 22-001 the Developer will be eligible for credits or reimbursements for TIF eligible improvements as outlined in the Development Agreement. The following is a summary of the improvements that will receive TIF Credit or reimbursement under the terms of Development Agreement 22-001:

Main Street between Gateway Avenue and A Street
Gateway Avenue between Main Street and Isabel Avenue
Isabel Avenue Medians and non-frontage off-site improvements
Portola Avenue non-frontage improvements
Shea Center Drive southbound bike lane
Gateway Avenue bike lanes west of Shea Center Drive

A. CREDITS

Traffic impact fee credits will be calculated at the time the subdivision agreement is prepared prior to final map approval. The traffic impact fee credit for construction will be based on cost estimates for the T.I.F. work as approved by the City Engineer. The final calculated traffic impact fee for construction will determine the number of building permits eligible to receive traffic impact fee credits at permit issuance.

B. REIMBURSEMENTS

In accordance with DA the Developer may be eligible to receive a reimbursement of a portion of TIF paid at building permit issuance if certain performance parameters are met as outlined in the DA. The portion of TIF fees to be reimbursed will be the difference between the full TIF rate and the Downtown TIF rate in effect at the time of building permit issuance. Additionally, following fulfillment of the performance parameters for TIF reimbursement as outlined in the DA, the Downtown TIF rate will be applied for all subsequent building permits issued for the project.

7. SANITARY SEWERS

The Developer is proposing to relocate an existing 12’ public sanitary sewer main along the southern end of the project within a 30’ sanitary sewer easement. The Developer is proposing to relocate the sewer main under the proposed multi-use trail along the southern edge of the project.

In order to relocate this main the Developer shall dedicate a new 30’ sanitary sewer easement on the final map for the relocated portion of the sewer main.

Following installation of the relocated sewer main and the new main has passed City inspection tests for use, the Developer shall remove the unused sewer main and prepare documents for the vacation of the sanitary sewer easement that will no longer be used for review and approval by the

City. Vacation of the sanitary were easement that is no longer needed shall occur prior to tract acceptance.

The Developer will be installing the City standard asphalt street section for the majority of the streets in the project with only specialty paving (i.e. pavers, stamped concrete, stamped asphalt, etc.) in a few areas to act as "accents" to the project entry or other areas as approved by the City Engineer. In order to facilitate the maintenance and repair of the public sanitary sewer lines in the future, the Developer shall install double-walled pipe or other pipe protective measures as approved by the City Engineer, in all locations where the pipe runs under specialty paving. Additionally, no pipe joints will be allowed in specialty paving areas.

Sewer lines shall be extended across all frontages and stubbed to each Planning Area.

Sewer laterals with cleanouts behind the curb shall be installed to each lot or site before the streets are surfaced.

8. STORM WATER DRAINAGE AND TREATMENT REQUIREMENTS

A. General

1. This site is subject to the National Pollutant Discharge Elimination System (NPDES) Program. Prior to the issuance of the initial grading or building permit, the Developer shall provide evidence that the site is covered by the statewide General Permit to Discharge Storm Water associated with construction activity. This requires confirmation that a Notice of Intent (NOI) and the applicable fee was sent to the State Water Resources Control Board. In addition, the grading plans need to state: "All grading shall be in accordance with the Storm Water Pollution Prevention Plan prepared by the Developer per the Notice of Intent on file with the State Water Resources Control Board".

2. Necessary interceptor ditches shall be concrete. Field inlets and storm drainage pipe may be necessary in conjunction with concrete interceptor ditches as secondary drainage releases. All interceptor ditches shall be privately maintained.

B. Storm Drainage Requirements

1. Drainage from this site currently outfalls to the Arroyo Las Positas which is identified in the Zone 7 Stream Management Master plan and Stream WISE Program, Project R5-2, dated August 2006 as impacted for sediment. The necessary improvements needed to alleviate this deficiency include removing the sediment from Airway Blvd. to Kitty Hawk Road. To avoid worsening downstream creek impacts the Developer shall evaluate the impacts to the creek as a result of this development and demonstrate that they are equal to or less than the existing impacts to the creek prior to development. If the impacts of the proposed development are found to exceed the pre-project impacts to the creek the Developer may: 1) choose to complete the improvements as part of their project; 2) wait until the improvements are completed by the City or Zone 7 with a future CIP project prior to proceeding with their project; or 3) provide with their project, on-site facilities that create post-development storm flows that are less than or equal to pre-development flows and

meet the City's discharge guidelines. If detention is needed the Developer shall regulate storm water flows up to and including the 100-year storm with the discharge rate the same as that required by the Hydromodification Management Plan "HMP". Developer shall submit calculations demonstrating that the added detention and flow regulation results in post project flows that are equal or less than the existing impacts to the creek prior to development.

2. *This project is located within an impacted storm drainage basin as identified in the City's Storm Drain Master Plan (dated July 2004). The necessary improvements needed to increase downstream capacity are not currently identified as a project within the City's current Capital Improvement Program (CIP). The applicant may: 1) choose to install the storm drain improvements as part of their project; 2) wait until the improvements are installed by the City with a future CIP project prior to proceeding with their project; or 3) provide with their project, on-site facilities that create post-development storm flows that are less than or equal to pre-development flows.*

Per the City's Facilities Planning Guidelines (dated June 2005), the flows must have the following characteristics:

> *For a 10-year design discharge: a hydraulic grade line (HGL) is no higher than 1.25 feet below the top of curb elevation at any manhole or inlet.*
>
> *For a 100-year design discharge: a HGL does not exceed the top of curb elevation. (This is required for item 3 above.)*

For additional detail on these guidelines, the applicant should refer to the following resources: City of Livermore Storm Drain Master Plan & City of Livermore Facilities Planning Guidelines (both available at the Engineering counter at City Hall).

Stormwater Hydromodification Vault

The storm drainage for the site shall be conveyed to the proposed stormwater hydromodification vault located at the southern end of the project as shown on the tentative map. This stormwater hydromodification vault shall be sized to serve the ultimate development of the site and detain the difference between pre-development and post development storm water flows for the 100-year storm based upon the City's NPDES storm water discharge permit. This stormwater hydromodification vault shall be privately owned and maintained.

C. Stormwater Infrastructure Maintenance Funding

The cost to maintain all private storm water infrastructure installed with this project shall be funded by the Developer.

D. Channels – Not Used

E. Storm Water Treatment, Detention and Low Impact Development Requirements

1. *The Developer shall treat the storm water runoff from this site prior to having the storm water enter the City's storm water distribution system. Stormwater Treatment, Low Impact Development, and Trash Capture is required by the Regional Water Quality Control Board. The Developer shall complete and or update the Stormwater Requirements Checklist. The Developer shall provide a storm water treatment plan with calculations indicating treatment that meets the latest requirements described in Section C.3 of the City's NPDES Permit with the Regional Water Quality Control Board. City approval of this plan and calculations is required prior to the approval of the improvement plans.*

2. *This project is greater than one acre, the Developer shall provide a Hydrograph Modification Plan (HMP) with calculations in accordance with the Alameda Countywide Cleanwater Program (ACCWP) Bay Area Hydrology Model (BAHM) guidelines. The software for the design of control measures to meet the Flow Duration Control is available to download from* www.bayareamodel.org. *For additional information you may contact Debbie Salgado in the City's Engineering Department at (925-960-4558)*

3. *Prior to final map approval, the applicant shall enter into a maintenance agreement with the City of Livermore for all storm water treatment devices deemed necessary on this site. If the stormwater treatment devices will be maintained by the individual homeowners a cleanout will be necessary at the property lines to allow the residents to maintain their portion of the private storm drain underdrain. If the stormwater treatment device will be maintained by a Homeowners Association, then the cleanouts at each of the property lines may not be needed. The storm drain treatment devices shall be shown on the plat plans and included in the Operations and Maintenance Agreement. The Operations and Maintenance Agreement(s) shall be recorded prior to recordation of the Final Map.*

F. Stormwater Treatment Infrastructure Maintenance Funding

The cost to maintain all private storm water treatment, detention and low impact development infrastructure installed with this project shall be funded by the Developer.

The cost to maintain storm water treatment devices located within a public street will be maintained by the City through the INSP Maintenance CFD.

9. REQUIRED SOURCE CONTROL STORMWATER MEASURES

The Regional Water Quality Control Board adopted Order R2-2022-0018 issuing the Alameda Countywide NPDES municipal storm water permit for the Alameda Countywide Clean Water Program. The 17 member agencies, including Livermore, are subject to this permit and all its requirements including the following:

> *"The Permittees shall, as part of their continuous improvement process, submit enhanced new development and significant redevelopment Performance Standards*

that summarize source control requirements for such projects to limit pollutant generation, discharge, and runoff, to the maximum extent practicable…"

In accordance with this requirement, the following source control measures, included as part of these Conditions of Approval, shall be implemented as a part of this project.

A. Structural Control Measures

1. Illegal Dumping to Storm Drain Inlets and Waterways

On-site storm drain inlets, except inlets located in landscaped areas, shall be clearly marked with the words "No Dumping! Flows to Bay" on a stainless steel marker. The stainless steel markers are available for purchase from the Water Resources Division. For ordering information, please call 925-960-8100. For projects with newly-developed, privately-maintained streets, agency staff will verify that storm drain inlets have been marked before the final sign-off on the project's building permit or encroachment permit.

2. Interior Floor Drains

Approved interior floor drains shall be plumbed to the sanitary sewer system and shall not be connected to the storm drain system. The applicant shall contact the Water Resources Division for specific connection and discharge requirements.

3. Parking Garages

Interior level parking garage floor drains shall be connected to a sand/oil interceptor or equivalent water treatment device approved by the Water Resources Division prior to discharging to the sanitary sewer system.

4. Pesticide/Fertilizer Application and Irrigation

a. Landscaping shall be designed to minimize irrigation and runoff, promote surface infiltration where possible, minimize the use of fertilizers and pesticides that can contribute to storm water pollution, and incorporate appropriate Bay-Friendly Landscaping principles.

b. If a landscaping plan is required as part of a development project application, the plan shall meet the following conditions related to reduction of pesticide use on the project site:

I. Where feasible, landscaping shall be designed and operated to treat storm water runoff by incorporating elements that collect, detain, and infiltrate runoff. In areas that provide detention of water, plants that are tolerant of saturated soil conditions and prolonged exposure to water shall be specified.

II. Plant materials selected shall be appropriate to site specific characteristics such as soil type, topography, climate, amount and timing of sunlight, prevailing winds, rainfall, air movement, patterns of land use, ecological consistency and plant interactions to ensure successful establishment.

III. Existing native trees, shrubs, and ground cover shall be retained and incorporated into the landscape plan to the maximum extent practicable.

IV. Unless otherwise specified, proper maintenance of landscaping shall be the responsibility of the property owner.

V. Integrated pest management (IPM) principles and techniques shall be encouraged as part of the landscaping design. Some examples of IPM principles and techniques include the following:

i. Select plants that are well adapted to soil conditions at the site.

ii. Select plants that are well adapted to sun and shade conditions at the site. Consider future conditions when plants reach maturity. Consider seasonal changes and time of day.

iii. Provide irrigation appropriate to the water requirements of the selected plants.

iv. Select pest and disease resistant plants.

v. Plant a diversity of species to prevent a potential pest infestation from affecting the entire landscaping plan.

vi. Use "insectary" plants in the landscaping to attract and keep beneficial insects.

VI. Landscaping shall also comply with City of Livermore's "Water Efficient Landscape Ordinance". However, areas of a site used for bio-swales or other landscaped areas that function as a storm water treatment measure shall be exempt from the Water Efficient Landscaping requirements.

VII. An efficient irrigation system shall be installed in areas requiring irrigation. An example of an efficient irrigation system is one that includes a weather-based (automatic, self-adjusting) irrigation controller with a moisture and/or rain sensor shutoff, and in which sprinkler and spray heads are not permitted in areas less than 8 feet wide.

5. Pool, Spa, and Fountain Discharges

a. New or rebuilt swimming pools, hot tubs, spas and fountains must have a connection to the sanitary sewer to facilitate draining. This connection could be a drain in the pool to the sanitary sewer or a cleanout located close enough to the pool so that a hose can readily direct the pool discharge into the sanitary sewer cleanout.

b. When draining is necessary, a hose or other temporary system shall be directed into a sanitary sewer cleanout, or vegetated areas that are large enough to accommodate the volume without allowing the discharged water to flow to the storm drain system or receiving water body.

6. Food Service Equipment Cleaning

a. Food service facilities (including grocery stores) shall have a sink or other container for cleaning floor mats, equipment, and hood filters, which is connected to a grease interceptor prior to discharging to the sanitary sewer system. The cleaning area shall be large enough to allow for the largest type of equipment that must be cleaned at the facility. The cleaning area shall be indoors or in a roofed area outdoors and must be plumbed to the sanitary sewer. The discharge of wastewater from these washing activities to the storm drain system is prohibited. Outdoor cleaning areas shall be designed to prevent storm water run-on from entering the sanitary sewer and to prevent wastewater runoff to the storm drain from washing activities. Signs shall be posted indicating that all food service equipment washing activities shall be conducted in this area.

b. An oil and grease interceptor with a minimum size of 750 gallons is required for all food service facilities (including restaurants and grocery stores). Facilities that do not have any cooking or any other grease generating processes may request an exemption from this requirement.

7. Refuse Areas

a. New or redevelopment projects shall provide a roofed and enclosed area for dumpsters, recycling containers, compactors, and food waste containers. The area shall be designed to prevent water run-on to the area, to prevent runoff from the refuse area and to properly contain litter and trash. Dumpster leakage from covered trash and food compactor enclosures shall drain to the sanitary sewer via connection to an approved oil and grease interceptor device.

b. Runoff from trash enclosures, recycling areas, and/or food compactor enclosures or similar facilities shall not discharge to the storm drain system. Trash enclosure areas shall be designed to avoid run-on to the trash enclosure area. In most cases, drains are not permitted within trash enclosure areas. A drain, however, must be provided for compactors. If a drain is required in or beneath dumpsters, compactors, and tallow bin areas, it shall be connected to a grease removal device prior to discharging to the sanitary sewer.

8. Outdoor Process Activities/Equipment [1]

[1] Examples of businesses that may have outdoor process activities and equipment include machine shops and auto repair shops, and industries that have pretreatment facilities.

a. Process activities shall be performed either indoors or in roofed outdoor areas. If performed outdoors, the area shall be designed to prevent the "run-on" of storm water drainage, as well, as the runoff from the area with process activities.

b. Process equipment areas shall drain to the sanitary sewer system. The applicant shall contact the Water Resources Division for specific connection and discharge requirements.

9. Outdoor Equipment/Materials Storage

a. All outdoor equipment and materials storage areas shall be covered and/or bermed, or shall be designed with Best Management Practices (BMP) that effectively minimize the potential runoff and contact of storm water to pollutants.

b. Storage areas containing non-hazardous liquids shall be covered by a roof and be contained by berms, dikes, liners, vaults or similar spill containment devices.

c. All on-site hazardous materials and wastes, as defined and/or regulated by the California Public Health Code must be used, managed, and stored in compliance with the applicable Livermore Pleasanton Fire Department's requirements and regulations.

10. Vehicle/Equipment and Commercial/Industrial Cleaning

a. Wastewater from vehicle and equipment washing operations shall not be discharged to the storm drain system. Auto dealerships, however, may rinse off vehicle exterior surfaces for appearance purposes, provided only a minimum volume of water is used without soap or other cleaning agents.

b. Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a roofed, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs (faucets) and installing signs prohibiting such uses. Vehicle/equipment washing areas shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer via an oil water separator with a minimum size of 750-gallons or an approved equivalent pretreatment device.

c. Commercial car wash facilities shall be designed and operated such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer via an oil water separator with a minimum size of 750-gallons or an approved equivalent pretreatment device.

d. All facilities, which discharge wastewater generated from vehicle or equipment washing, must obtain a wastewater discharge permit from the City of Livermore's Water Resources Division prior to the commencement of the discharge.

11. Vehicle/Equipment Repair and Maintenance

a. Vehicle/equipment repair and maintenance shall be performed in a designated area indoors, or if such services must be performed outdoors, in an area designed to prevent the run-on and runoff of storm water. Oil and other automotive fluid change service must always be performed indoors.

b. Secondary containment shall be provided for exterior work areas where hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.

c. Vehicle service facilities shall not contain floor drains.

d. Tanks, containers, or sinks used for parts cleaning or rinsing shall not be connected to the storm drain system. Tanks, containers, or sinks used for such purposes shall not be directly connected to the sanitary sewer. Discharges to the sanitary sewer from such operations require prior approval from the Water Resources Division. The applicant shall contact the Water Resources Division for specific connection and discharge requirements.

12. Fuel Dispensing Areas

a. Fueling areas[2] shall have impermeable surfaces (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of storm water to the maximum extent practicable.

b. Fueling areas shall be covered by a canopy or roof that extends a minimum of ten feet in each direction from each pump. Roof downspouts from the canopy or roof shall not drain onto the fueling area.

13. Loading Docks

a. Loading docks shall be graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct storm water away from the loading area. Storm water runoff from loading dock areas shall be connected to a post-construction storm water treatment measure(s) prior to discharge to the storm drain system.

b. Door skirts between the trailers and the building shall be installed to prevent exposure of loading activities to rain, unless one of the following conditions applies: the loading dock is covered, or the applicant demonstrates that rainfall will not result in an exposure of storm water to pollutants.

14. Fire Sprinkler Test Water

[2] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

Provisions shall be made in the project design and construction to allow for the discharge of fire sprinkler test water to an onsite vegetated area. If this is not feasible, provide for discharge to the sanitary sewer in accordance with current plumbing codes.

15. Miscellaneous Drain or Wash Water

a. Boiler drain lines shall be connected to the sanitary sewer system and may not discharge to the storm drain system.

b. For small air conditioning units, air conditioning condensate shall be directed to landscaped areas as a minimum BMP. For large air conditioning units, in new developments or significant redevelopments, condensation lines shall be connected to the sanitary sewer system, wherever feasible.

c. Roof drains shall discharge and drain away from the building foundation to landscaped areas wherever feasible.

d. Washing and/or steam cleaning activities must be performed at an appropriately equipped facility that drains to the sanitary sewer as specified in Section J. Any outdoor washing or pressure washing must be in compliance with the City's Stormwater Management Program requirements and managed in such a way that there is no discharge of soaps or other pollutants to the storm drain system. The applicant shall contact the Water Resources Division for specific discharge requirements.

16. Architectural Copper Installation

Projects with architectural copper should, if possible, purchase copper materials that have been pre-patinated at the factor. Whether patination is done offsite or onsite, applicant should consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. If patination is done on-site, implement one or both of the following:

a. Collect rinse water in a tank and pump to the sanitary sewer. Contact the City of Livermore Water Resources before discharging to the sanitary sewer.

b. Collect the rinse water in a tank and haul off-site for proper disposal.

B. II. OPERATIONAL BMPS

This section details Best Management Practices (BMP) that private property owners and/or the occupants of private property must implement following the construction of projects. Ultimately, the responsibility for implementation of these BMPs rests with the property owners. The City of Livermore's Source Control Program routinely performs inspections of industrial and commercial sites to verify BMP implementation and effectiveness.

1. Paved Sidewalks and Parking Lots

Sidewalks and parking lots shall be swept regularly to minimize the accumulation of litter and debris. Wash water resulting from the pressure washing of parking lots must be captured, pretreated (if necessary) to meet local discharge limits, and discharged to the sanitary sewer. Wash water resulting from the pressure washing of sidewalks may be allowed to drain to the storm drain system provided that (a) no soap or other cleaning agents are used, and (b) all debris are trapped and collected to prevent entry into the storm drain system. Under no circumstances shall wash water containing any soap or other cleaning agents be discharged to the storm drain system.

2. Private Streets, Utilities and Common Areas

   a. The owner of private streets and storm drains shall prepare and implement a plan for street sweeping of paved private roads and cleaning of all storm drain inlets.

   b. For residential developments, where other maintenance mechanisms are not applicable or otherwise in place, a Property Owners Association, Landscape& Lighting District, or an equivalent mechanism shall be created and shall be responsible for maintaining all private streets and private utilities and other privately owned common areas and facilities on the site including landscaping. These maintenance responsibilities shall include implementing and maintaining storm water BMPs associated with improvements and landscaping. CC&R's creating the association shall be reviewed and approved by the City prior to the recordation of the Final Map and recorded prior to the sale of the first residential unit. The CC&R's or Landscape & Lighting District shall describe how the storm water BMPs associated with privately owned improvements and landscaping shall be maintained and detail contact information for the entity responsible for such maintenance activities.

3. Vehicle/Equipment Repair and Maintenance

   a. No person shall dispose of, or permit the disposal, directly or indirectly, of vehicle fluids, hazardous materials, or rinse water from parts cleaning operations into storm drains.

   b. No vehicle fluid removal shall be performed outside a building, or on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.

   c. No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area that cannot discharge to the storm drain.

4. Fueling Areas

The property owner shall dry sweep the fueling area and spot clean leaks and drips on a routine basis. Fueling areas shall not be washed down with water unless the wash water is

collected and prevented from discharging to the storm drain system. Wash water resulting from the pressure washing of fueling areas must be captured, pretreated (if necessary) to meet local discharge limits, and discharged to the sanitary sewer or hauled offsite for proper disposal through a licensed waste hauler.

5. Loading Docks

The property owner shall ensure that BMPs are implemented to prevent potential storm water pollution. These BMPs shall include, but are not limited to, a regular program of sweeping, litter control, and spill clean-up.

6. On-site Storm Drains

All on-site storm drains must be inspected and, if necessary, cleaned at least once a year immediately prior to the rainy season.

7. Architectural Copper Cleaning, Treating or Washing

When cleaning, treating or washing architectural copper features, implement one or both of the following:

a. Collect rinse water in a tank and pump to the sanitary sewer. Contact the City of Livermore Water Resources before discharging to the sanitary sewer.

b. Collect the rinse water in a tank and haul off-site for proper disposal.

10. WATER SUPPLY (CITY)

The Developer is installing City standard asphalt street section for the majority of the streets within the project with specialty paving (i.e. pavers, stamped concrete, stamped asphalt, etc.) in a few areas to act as "accents" to the project entry or other areas as approved by the City Engineer. In order to facilitate the maintenance and repair of the water lines in the future, the Developer shall install double-walled pipe or other pipe protective measures as approved by the City Engineer, in all locations where the pipe runs under specialty paving. Additionally, no pipe joints will be allowed in specialty paving areas.

Water mains shall be extended across all frontages of each phase and all waterline valves must notate "EPDM" on the valve body.

The developer shall install pressure reduction valves (PRVs), backflow prevention devices and appurtenances on the potable and reclaimed water services as directed by the City Engineer

The fire service backflow preventer(s) shall be effectively screened from the public right-of-way while at the same time preserving ease of maintenance access to the backflow preventer(s). Screening shall be as specified on City Standard Detail W-10A, B and C. The fire service

backflow preventer(s) shall meet the performance standards of the backflow preventer shown in City Standard Detail W-10A, B and C.

Prior to removal of a 1-inch, a 1.5-inch, or a 2-inch water service, the Developer shall contact the City's Water Resources Division at (925) 960-8100 and ask if the City would like to convert the service to a water sampling station. Existing water services (of any size) that will not be used by the proposed development shall be abandoned at the main. Large services shall be abandoned by placing a blind flange on the tee at the main. Small services shall be abandoned by removing the corporation stop valve and installing the appropriate plug in the service saddle. Any valves or meters on abandoned services shall be removed. The meters shall be returned to the Water Resources Division if they are not reused. The Developer shall coordinate water service removals with the City's Water Resources Division as well as with the public works inspector.

Because the project is located within the City of Livermore Water Zone 1, the developer shall install pressure reduction valves (PRVs), backflow prevention devices and appurtenances on the potable and reclaimed water services as directed by the City Engineer.

The fire service backflow preventer(s) shall be effectively screened from the public right-of-way while at the same time preserving ease of maintenance access to the backflow preventer(s). Screening shall be as specified on City Standard Detail W-10A, B and C. The fire service backflow preventer(s) shall meet the performance standards of the backflow preventer shown in City Standard Detail W-10A, B and C.

Because the project is located within a reclaimed water service area, the irrigation system shall be connected to the reclaimed water system. If the Reclaimed water main is not currently located along the sight frontage of this project, the Developer shall extend the water main as necessary to connect to the main along said project site frontage.

Furthermore, the Developer shall Prepare a "Reclaimed Water Engineer's Report" for review and shall obtain City approval of the "Reclaimed Water Engineer's Report" prior to the approval of the final map.

11. UNDERGROUNDING OF UTILITIES:

All existing and new electric (with the exception of any 60 KV and higher voltage wires) and communication lines along the project frontage and within the project shall be placed underground. Electric, gas, Comcast and SBC utilities are required and shall be placed in a common trench. All electric transformers shall be placed underground.

12. TRAILWAY/BIKEWAY REQUIREMENTS

Active Transportation Plan

Certain portions of this development are within the City of Livermore Active Transportation Plan established and adopted as part of the General Plan.

In accordance with this plan, the Developer will be required to construct Class IV bike lanes including but not limited to the project frontages of Portola Avenue and Isabel Avenue.

In accordance with the DA the developer shall install a multi-use trail at the southern end of the project to provide neighborhood connectivity and a visual buffer from I-580. The trail shall be 26' wide and shall coexist with an Emergency Vehicle Access. The Developer shall dedicate a public access easement over the trail for pedestrian access on the final map. Prior to the filing of the final map, the Developer shall enter into a Maintenance Agreement with the City to ensure the long-term maintenance of this trail.

13. MEDIANS AND OTHER LANDSCAPED AREAS

Since the City has a new centralized irrigation system with a computer terminal and modem located at the City's Maintenance Service Center, the Developer shall install a City standard centralized irrigation controller system with communication accessories as approved by the City. The City may exempt this requirement based on the limited size of the landscape area.

14. HORTICULTURIST'S REPORT

A Horticulturist's report will be required if the site is located north of Highway I-580.

15. SPECIAL DISTRICTS

A. Landscaping and Lighting Maintenance and Operation

This development is within Landscape Maintenance District LL-821 that was created to maintain public improvements installed by Shea for the development of commercial properties. Because the property has been rezoned from commercial to residential, the Developer shall de-annex this property from LL-821 and annex into Landscape Maintenance District LL-857 which was created to maintain public improvements within Shea residential properties. The Developer shall initiate and bear the costs for the de-annexation from LL-821 and the annexation to LL-857.

The Developer may provide an alternative source of funding for its share of the maintenance of the public improvements within LL-857 subject to approval by the City.

B. Assessment District

Portions of this development are within Community Facilities District 2016-2 (Shea Properties) (CFD) and is subject to the charges and requirements thereof. Because the CFD was formed with a non-residential use for the parcels within Tract 8659, the Developer shall bear the costs for any changes or modifications to the CFD that will be necessary to reconfigure the assessments for the new residential use within Tract 8659.

The development shall annex into Community Facilities Maintenance District 2023-1 (Isabel Neighborhood Specific Plan) to provide the City maintenance funds to maintain portions of public

infrastructure and landscaping that is installed with the Isabel Neighborhood Specific Plan in accordance with the applicable rate and method of approtionment.

The Developer shall initiate and bear the costs for the annexation into CFD 2023-1.

Annexation documents shall be filed with the filing of the final map. The necessary documentation shall be submitted for City review with the first improvement plan submittal.

C. Mello Roos District

This development is within the Triad Community Facilities District 90-1A and is subject to the charges and requirements thereof.

In accordance with DA, the Developer is proposing to form a Community Facilities District (CFD) to fund the construction of back bone infrastructure and certain development impact fees. The formation of this new CFD must be completed prior to the filing of the final map.

16. AIRPORT LOCATION

This development is located in the vicinity of the Livermore Municipal Airport. Aircraft operations in the vicinity of the property may potentially create nuisances, including but not limited to noise, vibration or odors. The owner and or future buyer should be aware that operations and flight numbers at the Livermore Municipal Airport could increase in the future. A report must be filed with the Division of Real Estate relative to this matter.

An avigation easement shall be granted to the City. The grant shall be made on the City's "Avigation Easement" form.

17. SUBDIVISION AGREEMENT AND SECURITY

Following tentative map approval, the Subdivision Improvement Agreement will not be submitted to the City Council until the Developer has submitted all of the documents indicated in the "Final Approval of Tract Map Checklist" in the Development Plan Check and Procedures Manual (28) days prior to the city council meeting at which the final map will be considered for final approval by the City Council.

18. FEE AMOUNTS

The Developer will be required to pay the applicable development impact fees and project processing fees due in connection with this subdivision. The fee shall be the amount in effect at the time the fee is required to be paid.

19. VEHICLE ACCESS

Prior to or with the submittal for the first plan check of the tract improvement plans and final map, the Developer shall submit for review and approval a traffic control plan for providing safe entry

to and exit from the site. The purpose of the plan is to ensure that there will be safe entry and exit by construction and other vehicles prior to the installation of the required permanent street improvements.

Access to the development by construction equipment, material delivery and other heavy loads shall be limited by the Developer to the following route:

I-580, Isabel Avenue, Portola Avenue

Such heavy loads will not be allowed on existing residential streets in the vicinity of the development.

The wheel-loading on the above routes shall not exceed State load limits.

20. PHASING

The developer is proposing to file multiple final maps for the project. Per the Tentative Map for Tract 8659, the first final map will subdivide the project to create parcels for future tentative maps. The first final map will also create the primary backbone streets and infrastructure to serve the entire project. The Developer has also proposed to construct the required on-site and off-site master infrastructure improvements as set forth in the Development Agreement, in two phases, which generally proceed as follows (please refer to Development Agreement for the particular sequencing requirements):

Phase 1:
a) Backbone Infrastructure - On-site streets, utilities and amenities
b) Off-site improvements on Isabel Avenue, North Canyons Parkway, Campus Hill Drive, Shea Center Drive and Gateway Avenue and Portola Avenue
c) Caltrans Embankment Landscaping
d) Law Enforcement Assets located on or within City infrastructure

Phase 2:
a) Neighborhood Park
b) Neighborhood Plazas
c) Law Enforcement Assets located on or within Phase 2 improvements

FL:DES

VTTM 8659 (SUB22-008) Harridge - Isabel Crossings

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INSP Policy Table	
Land Use	
Goal/Policy	Whether the Project is consistent and an explanation. If the policy is not applicable, it is marked N/A.
G-LU-1: Provide a mix of residential, neighborhood-serving commercial, and office uses that supports transit ridership in both commute directions and support a vibrant and livable neighborhood.	
P-LU-1: Establish a new Main Street through the center of the Planning Area that accommodates neighborhood-serving businesses and places for social gathering ,and helps create a sense of place for the Isabel Neighborhood.	Consistent. The Project includes construction of a new commercial Main Street in the central portion of the Planning Area with commercial retail and other commercial uses on the ground floor for future neighborhood-serving businesses and commercial uses, as well as adjacent town squares and a neighborhood park for social gatherings to help create a sense of place for the Isabel Neighborhood.
P-LU-2: Require buildings with Ground Floor Retail/Overlay Flex Space on Main Street between Constitution Drive and Portola Avenue to provide active ground floor uses facing Main Street that are publicly accessible and that generate walk-in clientele.	Consistent. The Planning Area no longer has a Constitution Drive. However, Parcels C2-A, C1-B, and S-1 adjacent to Main Street between Gateway Avenue and Portola Avenue will have ground floor active uses, including a grocery store and retail spaces, to generate walk-in clientele and create a walkable neighborhood where housing and jobs are located in close proximity.
P-LU-3: Establish a neighborhood-serving retail center anchored by a grocery store. This center shall: • Be visible and accessible from the Valley Link station and Main Street; and • Incorporate a major public space such as a plaza or park.	Consistent. As discussed above, the Project will have ground floor retail stores and a grocery store/ food hall along Main Street, as well as adjacent open space town squares, connecting pedestrians to the proposed Valley Link Station a short walking distance away.

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P-LU-4: Allow live/work units in the Neighborhood core as an option for increasing both housing alternatives and business opportunities, particularly before the retail market matures: • Up to 20 percent of the ground floor frontage on each block of Main Street may be live/work units. These units may be converted entirely to a commercial use. The ground floor of these units are required to be active non-residential uses such as retail or flex space (cannot become residential) per the Retail/Flex Space Overlay development standards. • Live/work units located in the Ground Floor Retail / Flex overlay on Main Street shall be designed to meet the ground floor retail design standards and guidelines (Chapter 5, Urban Design) and Building Code standards for retail uses. • Live/work units located within residential areas not located on Main Street must be located adjacent to a public street and may not be converted entirely to a commercial use. These units must remain in residential use, with the option to also operate a business within the unit. • Live/work units shall count as one unit for the purposes of density calculation, open space requirements, and tracking housing. The density calculation shall be based on the underlying residential zone. – The City will require a Zoning Clearance for businesses operating in live/work units within the Ground Floor Retail / Flex overlay. – The non-residential ground floor use of Live/work units within the Ground Floor Retail / Flex overlay shall adhere to the City's HOP standards with the following exceptions: 1. Do not require commercial uses to be clearly incidental and secondary to the residential use; 2. May have in-person contact with clients, customers or employees at the residence; 3. May store up to 250 cubic feet of supplies/ stock/merchandise in the unit;	N/A. The Project does not propose live/work units.

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4. May employ people who do not live in the live/work unit; 5. May have visible signage on vehicles and at the unit, subject to the Ground floor Retail signage standards (Chapter 5, Urban Design); 6. May have one commercial grade vehicle associated with the business; and 7. May include photography studios and retail/ wholesale sales of products as permitted business types.	
P-LU-5: Encourage the continued operation of, and investment in, existing business park, light industrial, and commercial uses.	Consistent. The Project includes commercial uses on the ground floor along the new proposed commercial Main Street, which will be able to support uses that support the neighboring business park and commercial uses.
P-LU-6: Ensure that land uses are compatible with existing residential uses and minimize conflicts between adjacent land uses with respect to scale, safety, noise, privacy, and other potential nuisances and hazards.	Consistent. The Project proposes 1,299 residential units, residential amenities, 2.13 acres of town squares, pocket plazas, and a neighborhood park, as well as a grocery store and retail spaces that support the existing and future residential uses. The Project is designed to be compatible with the existing residential uses and would not pose potential nuisances and hazards to the existing communities.
P-LU-7: Plan the provision of high quality, cost effective child care facilities are provided throughout the Neighborhood. • Encourage new residential, office, and mixed use developments to incorporate child day care facilities early in the site planning and design process. • Consider applying regulatory and/or financial incentives to support child care centers close to the Valley Link station to serve commuters. • Partner with other public agencies such as Alameda County,	N/A. Small and Large Family Day Cares, Day Care Centers are a permitted use in all residential districts within the Project site. Day Care Centers are additionally permitted in the ground floor retail/flex overlay space and allowed through a Zoning Use Permits in all other commercial zones.

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non-profit organizations, and private child care providers to leverage resources and assist with planning efforts.	
P-LU-8: The City shall encourage property owners to collaborate and prepare Master Plans by residential subarea. (Refer to Figure 2-3 for the subarea map.) For the purposes of this Specific Plan, Master Planning shall mean the subdivision and/or site plan design review application of at least one entire subarea. If Master Planned, residential densities may be averaged or distributed across the subarea rather than calculated at the parcel level, provided that the Master Plan complies with: 1. The target subarea unit count and the performance measures identified in Table 2-6; and 2. All other applicable development and design standards for the land use. If Master Planning more than one subarea, the densities may be averaged or distributed across those subareas. The City may consider a unit count lower than the average subarea unit count within a Master Plan, if there are demonstrated, significant regulatory, environmental, or other constraints within the subarea, as determined by the Director.	Consistent. The Project encompasses subareas 3b and 3c subareas and proposes 1,299 dwelling units across the two subareas. Table 2-6 expects a minimum of 1,236 dwelling units to be constructed across the two subareas, and the Project meets or exceeds this requirement.
P-LU-9: Retail/Flex Space Overlay on the BART property north of I-580 is diagrammatic on Figure 2-1. As the Plan is implemented, the Overlay shall apply to all building frontages along the Isabel Path between the north end of the Valley Link pedestrian bridge and Isabel Avenue.	Consistent. The project proposes a grocery store or food hall on Parcel S1, a town square (Parcel TS), and two pocket plazas (Parcels C2-C and C1-C) directly north of Isabel Avenue, and it proposes additional ground floor retail spaces along Main Street and a neighborhood park on Parcel N3-B. The Retail/Flex Space Overlay areas on Parcels C2-A, C1-A, S1, and the town square and

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	parks, would create a walkable environment for pedestrians traveling between Isabel Avenue and Portola Avenue.
P-LU-10: Allow mobile food vendors to operate in non-residential areas within the Isabel Neighborhood with a Temporary Use Permit (TUP), subject to the following regulations: • Mobile food vendors are responsible for providing a solid waste receptacle and maintaining a clean environment around their facility. • No loud music. • No blocking driveways or taking up more than two spaces in private parking lots. • Mobile food vendors must provide copies of relevant permits from the Alameda County Health Department and obtain a City of Livermore Business License, as part of the TUP application. • The TUP shall identify the locations in which vendors would be allowed to locate and during which hours of the day (between 8:00 AM and 9:00 PM, for example). • The TUP shall be effective for one calendar year with no limit on the number of days in which it can operate. Each TUP shall be subject to annual renewal. • There may be up to 10 active TUPs for the Isabel Neighborhood at any point in time. This number may be reduced by the Community Development Director when the Neighborhood Commercial uses and Main Street commercial uses begin to open. • The requirement for a TUP would not apply to mobile food vendors that are part of special events such as festivals and farmer's markets, which would require a Special Event Permit.	As specified in the Development Agreement, the Project will provide Temporary Commercial Activation prior to the Commercial Block construction. Temporary Commercial Activation may include farmers markets, food trucks, mobile vendors, and other community-serving uses..
G-LU-2: Protect scenic views to the extent possible and create new view corridors from within the Planning Area.	Consistent. Although the mixed-use commercial buildings may block hillside views from Interstate 580, as ministerially allowed by state law, the Project proposes a neighborhood park, town square, and two pocket plazas, as well as a recreation center.

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	These features contribute to the creation of new view corridors within the Planning Area to nearby hillsides. The heights of the Project buildings are designed and oriented to protect views.
P-LU-11: In areas exempt from the Scenic Corridor Policy height limits, certain architectural elements may exceed the established height limits by up to 10 feet. Examples of allowable architectural elements include: • Church spires, cupolas, dormers, chimneys, and vents; • Television and radio receiving antennas; and • Wireless telecommunication facilities and associated screening (subject to Section 6.02.100 of the Livermore Development Code)	Consistent. The Project proposes three-story townhomes over the majority of the Site with central mixed-use buildings, including the five-story building over the proposed grocery store/food hall on Parcel S-1. The Project does not propose any designs that would be incompatible with or significantly obstruct views from the surrounding neighborhoods. The taller buildings proposed within the Project are located to the south along Isabel Avenue or along Main Street, where higher intensity developments are expected and planned for in the INSP.
P-LU-12: The Isabel Neighborhood shall be exempt from the "Special Height Regulations" in Section 4.02.040 of the Livermore Development Code.	Consistent.
P-LU-13: The Core, East Airway, and Portola areas, as identified on Figure 2-4, are exempt from the City's existing Scenic Corridor policies as defined in the Community Character Element of the Livermore General Plan. Maximum building height above mean sea level for these three areas are established by Figure 2-4. All other buildings proposed on this site remain subject to the Scenic Corridor Policy. Any buildings outside of the exception area remain subject to the Scenic Corridor Policy, or the prescribed height limits in the Plan area, whichever is more restrictive.	Consistent. The Project is consistent with the maximum building height above mean sea level as established by Figure 2-4. The Project proposes to exceed the applicable height limits in portions of Planning Areas C2-A, C-5, S-1, and S3-B; however, the Project has requested a "waiver or concession" under to the State Density Bonus Law for additional height in these locations. The areas where additional height is provided are located internal to the Project Site or near Isabel Avenue where the additional height, which is not substantial, would not block key views for neighboring properties in locations where higher development intensity is planned by the INSP.
P-LU-14: Development on all sites subject to Federal Aviation Regulations Part 77 must demonstrate compliance with the height limits established for airspace protection.	Consistent. The Project would comply with Federal Aviation Regulations Part 77. The Project has reviewed with FAA's Obstruction Evaluation Group the proposed heights of the proposed buildings, who have indicated that the proposed height would not pose a hazard to air navigation or require further analysis. The Project would only be required to notify the FAA five days after the construction reaches its greatest height.

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P-LU-15: Residential buildings shall be within the following ranges: 2-3 stories for Transition, 2-4 stories for Village, 3-5 stories for Center, and 3-6 stories for Core.	Consistent. The residential buildings the Project proposes are primarily three-story townhomes that comply with applicable INSP standards pursuant to the approved master plan. The Project proposes a four-story mixed-use building on Parcel C1-B and five-story mixed-use buildings on Parcel C2-A in the central area of the Project Site, where the additional height is expected and planned for in accordance with applicable INSP standards pursuant to the approved master plan. The Project's proposed mixed-use buildings that are five or six stories tall in Planning Areas S3-A, S3-B and S-1 are consistent with applicable INSP standards pursuant to the approved master plan.
P-LU-16: For Office, Office Core, General Commercial, and Business Park uses, maximum building height may be increased to 55 feet with a CUP if in compliance with Scenic Corridor policy.	N/A. The Project does not propose standalone commercial buildings. All commercial uses are within mixed-use residential and commercial buildings.
G-LU-3: Provide a variety of public open spaces and common areas within residential developments.	Consistent. The Project proposes a recreation center, a neighborhood park, two pocket plazas, and a town square within the proposed residential development.
P-LU-17: Ensure that all new development provides ample landscaped areas, private open space, common open space, and publicly accessible open space. Up to 10 percent of the common area requirement may be satisfied through the provision of common indoor areas. • When provided as Ground-floor Retail/ Flex space, these indoor spaces may not be converted to commercial use if utilized in the calculation of open space requirements – unless new common area is provided in kind as a replacement.	Consistent. The Project provides 5.42 acres of common open space, including playgrounds, community gardens, pocket plazas,and trails, and it provides 16,262 sf of indoor amenity space and 83,317 sf of private open space. The Project provides a total of 319,614 sf of open space for 1,299 dwelling units, an average of 246 sf of open space per dwelling unit, which exceeds applicable INSP and code requirements.
P-LU-18: New development under the Isabel Neighborhood Specific Plan shall fund the cost of ongoing maintenance and replacement for all new City landscape and open space assets.	Consistent. The Project would construct and maintain landscaping and open space within the Project boundary.
P-LU-19: For residential project sites that are one acre or less, required common open space may be provided on-site or off-site. Any open space provided off-site must be located within the Isabel Neighborhood Specific Plan area.	N/A. The Project exceeds one-acre in size.

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P-LU-20: For residential project sites greater than one acre and located adjacent to a neighborhood park (including across a public street), up to 25 percent of the required common open space may be satisfied through payment of an in-lieu fee.	N/A. The Project would exceed the required open space and would not need to satisfy open space requirement through payment of an in-lieu fee.
P-LU-21: Required landscaping, common open space, and publicly accessible open space areas may be located within required setbacks provided that these areas are appropriately designed to be used as common open space.	Consistent. The Project would provide landscaping and open space throughout the Project area, including within setbacks.
P-LU-22: Site plans must incorporate pathways to the larger street network, and, where feasible, the open space and trails network.	Consistent. The Project includes new streets, open space, and pedestrian trails.
G-LU-4: Encourage preservation of existing farmland under conservation easements and mitigation for the loss of important farmland.	N/A. The Site does not have existing farmland.
P-LU-23: Preserve land north of I-580 in the Planning Area that is classified as Farmland of Statewide Importance or Unique Farmland by the California Department of Conservation Farmland Mapping and Monitoring Program.	N/A.
P-LU-24: The City recommends that development of the BART site provide compensatory mitigation, per the BART to Livermore Extension EIR. To the maximum extent feasible, compensatory mitigation should be implemented in Eastern Alameda County at sites immediately adjacent to the area of the Valley Link project impacts. If this is not acceptable to Resource Agencies, other properties in North Livermore and Doolan Canyon (within unincorporated Alameda County) offer many opportunities. Potential mitigation areas that are farther from the Valley Link to Livermore Extension project footprint but still within Eastern Alameda County include: Altamont Hills, Greenville Road, and South Livermore.	N/A.
P-LU-25: Open space preservation should prioritize land that is adjacent to urban growth boundaries and/or existing easements, in order to create and protect wildlife corridors.	N/A.

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P-LU-26: The City shall work with Valley Link, and Alameda County to leverage other resources for farmland preservation to maximize the value of the mitigation and benefits to North Livermore.	N/A.
P-LU-27: Development of the Gandolfo property shall acquire Prime farmland at a 1:1 ratio of compensatory mitigation under permanent easement.	N/A.
G-LU-5: Support a diverse housing stock that provides options for students, seniors, low-income families, first-time homebuyers, and people with disabilities.	Consistent. The 1,299-dwelling-unit Project proposes to provide 363 affordable units, which is 28% of the total units provided, and 103 more affordable units than would otherwise be required by the IHO and the INSP including a complete range of affordability levels from very low income to moderate income housing, thus providing housing options for a broad array of persons. The Project also includes market rate and affordable for-sale units.
P-LU-28: Assist Las Positas College with pursuing opportunities for student and faculty housing projects.	N/A.
P-LU-29: Each product type within new residential developments shall provide at least two unit types which differ in the number of bedrooms.	Consistent. The Project proposes at least two unit types on each Planning Area within the Project Site.
P-LU-30: For residential projects with at least 10 dwelling units, 10 percent of the units must adhere to principles of Universal Design. Any fraction greater than or equal to 0.50 shall be rounded up to nearest whole number. No additional unit shall adhere to principles of Universal Design for a fractional unit of less than 0.50. Such features include but are not limited to: • Entrances without steps and a flat or very low threshold – • living space on one floor or stair landings big enough to accept lifts – • wide interior doors, hallways, and alcoves, and • clear floor space in kitchens and bathrooms. All residential development shall comply with the California Building Code for accessibility.	Consistent. The Project's housing units adhere to the principles of Universal Design, maximizing access for all persons through ground floor access points, wide walkways and access points, and open floor plans, among other elements. Additionally, the Project would comply with ADA requirements to ensure that at least 10% of the apartments have hallways, kitchens, and bathrooms that are ADA accessible.

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P-LU-31: Residential projects may achieve a density bonus consistent with the Livermore Development Code density bonus provisions.	Consistent. The Project requests incentives and waivers pursuant to the State Density Bonus Law (but not additional density).
P-LU-32: Encourage the construction of single room occupancy, studio, and accessible units.	Consistent. The Project proposes studio or one-bedroom units on Parcels C1-B, C2-A, S1, S3-A, and S3-B and will comply with Universal Design principles and ADA accessibility requirements.
G-LU-6: Promote the production of affordable for-sale and rental units and mixed-income developments such that at least 25 percent of all new units at build-out are offered at below-market rates, in order to provide affordable housing opportunities for rent and ownership in the Isabel Neighborhood and to take advantage of the strong connection between transit use and afford-able housing.	Consistent. The 1,299-dwelling-unit Project proposes to provide 363 affordable units, which is 28% of the total units provided, and 103 more affordable units than would otherwise be required by the IHO and the INSP.
P-LU-33: All new residential development shall comply with the City's Inclusionary Ordinance (Section 10.06.050 of the Livermore Development Code), except that at least 20 percent of units for each project shall be affordable (i.e., offered at below-market rates). The affordable housing units for for-sale residential subdivisions must be sold to moderate and median-income households. Of the total number of for-sale dwelling units (20 percent) set aside, at least five percent (5%) shall be reserved for sale to median-income households with the balance set aside for moderate-income households. Whenever the inclusionary requirement results in a fractional unit(s), the fractional unit(s) shall be combined and provided as median-income units. For example, a 110unit for-sale residential development would be required to provide 15 percent, or 16.5 units, at the moderate-income level and 5 percent, or 5.5 units, at the median-income level. Therefore, 16 units shall be provided at the moderate-income level and 6 units shall be provided at the median-income level. The affordable housing units for rental residential projects must	Consistent. The 1,299-dwelling-unit Project proposes to provide 363 affordable units, which is 28% of the total units provided, and 103 more affordable units than would otherwise be required by the IHO and the INSP.

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be designated or reserved for rent to very-low-, low-, median, and moderate-income households. Of the total number of rental dwelling units (20 percent) set aside, at least six percent (6%) shall be reserved for rental to very-low income households, four percent (4%) shall be reserved for rental to median-income households, and three percent (3%) shall be reserved for rental to moderate-income households. Whenever the inclusionary requirements results in a fractional unit(s), the fractional unit(s) shall be combined and provided as very-low-income units. For example, a 110-unit rental residential development would be required to provide 6 percent, or 6.6 units, at the very-low income level; 7 percent, or 7.7 units, at the low-income level; 4 percent , or 4.4 units at the median-income level; and 3 percent, or 3.3 units, at the moderate-income level. The combined fractional units equates to two units that shall be provided as very-low-income units. Therefore, 8 units shall be provided at the very-low income level, 7 units shall be provided at the low-income level, 4 units shall be provided at the median-income level, and 3 units shall be provided at the moderate-income level. Under the City's Inclusionary Ordinance, affordable housing units shall be built on site and integrated within new residential developments unless the City Council approves an alternative method of compliance. For projects that utilize land dedication as a compliance method, the dedicated land must be located within the Isabel Neighborhood area and equivalent in actual value to the affordable units it is replacing.	
P-LU-34: Coordinate with BART to maximize affordable housing on BART-owned property north of the Valley Link station and achieve their goal of at least 20 percent affordability.	N/A. The Project Site is not owned by the San Francisco Bay Area Rapid Transit District/ BART. However, the Project is providing 28% of the dwelling units as affordable units.

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P-LU-35: Establish a program to reduce the development cost of affordable units. For example, adopt flexible parking standards for the Core and Center land use categories to reduce housing costs associated with excess parking (see parking ratios and policies in Chapter 3, Transportation).	N/A.
P-LU-36: Pursue grant opportunity funds for transit-oriented development such as those using cap and trade funds (i.e., the Affordable Housing and Sustainable Communities program).	N/A.
P-LU-37: Use Affordable Housing Fund subsidies as appropriate to: • Acquire land for affordable housing in the Isabel Neighborhood. • Partner with property owners and non-profit developers to develop affordable and mixed-income projects. • Match funding from state and federal sources for affordable housing projects. • Support non-profit organizations that convert units from market-rate to below-market rate. • Subsidize infrastructure costs for affordable housing projects.	N/A.
G-LU-7: Minimize the involuntary displacement of existing residents resulting from increased property values after the Valley Link project.	N/A. The Site is currently vacant and contains no existing housing units.
P-LU-39: Develop an anti-displacement strategy in the event of rapidly rising rents after the opening of the Isabel Valley Link station. This may include providing rental assistance for long-time residents of nearby neighborhoods (within one mile of the Valley Link station).	N/A.
P-LU-40: Leverage the home repair program or establish a new program to help preserve the mobile home parks near to the Isabel Neighborhood.	N/A.
G-LU-8: Advance economic development goals of the City through a coordinated strategy for the Isabel Neighborhood.	Consistent. The Project would construct 1,299 dwelling units including 363 affordable units, ground floor commercial space,

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	and a grocery store, which would advance the economic development goals and housing goals of the City.
P-LU-41: Assist new businesses with locating in the Planning Area, and support existing businesses with retention and expansion efforts.	Consistent. The Project provides approximately 75,000 square feet of new commercial area, which is proposed to include grocery, restaurant, general retail, and office uses, among other potential allowed commercial uses.
P-LU-42: Work with local businesses, civic organizations, schools, and other local groups to establish and implement programs that foster a sense of community and make the Isabel Neighborhood an interesting place to live, work, and visit. Examples include events featuring local creative industries such as food, art, music, artisanal products and beer, wine and spirits tasting.	N/A. The Project is still in the pre-development stage and thus cannot yet establish public cultural programs. However, the Project proposes a robust public art program, includes ample public open space for social gatherings, activities and events and includes temporary commercial activation spaces during build out that would attract foot traffic and support a variety of local businesses and vendors.
P-LU-43: Help connect businesses to the Valley Link station through existing and emerging transportation technologies.	Consistent. The Project proposes ground floor commercial spaces along Main Street, which is an easy walking distance from and would thus enhance the walkability between Portola Avenue and the proposed future site of the Valley Link station. The Project also proposes enhanced crosswalks crossing Portola Avenue where the station is proposed to be located to improve pedestrian access and safety. The enhanced walkability through the Project Site would help connect businesses to the Valley Link station.
P-LU-44: Support employment opportunities including but not limited to job training programs, such as State of California approved Joint Labor Management Apprenticeship Programs, for Livermore residents of all skill levels to ensure the benefits of regional rail and transit-oriented development investments are spread among the entire community.	Staff has encouraged the Developer to work with local trades and labor organizations. As of the preparation of this report, the Developer is actively negotiating with labor groups for participation in Project construction.
P-LU-45: Promote construction workforce outcomes such as local hire, paying area standard wages and employing youth and employing youth and at-risk workers who are enrolled in State of California approved Joint Labor/Management Apprenticeship Programs.	

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P-LU-46: Encourage the use of a local construction workforce who are paid area standard wages. See P-IMP-8 regarding the use of Community Workforce and Training Agreements.	
P-LU-47: Allow for a mix of office space and land use types and flexible retail requirements that can respond to changing economic conditions and business needs overtime.	Consistent. The Project is designed with flexible retail spaces on the ground floor along Main Street and Gateway Avenue. The retail spaces are designed to be flexible so that they can respond to the changing economic conditions and business needs over time serving a variety of commercial uses.
P-LU-48: Require new large-scale industrial, warehouse and distribution uses that require outdoor storage to locate outside the Planning Area, in more appropriate parts of Livermore such as the Oaks Business Park and the east side of Livermore.	N/A. The Project does not propose any large-scale industrial, warehouse, or distribution uses.
G-LU-9: Establish the Innovation Hub as a dedicated space for attracting, growing, and retaining innovation-oriented companies.	N/A.
P-LU-49: Support the development of a campus environment that includes Class A offices, flexible/collaborative work spaces, common areas, business support services, and shared amenities. This may include assistance with assembling land or master planning, or subsidizing programs or amenities.	N/A.
P-LU-50: Utilize the latest communication infrastructure in the Innovation Hub.	N/A.
P-LU-51: Pursue a shared marketing strategy, business association, and/or maintenance district in coordination with Innovation Hub tenants and property owners.	N/A.
P-LU-52: Encourage collaboration between Innovation Hub tenants and Las Positas College, existing/new businesses, and/or the Labs.	N/A.
Transportation	
G-TRA-1: Develop a street network that implements the land use diagram and is sized to meet projected demands for vehicle travel.	Consistent. The Project would construct several new internal and connector streets through the Site, including A Street, B Street, C Street, Gateway Avenue, and Main Street to meet projected demands for vehicle travel.

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P-TRA-1: Create a walkable street grid within a half-mile radius of the Valley Link station (Neighborhood core area). • Block sizes within this area should range from 300-400 feet, with a maximum length of 600 feet. Where block lengths exceed 400 feet, mid-block crossings shall be installed.	Consistent. The Project proposes a town square, pocket plazas, a neighborhood park, and various ground floor commercial spaces and a grocery store along Main Street, creating an active street frontage and a walkable neighborhood in close proximity to the Valley Link Station. While some of the block sizes exceed 300 feet, the Project is designed with multiple pedestrian entrances along the frontages so that the streets would be safe and provide ample access for pedestrians.
P-TRA-2: For the purposes of development associated traffic studies, road improvement design, and capital improvement priorities, the upper limit of acceptable service at signalized intersections shall be mid-level D, except at the following intersections near the freeway, which shall be LOS E: • Airway Boulevard/North Canyons Parkway • Airway Boulevard/I-580 westbound ramps • Airway Boulevard/I-580 eastbound ramp-Kitty Hawk Road • Isabel Avenue/Portola Avenue • Isabel Avenue/I-580 westbound ramps • Isabel Avenue/I-580 eastbound ramps • Isabel Avenue/Airway Boulevard	Consistent. The Project would provide improvements along Isabel Avenue and Portola Avenue adjacent to the Site, as well as establish new streets within the Project Site and comply with this requirement. As set forth in the Project's Focused Traffic Study, the Project complies with the applicable Level of Service requirements.
G-TRA-2: Establish a comfortable, safe, and efficient network for pedestrians and bicyclists.	Consistent. The Project contributes to the bicycle network through the construction and contribution to of a variety of new Class II and IV proposed bicycle lanes along Isabel Avenue, Portola Avenue and Campus Hill Drive. The Project also creates a walkable central street that will be safe for and provide facilities for bicyclists along Main Street through the use of ground floor commercial spaces, a grocery store, and various open spaces. The other streets within the Project Site would be smaller residential streets designed to be safe for pedestrians and bicyclists.
P-TRA-3: Connect existing uses, new development, the Main Street, Valley Link station, bus stops, parks, natural areas, Las	Consistent. The Project would provide sidewalks, bicycle and pedestrian trails, and code required bicycle parking spaces to

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Positas College, and other key destinations with sidewalks, pedestrian and bicycle trails, and bicycle facilities.	connect the proposed development, the Main Street, with existing uses and the Valley Link Station.
P-TRA-4: Create a continuous trail loop within the Isabel Neighborhood and links to the regional trail network outside of the Planning Area. • Partner with LARPD, East Bay Regional Parks District, and Alameda County to identify funding opportunities. • Advocate for a pedestrian and bicycle trail as the top priority for the bicycle connection along the future North Canyons Parkway/ Dublin Boulevard extension, followed by a buffered bike lane as a second priority (as opposed to a traditional Class II facility).	Consistent. The Project proposes sidewalks and pedestrian trails that would provide safe pathways for pedestrians and bicyclists within the Project Site and connect them to the regional trail network outside of the Project Site and the new external bike lanes provided by the Project.
P-TRA-5: Design pedestrian and bicycle trails to be highly visible and accessible from adjacent development. • Any fencing along trails should be as low and visually permeable as possible, such as three-foot high split rail fencing. • Allow and encourage property owners to provide direct access to trails that abut their properties through the installation of access gates where fencing currently exists. • Work with property owners and Zone 7 to address safety, security, and maintenance in selecting access points and designing fencing.	Consistent. The Project's proposed sidewalks and trails would not be fenced in as the fences would detract from the usability of the sidewalks and the trails; however, the sidewalks and trails would be highly visible and accessible from the Project and would be internal and along the perimeter of the Project Site.
P-TRA-6: Provide pedestrian bridges and under-crossings to enhance the connectivity of the trail network and provide direct access to the Valley Link station. • Orient pedestrian bridges to be as short, direct, and publicly visible as possible.	N/A.
P-TRA-7: Provide multiple safe bicycle and pedestrian crossings of I-580 within the Isabel Neighborhood. • Encourage Valley Link station pedestrian bridges to be available for non-Valley Link patron use when the station is open.	N/A. The Project does not cross I-580.
P-TRA-8: Provide four-legged crosswalks at new signalized or stop-controlled intersections.	Consistent. The Project would provide four-legged crosswalks at new signalized intersections at the Isabel Avenue and Gateway Avenue, and Isabel Avenue and A Street intersections.

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P-TRA-9: Implement on-street improvements such as new crosswalks and bike lanes to enhance the safety and convenience of walking and biking in the outer portions of the Planning Area and to provide interim connections along the proposed trail loop before major off-street improvements are in place. Consider adding on-street markings to more clearly show the path of bicycle travel on and near freeway interchanges.	Consistent. The Project provides high visibility crosswalks and both on and offsite new bike lanes within and around the Project Site that connect the Site to the regional bicycle trial network.
P-TRA-10: Provide bicycle parking areas at trailheads and major destinations at major intersections.	Consistent. The Project would provide crosswalks and bike lanes within and around the Project Site in addition to provide bicycle parking areas, including bike parking adjacent to the proposed onsite trail.
P-TRA-11: Incorporate traffic calming measures to slow vehicle speeds and increase the visibility of pedestrian crossings.	Consistent. The Project's proposed streets have been designed with vehicle speed and pedestrian/bicyclist safety in mind to create a safe environment for pedestrians and bicyclists, including through the provision of stop signs, signalized intersections, protected crosswalks, and signage.
P-TRA-12: Coordinate implementation of the planned trail, pedestrian, and bicycle improvements with the City's adopted Bicycle, Pedestrian, & Trails Active Transportation Plan. • Improvements to existing major streets in the Planning Area shall refer to the adopted Bicycle, Pedestrian, & Trails Active Transportation Plan for specific bicycle facility type, sidewalk improvements, and crossing improvements. • The design of new streets should refer to the Bicycle, Pedestrian, & Trails Active Transportation Plan for specific design considerations related to the bicycle, pedestrian, and trail network and street crossings.	Consistent. The Project would provide on and offsite bicycle trails and pedestrian pathways.
P-TRA-13: Require development to meet the on-site bicycle parking requirements listed in Table 3-3. Development applications shall show bicycle parking on site plans, including spaces to be provided within garages of individual dwelling units. Bicycle stalls shall meet the following requirements:	Consistent. The Project provides code required bicycle parking spaces and bicycle facilities.

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• Stalls shall be capable of supporting a bicycle in an upright or hanging position and enable a user to lock his or her bicycle to such a device. • The areas containing stalls shall be surfaced with hardscape or paving. • When located within a parking area, stalls shall be protected by curbs, fences, planter areas, bumpers, or similar barriers for the mutual protection of bikes, automobiles and pedestrians, unless deemed by the City to be unnecessary. • Where required, "secured, covered" bicycle parking may include garages, lockers, storage rooms, or fenced areas with restricted access. • Publicly accessible bicycle parking may include uncovered racks.	
G-TRA-3: Provide safe, convenient access to and from the Valley Link station by all transportation modes.	Consistent. The Project proposes enhanced crosswalks crossing Portola Avenue where the station is proposed to be located to improve pedestrian access and safety. The enhanced walkability through the Project Site would help connect the Project to the Valley Link station for easy and safe pedestrian access.
P-TRA-14: Encourage Valley Link station infrastructure to be integrated into the Neighborhood's circulation and land use networks.	N/A.
P-TRA-15: Prioritize pedestrian safety when designing roadways serving the Valley Link station.	N/A.
P-TRA-16: Support direct, comfortable, shaded, safe, visible, and well-lit walking paths between the Valley Link platform and surrounding development.	N/A.
P-TRA-17: Support the research, piloting, and deployment of emerging technologies and new services such as real-time parking availability signage, real-time bus arrival updates, and rideshare matching.	N/A.

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P-TRA-18: Work with Valley Link to ensure adequate bicycle parking at the Isabel Valley Link station and to consider bicycle needs when designing elevators.	N/A.
G-TRA-4: Reduce dependency on vehicle travel and congestion on neighborhood streets to create a safer, cleaner neighborhood environment.	Consistent. The Project provides bicycle parking spaces and creates pedestrian sidewalks and walkways to reduce the dependency on vehicle travel and congestion within and around the Project Site. By locating residential homes near the Valley Link Station and onsite and offsite job opportunities, the Project further contributes to the reduction of vehicle dependency within the City.
P-TRA-19: Employ a range of Transportation Demand Management (TDM) strategies to help make alternative modes of transportation as convenient, affordable, and safe as solo driving. Strategies include sponsored transit passes, parking cash-out programs, sponsored rideshare programs, bicycle commuter tax reimbursement, and bikeshare programs.	N/A.
P-TRA-20: Design the street network to minimize cut-through vehicle traffic in residential areas.	Consistent. The Project's proposed internal streets have been carefully planned to minimize cut-through vehicle traffic in residential areas and maximize pedestrian traffic in areas with ground floor commercial spaces and parks.
P-TRA-21: Continue working with transit operators, developers, technology providers, corporate shuttles, Transportation Network Companies, bike share operators, and other entities to minimize neighborhood impacts, and reduce private car ownership need and parking demand.	N/A.

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P-TRA-22: With the exception of business park and general commercial users outside of the Core Area (generally bound by I-580, Collier Canyon Road, Portola Avenue, and the seasonal drainage running south from Cayetano Park), require property owners, residents, and tenants, to form a Transportation Management Association (TMA) for the Isabel Neighborhood. Required actions shall be determined by the TMA and may include but are not limited to the following: • Monitor and manage the vehicular and bicycle parking supply for all retail uses north of I-580, rather than on a project or site basis. • Work with LAVTA and Valley Link to alter or add bus routes and/or provide free shuttle service between the Valley Link station and major destinations such as Las Positas College. • Establish neighborhood-wide car-sharing and/or bike sharing programs. • Implement programs for streetscape maintenance and beautification projects along Main Street, Pedestrian Streets, and Bicycle Streets. • Implement informational campaigns using brochures, boards/kiosks, or other communication outlets. • Provide technical support to businesses and homeowner associations in the implementation of TDM measures. • Implement a wayfinding signage program for motorists, bicyclists, and pedestrians.	Consistent. The Project would comply with the TMA requirement for any TMA established pursuant to the INSP.
P-TRA-23: Require Office and Business Park projects exceeding 15,000 square feet within a half-mile of the Valley Link station to implement the following site design measures: • Integration of passenger loading zones near the main building entrance on large sites; • Access to electrical vehicle charging stations for 10 percent of residential parking spaces and two percent of commercial or	N/A. The Project is not an office or business park project.

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industrial parking spaces; • On-site showers and lockers for employees; and • Preferential parking for carpools, vanpools, and low emission vehicles.	
P-TRA-24: Following station opening, require businesses within a half-mile of the Valley Link station to participate in the TMA and implement at least two of the following TDM programs (to be implemented through the initial Site Plan Design Review process for new development or through the Zoning Clearance process after construction): • Parking cash-out for employees that do not drive to work. • Transit passes (such as the Clipper Card) for employees. • Car-sharing or bike-sharing program. • Carpool and vanpool ride-matching services. • Guaranteed ride home for transit users and car/vanpoolers. • Flexible work schedules, shortened work weeks, or options to telecommute.	Consistent. The Project would comply with the TMA requirement for any TMA established pursuant to the INSP.
G-TRA-5: Proactively manage the supply of on- and off-street parking to match demand, while minimizing the land dedicated to and the costs associated with parking.	Consistent. The Project would provide code required bicycle and automobile parking spaces to match the demands expected of the Project Site.
P-TRA-25: Monitor Valley Link parking supply and demand. In the event of parking shortages: • Work with property owners to provide surface or shared parking arrangements. • Work with LAVTA, Valley Link, and other partners to implement additional TDM strategies such as enhanced shuttle/bus service.	N/A.
P-TRA-26: Monitor and manage parking supply and demand, spillover in neighborhoods, available technologies, programmatic parking management options, and cost implications of providing parking structures. Potential mechanisms for reducing conflicts include: • Add paid parking on all public streets throughout the Planning Area	N/A

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• Implement a residential parking permit system. • Add time-limited parking to residential streets.	
P-TRA-27: Consider charging for on-street parking and/or enforcing time limits along Main Street and additional areas as needed to encourage turnover in front of businesses and to encourage use of longer-term parking in off-street lots. • Install Smart pay stations that accept coins, credit/debit cards and pay-by-phone.	N/A.
P-TRA-28: Implement the parking minimum and maximum on-site vehicle parking requirements for development listed in Table 3-2. • When calculating the minimum parking requirement, any fraction greater than or equal to 0.50 shall be rounded up to nearest whole number; no additional space shall be required for a fractional unit of less than 0.50. • Parking requirements based on floor area in square feet (for example: 1 space for each 1,000 sf) shall be based upon the square feet of gross interior floor area, excluding mechanical equipment areas and stairwells, unless stated otherwise (e.g., ground area). • A single use with accessory components may be required to provide parking for each component, at the Director's discretion. For example, a hotel with a restaurant shall provide space for both program elements. • On-site parking requirements for unlisted uses may be determined by the Director based on available data, consistent with the intent of the Development Code. • On-street parking spaces located on Main Street shall count	Consistent. The Project Site has a minimum parking requirement of 1,873 spaces and a maximum parking allowance of 2,584 spaces. The Project is proposes 2,413 parking spaces.

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toward the required non-residential parking requirement for development on adjacent blocks. • When uses change, and additional parking is required, an in-lieu fee may be applied if construction of additional parking is infeasible.	
P-TRA-29: Developers shall install required paid parking infrastructure.	Consistent. The Project would provide all required paid parking infrastructure within commercial parking areas.
P-TRA-30: For projects with demonstrable lower parking needs allow reductions in the minimum parking requirements by up to 20 percent, subject to Community Development Director approval. • Requests for parking reductions will be based on factors such as: parking demand (including time of day/week), provision of bicycle parking, share of affordable (below market rate) units, specific user needs, proximity to the Valley Link station and other transit services, proximity and capacity of public parking lots, and proposed TDM strategies. • Applicants shall provide sufficient documentation to support the proposed reduction. • The City shall grant a reduction only upon finding that the proposed parking plan would not have an adverse effect on the surrounding properties. • When a use that was granted a parking reduction is discontinued, the required parking shall be provided on-site, off-site within a quarter mile of the site, or through payment of the in-lieu fee. The new use, however, may request a parking reduction under this policy.	N/A.

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P-TRA-31: Establish an in-lieu parking fee for retail-commercial uses in the Neighborhood's core area. • Developers of Ground floor Retail/Flex space may satisfy up to 30 percent of the minimum parking requirement through payment of the in-lieu fee. • Developers of Neighborhood Commercial uses on the Retail Center block may satisfy up to 10 percent of the minimum parking requirement through payment of the in-lieu fee. • The City will use the fees generated to pay for the cost of providing public parking, including on-street parking intended to serve retail users along Main Street.	N/A.
P-TRA-32: If a property owner/developer is unable to provide some or all of the required parking on-site, the minimum parking requirement may be satisfied by one or more alternatives: • Off-site. The owner may provide the required parking on other property within 600 feet of the site proposed for development. The owner shall provide a recorded parking agreement reflecting the arrangement with the other site. The form of agreement must first be approved by the City. • Shared Parking. Up to 50 percent of the minimum on-site parking requirement may be provided through a shared parking arrangement, contingent upon a parking study and subject to approval by the Community Development Director. The shared parking facility must be located within 600 feet of the site, if located on private property, or within a quarter mile if located on public property. Distances shall be based on the shortest feasible walking route.	N/A.
P-TRA-33: Encourage shared parking between users with different hours of peak demand.	N/A.
P-TRA-34: Require parking lots along Main Street and Gateway Avenue (between Isabel Avenue and Shea Center Drive) to be available for public use as secured through an agreement with the City (e.g., as part of a Development Agreement) or a land use	Consistent. The Project's parking lots proposed along Main Street and Gateway Avenue for commercial parking would be available for public use.

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entitlement condition of approval. Where an existing private lot is converted to a shared lot that is open for non-exclusive use, spaces that are provided in excess of the amount required may be leased to other establishments.	
P-TRA-35: Encourage vehicle parking configurations that provide for efficient use of land such as tandem, underground, and structured parking.	Consistent. The Project proposes parking spaces on the ground floor of the proposed townhomes, or within the building envelopes of the mixed-use buildings. The Project strives to provide efficient parking configurations where parking spaces are primarily located away from the public streets to enhance pedestrian and bicyclist safety.
P-TRA-36: Vehicle parking in residential projects, with the exception of Transition housing units, shall be "unbundled," such that residents pay for parking separately from the sales price or rent for the housing unit.	Consistent. The parking spaces located within townhomes would necessarily be "bundled" to the unit that they are attached to. However, the mixed-use buildings and flats would have unbundled parking spaces within proposed parking structures.
P-TRA-37: Encourage resident parking in new residential developments to be secured and accessed separately from commercial parking.	Consistent. The Project is designed so that the residential parking spaces are secured and accessed separately from commercial parking areas.
Parks, Public Facilities, and Infrastructure	
G-PF-1: Provide an integrated park, recreation, and open space system that serves a variety of functions: provide opportunities for recreation and exercise, allow for community gathering and special events, enhance the greenery and overall aesthetics of the Neighborhood, and support the general enjoyment of the outdoors.	Consistent. The Project provides a recreation center, a neighborhood park, two pocket plazas, and a town square to allow for community gathering and special events, enhance the greenery and the overall aesthetics of the neighborhood, as well as support the general enjoyment of the outdoors.
P-PF-1: Incorporate nodes (parks, plazas, and common areas) and linear elements (trails, paseos, and streets) to form a cohesive, hierarchical open space system for the Neighborhood.	Consistent. The Project creates several different types of open space areas, including a recreation center, a neighborhood park, two pocket plazas, and a town square as well as pedestrian trails, streets, and sidewalks, to meet different outdoor needs of the neighborhood.
P-PF-2: Provide a mix of amenities and programs that respond to the diverse needs and preferences of the community. Design physically accessible, multi-generational spaces to serve children, young adults, seniors, and people with limited mobility.	Consistent. The Project proposes a wide variety of amenities and outdoor areas to meet the diverse needs of this 1,299-dwelling-unit development and to meet the needs of the businesses that would be located on the ground floor along Main Street.

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P-PF-3: Construct three new neighborhood-serving Urban Parks (pursuant to Part 8, Civic Space Types, of the Livermore Development Code) in the general locations shown on Figure 4-1, with the following minimum sizes: • 3 acres along Collier Canyon Creek; • 1.5 acres located along the proposed Main Street; and • 2 acres south of the freeway, east of Stealth Street.	Consistent. The Project proposes a 1.5 acre neighborhood park along Main Street on Parcel N3-B.
P-PF-4: Require developers to provide land or in lieu fees for parks, as governed by the terms of the Quimby Act. Developers of the three park sites as shown on Figure 4-1 shall be required to dedicate land for such purpose and provide park improvements at the time of development.	Consistent. The Project would provide amply parks and open space in addition to paying required park fees in excess of available fee credits for the provision of in-project open space.
P-PF-5: Design new parks to be easily accessible to residents and highly visible from the adjacent streets and surrounding uses.	Consistent. The Project's substantial proposed open space areas are designed with the residents in mind and are designed to be usable and accessible by the residents and the patrons of the businesses.
P-PF-6: Each new park shall include a variety of amenities such as: benches, pathways, picnic areas, dog stations, children's play areas, and landscaping. • The new park located next to Collier Canyon Creek should include a sports field, other compatible uses, and trail amenities. • The new park located along the proposed Main Street shall be scaled appropriately to fit the surrounding mixed use/commercial context. The new park located along the proposed Main Street should be designed to accommodate community events, oriented such that residents can view the park, and provide adequate lighting and on-street parking. Park design shall be consistent with the standards set-forth in section 8.01.070 of the Livermore Development Code for Urban Parks, as it exists today or amended in the future. • The new park located south of the freeway should incorporate	Consistent. The Project's parks, plazas, and town square onsite would include amenities such as benches, pathways, children's play area, dog stations, picnic areas, and landscaping.

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features that honor the history of the site and agricultural heritage of the Planning Area.	
P-PF-7: Design the new park located next to Collier Canyon Creek to minimize adverse effects resulting from the proximity to the freeway. • Locate the most active uses in the northern portion of the park. • Provide on-street parking along the southern end of the park.	N/A.
P-PF-8: The final selection of amenities within new public parks shall: • Involve community outreach and coordination with LARPD; • Utilize low-maintenance vegetation and high quality, durable materials; and • Minimize long-term operational costs.	Consistent. The Project's landscaping plans utilize low-maintenance vegetation and high quality, durable materials to minimize long term operational costs within the Project's various landscaped areas and landscape features. Pursuant to the Development Agreement, the Project's park design shall be reviewed by LARPD prior to Occupancy.
P-PF-9: Incorporate a plaza in the Retail Center site as a central gathering place that can accommodate special events, outdoor dining, and pedestrian circulation, consistent with design principles in Chapter 5, Urban Design.	Consistent. The Project proposes two pocket plazas and a town square adjacent to the ground floor commercial spaces and the grocery store/ food hall. These areas can accommodate special events, outdoor dining, and pedestrian circulation, consistent with the design principles in Chapter 5, Urban Design.
P-PF-10: Coordinate with Valley Link and BART on the design of Pocket Plazas at each base of the pedestrian bridge to the station, consistent with open space goals and design principles in Chapter 5, Urban Design. The City of Livermore recommends that the total	Consistent. The two proposed pocket plazas are 0.17 and 0.19 acres respectively, and the proposed town square is 0.25 acres.

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size of the plazas not exceed 0.25 acre unless a larger area is necessary for pedestrian circulation purposes.	
P-PF-11: Incorporate recreational amenities such as bike parking, Pocket Plazas, children play structures, and dog stations along active frontages in the Neighborhood Core.	Consistent. The proposed open spaces would be located along active frontages and would incorporate bike parking, children play structures, dog stations, and pocket plazas.
P-PF-12: Private developments shall provide on-site common outdoor areas in the form of Pocket Parks or Pocket Plazas (pursuant to Part 8, Civic Space Types, of the Livermore Development Code).	Consistent. The Project is providing two pocket plazas.
P-PF-13: Connect new and existing parks, open spaces, and common areas on private property directly to the trail network or through pedestrian-friendly streets and paseos.	Consistent. The Project is providing sidewalks and pedestrian trails to connect the proposed open spaces.
P-PF-14: Install landscaping and enhance natural habitats to enhance the aesthetic quality and recreational value of trail corridors and other passive open spaces.	Consistent. The Project's landscaping plans provide ample landscaping around and within the Project Site to enhance the aesthetic quality and recreational value of the trails and the open spaces.
P-PF-15: Designate a 2.5:1 buffer from the toe of all natural (non-channelized) creeks plus 20 feet, consistent with Zone 7 creek setback criteria. Pedestrian and bicycle trails and associated amenities may be located within this buffer, subject to the trail polices in Chapter 3, Transportation, design standards and guidelines in Chapter 5, Urban Design, and necessary regulatory permits.	N/A.
P-PF-16: Increase the availability of athletic facilities through shared use agreements with Las Positas College and/or K-12 schools in the Planning Area.	N/A.
P-PF-17: Incorporate a consistent theme of wayfinding signage and Neighborhood-identifying features into parks, plazas, and other open spaces, based on the Pedestrian Streetscape palette described in Chapter 5, Urban Design.	Consistent. The Project incorporates consistent themes and design with wayfinding signage and neighborhood-identifying features throughout the Site, including within the onsite parks, plazas, and other open space areas.

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P-PF-18: Require that development projects involving the alteration, relocation, or demolition of historical resources include interpretative signage with historical images and information for residents, employees, and passers-by to learn about the property and its significance. The content of the interpretive signage shall be prepared by a qualified Architectural Historian and graphic design professional.	N/A. The Site is vacant and does not contain historic resources.
P-PF-19: Incorporate elements commemorating Gandolfo Ranch into the park development south of the freeway, east of Stealth Street in order to promote understanding among visitors of the site's historical significance. The preservation of structures and other character-defining features is strongly encouraged.	N/A.
P-PF-20: Require, prior to issuance of permits for the alteration, relocation, or demolition of a historical resource, that the project sponsor conduct Historic American Buildings Survey (HABS) and Historic American Landscapes Survey (HALS) Level II documentation. The HABS is a federal preservation program used to document architectural heritage and the HALS is a federal program used to document landscapes.	N/A. The Site is vacant and does not contain historic resources.
G-PF-2: Promote adequate and accessible educational facilities for Isabel Neighborhood residents.	N/A.
P-PF-21: Work closely with the School District to monitor student enrollment and school facility needs to ensure accommodation of the future student population in Livermore.	Based on the letter received from the School District, existing school capacity is sufficient to accommodate the incremental increase in students generated by the Project
P-PF-22: Work with the School District, LARPD, Livermore Amador Valley Transit Authority (LAVTA), property owners, and developers to create and/or improve safe walking/biking routes to the public schools serving the Isabel Neighborhood. • Incorporate school access into the Neighborhood's Transportation Demand Management program (described in Chapter 3, Transportation). Strategies to consider include LAVTA public bus, school busing, carpooling programs, Walk/Bike to School Days, a Walking School Bus program, and bicycle trains.	N/A.

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G-PF-3: Maintain Livermore as a safe and livable community.	Consistent. The Project is designed with a variety of open space, pedestrian and bicyclist trails and sidewalks, and thoughtfully designed streets and access points. The Project includes a variety of housing options and commercial spaces. The proposed development would allow residents to work where they live and to enjoy nearby open space facilities that they can access on foot, creating a safe and livable community.
P-PF-23: Ensure that new development in the Planning Area adequately addresses public safety considerations in building design, site planning, and business operations.	Consistent. The Project addresses public safety considerations through building design and site planning. The design ensures that active streets are provided along Main Street, and residential parcels would have relative security where access within their areas would be monitored.
P-PF-24: Work with the LPFD to monitor the need for a new Fire Station if Station #10 needs to be relocated and/or additional equipment is needed to serve the Isabel Neighborhood.	N/A.
P-PF-25: Ensure that LPFD and the Police Department have sufficient staffing to serve all new development and associated population growth in the Isabel Neighborhood.	N/A.
P-PF-26: Coordinate with the Fire Department to incorporate a small police substation, for internal uses only, into another public facility. The facility should be large enough to include an office, break room, restroom, interview room, and storage for equipment and bikes.	N/A.
G-PF-4: Provide materials collection services that are safe, sanitary, environmentally acceptable, efficient, and affordable.	Consistent. The Project would have onsite refuse collection throughout the Site consistent with state and local solid waste requirements. The Project would work the City's franchise hauler to encourage recycling, composting, and organic material collection and waste reduction and diversion.

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P-PF-27: Work with residents, businesses, LARPD, and the City's franchise hauler to exceed the City's 75 percent waste diversion goal in the Isabel Neighborhood. • Design new development to make recycling, composting, and organic material collection as convenient as possible for residents, employees, and visitors. • Reduce the amount of materials that must be processed through implementation of recycling programs, composting, source reduction (such as packaging), purchasing policies, and manufacturing processes. • Continue to implement educational and outreach programs on available diversion programs and best practices. • Encourage businesses to participate in the Bay Area's Green Business Program. • Support the expansion of organics capacity in Alameda County.	Consistent. The Project would have onsite refuse collection throughout the Site and would work with LARPD and the City's franchise hauler to encourage recycling, composting, and organic material collection and waste reduction and diversion.
P-PF-28: Continue to work with the current materials collection franchise hauler in the review of development projects to ensure compliance with materials collection requirements. • Ensure that streets and alleys are designed to allow collection vehicles to make safe, unobstructed turning movements. • For residential projects that will have wheeled cart service, ensure that streets and alleys are designed to accommodate the placement of carts on the street during collection day. • Periodically update the interior and exterior trash collection standards to reflect current goals, regulations, and best practices, particularly for multi-story buildings in the residential, Office, and Ground floor Retail/Flex areas of the Isabel Neighborhood. • Refer to StopWaste resources such as the Recycling Guidelines for Multi-Family Housing Design.	Consistent. The Project has proposed thoughtful refuse collection locations to ensure refuse collection and recycling areas are appropriately accessible and would not become a nuisance to the businesses and residents onsite.
G-PF-5: Provide sufficient water supplies and facilities to serve new development under the Isabel Neighborhood Specific Plan.	Consistent. The Project's projected water usage is within the water supply limits analyzed in 2017 Water Supply Assessment prepared for the INSP's EIR, which conclude sufficient water supplies exist over a 25-year time horizon from 2017 to serve the full buildout of

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	the INSP. As established in the Project's CEQA Addendum, the Project reduces water usage from the proposed development analyzed for the Site in the original INSP.
P-PF-29: Continue to coordinate with Zone 7 and Cal Water to monitor and plan for the City's future water needs.	N/A.
P-PF-30: Require new development projects to construct an adequate potable water distribution and sanitary sewer systems and pay applicable fees to construct necessary facilities, as identified under the Isabel Neighborhood Specific Plan and the City's Capital Improvement Plan.	Consistent. The Project would construct an adequate potable water distribution and sanitary sewer system and pay applicable fees to construct necessary facilities to serve its residents and businesses.
P-PF-31: Connections to the water distribution and sanitary sewer systems should occur concurrently with construction of new roadways to maximize efficiency and minimize disturbance due to construction activity	Consistent. The Project would connect to the water distribution and sanitary sewer system at the time of the construction of its backbone infrastructure.
P-PF-32: Require new development to install water efficient appliances and fixtures such as low-flow faucets and toilets.	Consistent. The Project would install water efficient appliances as required by state Title 24 regulations.
P-PF-33: Require new development to comply with State and City's mandatory water efficient landscape ordinance (WELO).	Consistent. The Project would install water efficient landscape as required by state and local codes.
P-PF-34: Require new development within the Municipal Water service area to connect to the recycled water system and to use recycled water for landscape irrigation, where economically feasible.	Consistent. The Project would connect to the recycled water system and use recycled water for landscaping within public rights of way, as available.
P-PF-35: Allow the use of rainwater harvesting systems, consistent with regional permit requirements	Consistent. The Project would comply with applicable Low Impact Development (LID) standards, which may include requirements to install rainwater harvesting systems and other storm water retention and treatment facilities where needed to meet LID standards.
P-PF-36: Restaurants and other uses that discharge grease into the wastewater treatment system shall be required to reduce impacts through individual or collective pretreatment facilities.	Consistent. The Project would install grease interceptors or other grease capture systems as needed to divert restaurant grease as required by applicable state and local building codes.
G-PF-6: Develop a stormwater drainage system that maintains the health and safety of residents, provides flood control,	Consistent. The Project would comply with LID requirements and develop a stormwater drainage system to provide flood control,

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reduces long-term maintenance costs, minimizes pollution, and enhances aesthetic quality.	minimize pollution, reduce long-term maintenance costs, and enhance aesthetic quality.
P-PF-37: Design new streetscape and landscaped areas in the public right-of-way for stormwater management and the efficient use of water through: • The installation of low-maintenance, drought-resistant plant palettes; • Use of large retention basins; • Use of low-flow irrigation systems; and/or • Use of bioswales and rain gardens in planting areas, curb extensions, and other green infrastructure.	Consistent. The Project's new streetscape and landscape areas would be designed with low maintenance and drought resistant plants, as well as utilizes bioswales, retention basins, and low-flow irrigation systems, as set forth in the approved Landscape Plans.
P-PF-38: Require new development to incorporate low impact landscape design, such as natural drainage systems and groundwater recharge features, consistent with stormwater permit requirements.	Consistent. The Project would incorporate low impact landscape designs, as set forth in the approved Landscape Plans.
P-PF-39: Continue to partner with Zone 7 to improve and maintain the flood control system.	N/A.
P-PF-40: Allow stream modifications associated with new development only if necessary to better contain flood flows, restore creek conveyance capacity, enhance groundwater recharge, stabilize creek beds and banks, control erosion, remove sediment and debris, provide public access for maintenance and emergency vehicles, and/or restore creek natural habitat. • Any stream modifications and flood control structure improvements shall be done in accordance with the National Flood Insurance Program and Community Rating System Class Standards and appropriate engineering design, resource agency approvals, and current environmental restoration best management practices.	N/A.
G-PF-7: Facilitate the development and maintenance of all utilities at the appropriate levels of service to accommodate the City's projected growth.	N/A.

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P-PF-41: Ensure that utilities (i.e., electricity, natural gas, telecommunications, and cable) are available to serve new development in an environmentally responsible, aesthetically acceptable, and safe manner. However, the ultimate responsibility for ensuring that the utilities are available to support new development rests on the sponsor of proposed projects.	Consistent. The Project has reviewed its utility needs with the applicable service providers to ensure capacity to provide adequate service.
P-PF-42: Require new development to place underground all utility distribution lines, including new and existing aboveground utilities located in the abutting street right-of-way (consistent with Section 4.02.090 of the Livermore Development Code as it exists now or is amended in the future). • The City shall work with PG&E and other public agencies to underground existing overhead utility lines that are not adjacent to a potential development site (i.e., the Change Areas described in Chapter 2, Land Use).	Consistent. The Project occurs within and vacant area and will underground all utility distribution lines.
P-PF-43: Encourage new development to consider and incorporate telecommunications facilities into the initial building design. • Industrial and public buildings should be designed to accommodate wireless antennas in a manner that integrates with the architecture.	Consistent. The Project seamlessly incorporates telecommunication facilities into building design. Any future telecom applications will be required to obtain necessary design review permits from the Community Development Department.
P-PF-44: Support the development of a fiber optic network in and around the Innovation Hub.	N/A.
Environmental Resources & Conservation	
G-ENV-1: Ensure that development is compatible with Livermore Municipal Airport safety zones.	Consistent. The Project would not cause obstruction to the Livermore Municipal Airport as determined based on review with FAA's Obstruction Evaluation Group of the proposed heights of the proposed buildings. The FAA indicated that the proposed height would not pose a hazard to air navigation or require further analysis. The Project will notify the FAA five days after the construction reaches its greatest height.

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P-ENV-1: Increase resident awareness of their proximity to the Livermore Municipal Airport. • Provide overflight notifications and avigation easements and Buyer's Awareness Measures on new residential development within the Airport Influence Area (AIA). • Send annual reminders to residents that they knowingly purchased property in the AIA. • Provide information on the City's website about the APA overlay zone and Airport Land Use Compatibility Plan (ALUCP). • Proactively advise potential residents who inquire about buying property in the overlay zone that their property will be subject to aircraft noise (via the Permit Center).	Consistent. The Project conditions of approval require avigation easements and airport vicinity notifications for all new residences.
G-ENV-2: Ensure that the Isabel Neighborhood is a pleasant place to live and work by protecting residents, workers, and visitors from noise that affects comfort and health.	N/A.
P-ENV-2: Amend the General Plan to clarify that the Isabel Neighborhood Specific Plan is exempt from Noise Compatibility Guidelines, recognizing that certain existing and future exterior noise sources are higher in the Planning Area.	N/A.
P-ENV-3: In accordance with Title 24 of California Building Code, all residential building spaces must be improved or constructed in such a manner that interior noise levels in any habitable room do not exceed a maximum of 45 dBA with windows closed. If windows must be closed 100 percent of the time to achieve this standard, a fresh air ventilation system must be utilized.	Consistent. The Project will comply with Title 24 of the California Building Code applicable at the time of permitting.
P-ENV-4: Require residential and other noise sensitive land uses within the 60 dBA or higher contours for freeway or major street noise to complete a noise analysis to verify that the interior noise standard can be met.	Consistent. The Project conditions require acoustical studies prior to Building Permit issuance.
P-ENV-5: Although not anticipated, any noise sensitive land uses within the 60 dBA contour for the airport shall incorporate adequate noise attenuation into the design and site planning of	Consistent. The Project conditions require acoustical studies prior to Building Permit issuance.

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the project in order to achieve an interior noise level of not more than 45 dBA CNEL.	
P-ENV-6: Recreational facilities within new public parks and common open space areas on private development sites should be located and designed such that ambient noise levels do not exceed 70 dBA CNEL. This guideline does not apply to pedestrian and bicycle trails or private outdoor spaces within developments (refer to Chapter 2, Land Use, for open space definitions).	Consistent. The Project has placed the recreation facilities, parks, and common open space in areas where ambient noise would not exceed 70 dBA CNEL.
P-ENV-7: Reduce vibration impacts associated with construction activities by requiring construction contractors to implement measures to help reduce vibration levels at nearby sensitive receptors. Measures to reduce vibration levels include, but are not limited to, the following: • Operating heavy equipment as far as practical from residential uses; • Using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and • Using quiet pile driving technology (such as predrilling piles, using sonic or vibratory pile drivers, or using more than one pile driver to shorten the total duration of pile driving).	Consistent. The Project is a residential and retail commercial development that would not entail any ongoing vibration impacts. However, during construction, the Project would comply with the City's applicable requirements to reduce potential construction vibration impacts.
P-ENV-8: The following limits shall apply to noise-generating land uses, as measured from the property line: • In residential areas of the Isabel Neighborhood, exterior noise levels may not exceed 65 dBA from 7:00 a.m. to 12:00 a.m or 60 dBA from 12:00 a.m. to 7:00 a.m. • Along Main Street and in the office, commercial, or business park areas of the Isabel Neighborhood, exterior noise levels may not exceed 75 dBA from 7:00 a.m. to 12:00 a.m. or 65 dBA from 12:00 a.m. to 7:00 a.m.	Consistent. The Project would comply with applicable City noise ordinance requirements.

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P-ENV-9: Require that project applicants for future development in areas where noise is projected to exceed compatibility standards prepare a detailed acoustical analysis of the noise environment and project characteristics. The analysis should determine whether noise insulation or protection features are required to achieve consistency with the applicable exterior and interior noise compatibility standards. The City shall review and approve the acoustical analyses for proposed projects prior to the issuance of building permits or as part of the planning entitlement process. Project applicants shall then be required to implement measures to ensure exterior noise compatibility with the applicable standards, where feasible.	Consistent. The Project is a residential and retail commercial development that would not entail any ongoing substantial noise sources that would exceed applicable compatibility standards.
P-ENV-10: Prohibit Category 1 facilities (according to the FTA guidelines, including research facilities with vibration-sensitive equipment) that use vibration-sensitive equipment that could be affected by Valley Link train vibration in areas located within 600 feet of the Valley Link tracks (noting that 600 feet is the FTA screening distance for Category 1 land uses). These types of facilities shall be allowed within the Planning Area in locations that are more than 600 feet from the Valley Link tracks.	N/A.
G-ENV-3: Minimize exposure of new development, especially residents and other sensitive pollution groups, to air quality hazards.	Consistent. The Project is a residential and retail commercial development that would not entail the use or emissions of hazardous air contaminants. Project construction would comply with the standards and applicable mitigation measures adopted into the INSP EIR.
P-ENV-11: Require new residential projects and other new sensitive receptors such as schools, child day cares, nursing and retirement homes located within 500 feet of I-580 to install indoor air quality equipment, such as high-efficiency particulate air filters (HEPA) filters or equivalent mechanisms to minimize health risks for future residents.	N/A. No childcare center, schools, or nursing and retirement homes are proposed onsite.

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P-ENV-12: Require project proponents within identified high risk Overlay Zones surrounding existing hazardous sites, roadways, or TAC sources, to assess health risks at the location in question and to incorporate feasible design-related risk mitigation measures, such as HEPA filters or equivalent indoor air quality equipment mechanisms, as appropriate and determined in consultation with the City.	N/A.
P-ENV-13: Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.	N/A.
P-ENV-14: Require construction projects to implement the following measures recommended by the BAAQMD, as applicable: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; • All haul trucks transporting soil, sand, or other loose material off-site shall be covered; • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; • All vehicle speeds on unpaved roads shall be limited to 15 mph; • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used; • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points; • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be	Consistent. The Project is conditioned to comply with these requirements.

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checked by a certified visible emissions evaluator; and • A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be posted. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.	
P-ENV-15: Require that applicants proposing development of projects within the Planning Area require contractors, as a condition of contract, to reduce construction-related exhaust emissions by ensuring that all off-road equipment greater than 50 horsepower (hp) shall operate on an EPA-approved Tier 4 or newer engine. Exemptions can be made for specialized equipment where Tier 4 engines are not commercially available within 200 miles of the project construction site. The construction contractor must identify these pieces of equipment, document their unavailability from at least two construction equipment rental firms, and ensure that they operate on no less than an EPA-approved Tier 3 engine.	Consistent. The Project is conditioned to comply with these requirements.

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P-ENV-16: Require that applicants proposing development of projects within the Planning Area require contractors, as a condition of contract, to reduce construction-related fugitive ROG emissions by ensuring that low-VOC coatings that have a VOC content of 10 grams/liter (g/L) or less be used during construction. All project applicants shall submit evidence of the use of low-VOC coatings to BAAQMD prior to the start of construction.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-17: Ensure that all applicants proposing new development projects within the Planning Area require their contractors, as a condition of contract, to reduce construction-related GHG emissions through implementation of the Bay Area Air Quality Management District's recommended best practices, including but not limited to the following measures (based on BAAQMD's 2017 CEQA Guidelines): • Ensuring alternative fueled (e.g. biodiesel, electric) construction vehicles/equipment make up at least 15 percent of the fleet; • Ensuring at least 10 percent of building materials are local building materials (sourced from within 100 miles of the Planning Area); and • Recycling or reusing at least 50 percent of construction waste or demolition materials.	Consistent. The Project is conditioned to comply with these requirements.
G-ENV-4: Protect and improve the quality of biological resources and habitat areas.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-18: Creek setbacks shall be 2.5:1 from the toe of the channel plus 20 feet, consistent with Zone 7 creek setback criteria. New development shall be restricted within the buffer. • Expand the buffer edge in areas where the City determines there is high biological value. • Where feasible, allow public access in the form of open space or a pedestrian or bicycle trail within the creek edge buffer, and incorporate interpretive signage for educational purposes in public access areas along creeks.	N/A.

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P-ENV-19: Promote the healthy growth of trees and minimize the removal of trees within the Isabel Neighborhood through the City's Tree Protection Ordinance (Section 12.20 of the Livermore Municipal Code).	N/A.
P-ENV-20: Design pedestrian and vehicle bridges over creeks to span the bed and bank of the creek and to avoid placing bridge piers or footings within the creek, within bridge safety limits.	N/A.
P-ENV-21: Require that new development inventory sensitive resources and develop adequate measures to avoid or mitigate impacts for any parcel that may include special-status species habitat with a moderate or greater potential to exist in the Isabel Neighborhood. The inventory must be conducted by an independent, qualified biologist, and follow guidelines established for federally-listed species. If special-status species are identified, an avoidance strategy must be pursued where feasible.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-22: Require that project proponents avoid or minimize the introduction or spread of invasive plant species through measures such as the following: • Cleaning construction equipment and vehicles in a designated wash area prior to entering and exiting the construction site. • Treating small, isolated infestations with eradication methods that have been approved by or developed in conjunction with CDFW and USFWS to prevent or destroy viable plant parts or seeds. • Minimizing surface disturbance to the greatest extent feasible to complete the work. • Using native, non-invasive species or non-persistent hybrids in erosion control plantings to stabilize site conditions and prevent invasive plant species from colonizing. • Using weed free imported erosion control materials (or rice straw) in upland areas.	Consistent. The Project is conditioned to comply with these requirements.

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P-ENV-23: Require project proponents to comply with the East Alameda County Conservation Strategy (EACCS). Development activities will either obtain compensatory habitat mitigation through the EACCS, or use the mitigation prescribed in EACCS as a basis for near-term and longer-term mitigation and obtain coverage under separate applicable State and federal permits from CDFW and USFWS. The project proponent will be responsible for acquiring, funding, monitoring, restoring, enhancing, reporting, and implementing compensatory habitat mitigation and contingency actions per the applicable State and federal permits. In accordance with the EACCS, the project proponent will implement compensatory mitigation for impacts on habitat for the following species under or consistent with EACCS at the corresponding mitigation ratios. • Vernal pool fairy shrimp—10:1 ratio (mitigation area to impact area) dependent on impact location relative to mitigation location • Callippe silverspot butterfly—5:1 dependent on impact location relative to mitigation location • California tiger salamander and California red-legged frog—3:1 dependent on impact location relative to mitigation location, or above through coordination with relevant regulatory agency/ies • Burrowing owl—3:1 dependent on impact location relative to mitigation location, or above through coordination with relevant regulatory agency/ies	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-24: Where a biologist has identified areas supporting or potentially supporting sensitive biological resources, require project proponents to prepare and implement a worker environmental awareness training program prior to equipment staging, grading, or vegetation removal. The training program should be provided to all construction personnel (contractors and subcontractors) and include the following information: • The need to avoid effects on sensitive biological resources and the importance of protecting habitat;	Complies. The Project would comply with this requirement.

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• Penalties for not complying with applicable State and federal laws and permit requirements; • General restrictions and guidelines to be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during construction; • The life history and habitat requirements of special-status species potentially occurring in or adjacent to the improvements footprint; and • The terms and conditions of the Biological Opinions and other applicable permits. In addition, the training program should educate construction supervisors and managers about invasive plant identification and the importance of controlling and preventing the spread of invasive plant infestations:	
P-ENV-25: If any work remains to be completed after the start of the rainy season or during the upland migration periods of protected amphibians (October 15 to June 1), require project proponents or their contractors to install exclusion fencing and erosion control measures prior to any ground disturbance within 50 feet of wetlands and vernal pools to be avoided by construction (where feasible) under the guidance of a City-approved biologist. The fencing should be installed around the perimeter of vernal pools and other seasonal wetlands and be erected and maintained under the supervision of the biologist.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-26: Require that construction within 300 feet of freshwater marsh or streambank habitat take place during the non-breeding season for tricolored blackbirds (September 1 through January 31) to the extent feasible.	N/A.
P-ENV-27: Require that construction and structure demolition/modification activities be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible.	Consistent. The Project is conditioned to comply with these requirements.

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P-ENV-28: Require project proponents to compensate for tree removal during construction. Prior to the removal of any trees, proponents of projects within the Planning Area shall obtain a tree removal permit, and if necessary, develop a tree avoidance, minimization, and replacement plan in consultation with a certified arborist, the City of Livermore's Department of Public Works and/or the Community Development Department, and is consistent with the City of Livermore's Street Tree and Tree Preservation Ordinance Chapter 12.20. Replacement plantings should be native species where practicable. Invasive species (as defined by the California Invasive Plant Council) should not be planted.	N/A
G-ENV-5: Minimize the exposure of new development in the Planning Area to hazardous materials and flooding.	Complies. The Project would comply with this requirement.
P-ENV-29: Require documentation of the site investigation and any required cleanup to be submitted to City staff during the entitlement review process. Remediation and clean-up of any contaminated sites in the Planning Area shall be in accordance with federal and State standards.	N/A
P-ENV-30: Ensure compliance with the City's Stormwater Master Plan to reduce flooding and stormwater hazards and for information on site-specific flooding areas. • Development that falls within potential flooding areas shall design buildings to be at least 12 inches above the potential flooding elevation. • The City may require a site-specific flooding hazard analysis where the City determines there is moderate to high flooding potential.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-31: Ensure new projects within the 100-year flood zone are designed to reduce flood risk. In accordance with Municipal Code Chapter 16.12, Flood Control Regulations, strategies include site planning, grading to minimize flood risk, and flood proofing new commercial construction.	N/A

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P-ENV-32: If any structure or grading for the Isabel Station parking will alter the floodplain, a floodplain analysis including a conditional letter of map revision and letter of map revision may be required to meet FEMA requirements in the City.	N/A.
P-ENV-33: Require that a final drainage study be prepared for projects in the Planning Area by a registered civil engineer and submitted to the City of Livermore with the initial grading plan check in accordance with City, County, and engineering standards, prior to issuance of a grading permit. The final study shall identify stormwater runoff quantities (to mitigate the 100-year storm event) from the development of the site and upstream of the site, and shall identify all existing or proposed drainage facilities intended to discharge this runoff. The final study shall include a capacity analysis verifying the adequacy of all facilities to convey runoff to an adequate outfall capable of receiving the stormwater runoff without damage to public or private property. If the receiving facilities are determined to be under capacity, then onsite detention would be considered.	Consistent. The Project is conditioned to comply with these requirements.
P-ENV-34: The 6.4-acre property located at the bend of Airway Boulevard across from the Livermore Municipal Airport is within the floodplain and covered by a Zone 7 Flood Control Easement. Any development on this parcel cannot hinder the purpose, intent and use of the easement for flood control purpose. Interim uses such as surface parking and temporary sales with no permanent buildings can be considered with approval by City and Zone 7. The large oak tree shall also be preserved in good health as part of any physical change on the property.	N/A.
G-ENV-6: Reduce risks resulting from geologic and seismic hazards.	Consistent. The Project would comply with this requirement through compliance with state and local building code requirements and engineer recommendations.
P-ENV-35: Ensure continued compliance with City standards and procedures for minimizing risks associated with geology and soils,	Consistent. The Project would comply with this requirement through compliance with state and local building code requirements and engineer recommendations.

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including through integration of required geotechnical investigations into the planning and design of projects.	
P-ENV-36: Require development applications to include a preliminary soils report and hydrologic and hydraulic analyses in accordance with the City's Facility Planning Guidelines, the City's Scenic Corridor Polices, and the Development Plan Check Manual.	Consistent. The Project would comply with this requirement.
G-ENV-7: Protect and conserve cultural resources within the Planning Area.	Consistent. The Project would comply with this requirement through the implementation of INSP mitigation measures to protect cultural resources.
P-ENV-37: When future individual projects are proposed and require site-specific environmental reviews, require project proponent to retain a professional who meets the Secretary of the Interior's standards for archaeology to conduct a project-level study of the proposed action. Such studies will include the following: • Review of the NWIC records search or conduct an updated records search, if necessary; • Archaeological pedestrian survey of the proposed project area; and • Formal evaluation to determine NRHP or CRHR eligibility. In those instances where it has been determined that unique archaeological resources may be impacted, recommended mitigation measures, including but not limited to, avoidance, preservation in place, and data recovery may be applied.	N/A. The Project Site is vacant.

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P-ENV-38: Require that all applicants proposing development projects within the Planning Area retain a qualified paleontologist, as defined by the Society for Vertebrate Paleontology, who is experienced in teaching non-specialists, prior to the start of any excavation, drilling, or pile-driving activities. The qualified paleontologist will train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate the significance. The qualified paleontologist will also make periodic visits during earthmoving in high sensitivity sites to verify that workers are following the established procedures.	Consistent. The Project would comply with this requirement through the implementation of INSP mitigation measures for paleontological resources as enforceable conditions of approval.

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P-ENV-39: Require development to follow the following steps regarding discovery of paleontological resources: • If paleontological resources are discovered during earthmoving activities, the construction crew will immediately cease work near the find and notify the project applicant. Construction work in the affected areas will remain stopped or be diverted to allow recovery of fossil remains in a timely manner. • The project applicant will retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. • Recommendations in the recovery plan that are determined by the project applicant to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered. • The project applicant may be responsible for ensuring that the monitor's recommendations regarding treatment and reporting are implemented. • If the remains are of Native American origin: – The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or – The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.	Consistent. The Project would comply with this requirement through the implementation of INSP mitigation measures for paleontological resources as enforceable conditions of approval.
Implementation & Financing Strategies	
G-IMP-1: Require property owners to undertake all required infrastructure and public improvements within their properties	Consistent. The Project would undertake all required infrastructure and public improvements within the Site.

EXHIBIT B

P-IMP-1: All development projects are required to construct all proposed public infrastructure identified in this Plan within their property, along their frontage, and off site as may be necessary for public improvements, such as the proposed street network shown on Figure 3-1 in the Plan.	Consistent. The Project would construct all proposed public infrastructures within the Site and along the outward facing street frontages.
G-IMP-2: Develop ongoing funding sources for maintenance of public infrastructure	N/A.
P-IMP-2: Require property owners to participate in Community Facilities Districts as necessary to fund ongoing private maintenance, including capital replacement, of public infrastructure such as streets, trails, drainage facilities, lighting and landscaping, signage, traffic signals and amenities in the public rights of way, except for Major Streets.	Consistent. The Project would participate in existing applicable Community Facilities Districts and calls for the formation of a new Project-specific CFD.
P-IMP-3: Fund ongoing maintenance of Major Streets out of gas and countywide transportation taxes.	N/A.
G-IMP-3: Facilitate the construction of mixed-use development to support the complete neighborhood vision.	Consistent. The Project proposes a mixed-use development that includes townhomes, flats, ground floor commercial spaces, a grocery store, and ample open space to support the INSP's complete neighborhood vision for the Site.
P-IMP-4: To encourage future tenants to occupy commercial spaces and facilitate the complete neighborhood vision, mixed-use development shall pay the mixed-use commercial wastewater connection fees at the time of initial construction as identified in the City's Fee Schedule.	Consistent. The Project would pay any applicable mixed-use commercial wastewater connection fee at the time of initial construction.
G-IMP-4: Monitor and track the Isabel Neighborhood Specific Plan and Valley Link Rail project progress	N/A.
P-IMP-5: The City shall review the progress of the Specific Plan every two years, starting from the date of its adoption. This review shall include an evaluation of the public infrastructure to ensure continued public health and safety. • The City will monitor the progress of the Valley Link rail project leading up to the anticipated opening in year 2028. In the event that the anticipated opening date of the Valley Link rail project is	N/A.

EXHIBIT B

altered, the City has the discretion to require additional environmental analysis for development projects within the Specific Plan area.	
G-IMP-5: Consider a variety of strategies to meet the Specific Plan goals and requirements	N/A.
P-IMP-6: The City shall modify the Transferable Development Credits In-Lieu Fee Program to establish new multi-family housing rates to facilitate the development of the densities and building types identified within the Specific Plan. The new rates shall apply to developments that build at or above 25 dwelling units per acre and that meet or exceed the target housing unit count by subarea shown in Table 2-6, Performance Measures by Subarea. The new multi-family housing rates shall apply to the Isabel Neighborhood Specific Plan area only.	N/A.
P-IMP-7: The City shall consider a Transferable Development Credits In-Lieu Fee credit program to encourage residential development to meet or exceed the target housing unit count by subarea shown in Table 2-6, Performance Measures by Subarea. The credit program shall apply to the Isabel Neighborhood Specific Plan area only and take effect upon compliance with Master Planned subareas consistent with P-LU-8.	N/A.
P-IMP-8: For projects over 150 residential units or over 100,000 square feet of commercial or retail space, the project developer is encouraged to consider a Community Workforce and Training Agreement with building trades locals that provides for the local hire of the construction workforce, the use of apprentices enrolled in State of California approved apprentice programs and the payment of area standard wages.	N/A.

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P-IMP-9: The City shall consider using a suite of options to fulfill Specific Plan requirements, such as allowing an in-lieu fee payment to meet a standard.	N/A.

Project Title: SP18-001; DCA18-001; APZ18-001; GPA18-001; POL18-001; ZMA18-001; PD18-001; PD18-006; PD18-007; and PD18-009
Project Name: Isabel Neighborhood Specific Plan

Isabel Neighborhood Specific Plan Mitigation Monitoring Program

SUMMARY OF IMPACT	SUMMARY OF MITIGATION MEASURE	AGENCY RESPONSIBLE FOR VERIFICATION	TIMING OF VERIFICATION
Traffic and Transportation			
3.3-2 Implementation of the proposed Plan would violate an air quality standard and contribute substantially to an existing or projected air quality violation during construction.	**MM-AQ-1: Require Construction Fleet to Use Renewable Diesel.** All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to reduce construction-related exhaust emissions by ensuring that all off-road equipment operating for more than 20 total hours over the entire duration of construction activities shall operate on renewable diesel (such as Diesel high performance renewable). Renewable diesel is currently commercially available in San Francisco Bay Area.	COL	TM, C
	MM-AQ-2: Require Use of Diesel Trucks with 2010-Compliant Model Year Engines. All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to use diesel trucks that have 2010 model year or newer engines. In the event that 2010 model year or newer diesel trucks cannot be obtained, the contractor must provide documentation to the City showing that a good faith effort to locate such engines was conducted.	COL	TM, C
	MM- AQ-3: Require Payment of Mitigation Fees to Offset Emissions Exceeding BAAQMD's Daily Pollutant Thresholds. The City shall work with BAAQMD's Office of Community Investment and Infrastructure (OCII) to establish City-specific construction emissions offset guidance that can be implemented to assess, determine, and issue mitigation fees that project applicants would be required to pay BAAQMD on a pro rata basis for all concurrently ongoing	COL, BAAQMD	TM, C

Responsible Agency/Department/Party

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Timing of Verification

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SUMMARY OF IMPACT	SUMMARY OF MITIGATION MEASURE	AGENCY RESPONSIBLE FOR VERIFICATION	TIMING OF VERIFICATION
	construction projects in the Planning Area to offset all pollutant emissions exceeding BAAQMD's daily pollutant thresholds. The offset fees may be paid into BAAQMD's Bay Area Clean Air Foundation (Foundation) in an amount to be determined at the time of mitigation. This mitigation (AQ-3) does not apply **if builder/contractor documents they will not exceed BAAQMD's dailey pollutant threshold,** This mitigation includes the following specific requirements: • For all construction projects occurring in the Planning Area, the applicants for each project shall require their construction contractors to estimate annual construction activity monitoring data for the following year. All applicants shall submit their estimated construction-related emissions to the City for review by November 1 of each year for the following construction year. • The City shall review all received construction estimates to ensure they are representative, total the emissions estimates for all construction projects that had activities that would be ongoing during the following construction year, and determine the total mitigation fee that would need to be submitted to BAAQMD to fund offsets for the portion of annual emissions that exceed BAAQMD's average daily thresholds for criteria pollutants. • In light of the total mitigation fee that was determined, and based on the construction emission amounts submitted by each applicant, the City shall appropriate the mitigation fee amount that would need to be submitted by each project applicant on a pro rata basis. The City shall issue the required mitigation fee amounts to each applicable project applicant.		

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	• Upon receiving the City's assigned mitigation fee amount, the applicants shall enter into a construction mitigation contract with BAAQMD to submit their apportioned mitigation fees.		
3.3-4 Implementation of the proposed Plan would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).	**MM-AQ-1: Require Construction Fleet to Use Renewable Diesel.** All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to reduce construction-related exhaust emissions by ensuring that all off-road equipment operating for more than 20 total hours over the entire duration of construction activities shall operate on renewable diesel (such as Diesel high performance renewable). Renewable diesel is currently commercially available in San Francisco Bay Area.	COL	TM, C
	MM-AQ-2: Require Use of Diesel Trucks with 2010-Compliant Model Year Engines. All applicants proposing development of projects within the Planning Area shall require their contractors, as a condition of contract, to use diesel trucks that have 2010 model year or newer engines. In the event that 2010 model year or newer diesel trucks cannot be obtained, the contractor must provide documentation to the City showing that a good faith effort to locate such engines was conducted.	COL	TM, C
	MM- AQ-3: Require Payment of Mitigation Fees to Offset Emissions Exceeding BAAQMD's Daily Pollutant Thresholds. The City shall work with BAAQMD's Office of Community Investment and Infrastructure (OCII) to establish City-specific construction emissions offset guidance that can be implemented to assess, determine, and issue mitigation fees that project applicants would be required to pay BAAQMD on a pro rata basis for all concurrently ongoing construction projects in the Planning Area to offset all pollutant emissions exceeding BAAQMD's daily pollutant thresholds. The	COL. BAAQMD	TM, C

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	offset fees may be paid into BAAQMD's Bay Area Clean Air Foundation (Foundation) in an amount to be determined at the time of mitigation. This mitigation (AQ-3) does not apply **if builder/contractor documents they will not exceed BAAQMD's dailey pollutant threshold,** This mitigation includes the following specific requirements: • For all construction projects occurring in the Planning Area, the applicants for each project shall require their construction contractors to estimate annual construction activity monitoring data for the following year. All applicants shall submit their estimated construction-related emissions to the City for review by November 1 of each year for the following construction year. • The City shall review all received construction estimates to ensure they are representative, total the emissions estimates for all construction projects that had activities that would be ongoing during the following construction year, and determine the total mitigation fee that would need to be submitted to BAAQMD to fund offsets for the portion of annual emissions that exceed BAAQMD's average daily thresholds for criteria pollutants. • In light of the total mitigation fee that was determined, and based on the construction emission amounts submitted by each applicant, the City shall appropriate the mitigation fee amount that would need to be submitted by each project applicant on a pro rata basis. The City shall issue the required mitigation fee amounts to each applicable project applicant.		

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	• Upon receiving the City's assigned mitigation fee amount, the applicants shall enter into a construction mitigation contract with BAAQMD to submit their apportioned mitigation fees.		
3.3-5 Implementation of the proposed Plan would expose sensitive receptors to substantial pollutant concentrations from new sources of toxic air containments.	**Mitigation Measure AQ-4: Require Future Projects Located within 1,000 Feet of Receptors Perform a Construction Health Risk Assessment**. All applicants proposing development of projects within 1,000 feet of existing sensitive receptors, as defined by the Bay Area Air Quality Management District (BAAQMD), shall prepare a site-specific construction health risk assessment (HRA) taking into account both project-level and cumulative health risks (including existing TAC sources). If the HRA demonstrates, to the satisfaction of the City, that the health risk exposures for adjacent receptors may be less than BAAQMD project-level and cumulative thresholds (as appropriate), then additional mitigation would be unnecessary. However, if the HRA demonstrates that health risks would exceed BAAQMD project-level and/or cumulative thresholds (as appropriate), additional feasible on- and offsite mitigation shall be analyzed by the applicant to help reduce risks to the greatest extent practicable.	COL, BAAQMD	TM, C, PC

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Energy, Greenhouse Gases, and Climate Change			
3.4-2 Implementation of the proposed Plan would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	**MM- GHG-1**: Operational GHG Emissions Reduction Measures. Implement the following GHG emissions reduction strategies to guide future development within the Planning Area: 1. Require that a minimum of 20 percent of housing allowed under the proposed Plan be affordable (below market-rate) housing. 2. Incorporate street and intersection traffic calming measures to a minimum of 25 percent of streets and intersections in the Planning Area. Street traffic calming features may include, but are not limited to, on-street parking, planter strips with street trees, chicanes, horizontal shifts (lane centerline that curves or shifts), bollards, rumble strips, and woonerfs, Intersection traffic calming measures may include, but are not limited to, marked crosswalks, count-down signal timers, curb extensions, channelization islands, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, and traffic circles or mini-circles. 3. Expand the existing local bus network in the Planning Area by a minimum of 25 percent by adding or modifying bus routes to increase accessibility to the BART station at Isabel Avenue. 4. Require all new development to install indoor water efficient appliances and fixtures to achieve a minimum of 15 percent reduction in water usage and require applicants for new development to submit landscape and irrigation plans capable of achieving a minimum of 10 percent reduction in outdoor water usage. The percent reductions should be achieved over baseline water use conditions in the City at the time of	COL	TM, FM, BP, PC

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	development. 5. Require a minimum solid waste diversion rate of 85 percent to be achieved by 2040. 6. Require electric-only appliances and HVAC (e.g. no natural gas heating, cooling, or cooking). 7. Require employers with more than 50 employees to provide a suite of travel demand reduction measures (TDM) capable of reducing single-vehicle trips by at least 20 percent compared to normal trip generation rates.		
3.4-3 Implementation of the proposed Plan would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	MM- GHG-1: Operational GHG Emissions Reduction Measures. Implement the following GHG emissions reduction strategies to guide future development within the Planning Area: 1. Require that a minimum of 20 percent of housing allowed under the proposed Plan be affordable (below market-rate) housing. 2. Incorporate street and intersection traffic calming measures to a minimum of 25 percent of streets and intersections in the Planning Area. Street traffic calming features may include, but are not limited to, on-street parking, planter strips with street trees, chicanes, horizontal shifts (lane centerline that curves or shifts), bollards, rumble strips, and woonerfs, Intersection traffic calming measures may include, but are not limited to, marked crosswalks, count-down signal timers, curb extensions, channelization islands, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, and traffic circles or mini-circles. 3. Expand the existing local bus network in the Planning Area by	COL	TM, FM, BP, PC

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	a minimum of 25 percent by adding or modifying bus routes to increase accessibility to the BART station at Isabel Avenue. 4. Require all new development to install indoor water efficient appliances and fixtures to achieve a minimum of 15 percent reduction in water usage and require applicants for new development to submit landscape and irrigation plans capable of achieving a minimum of 10 percent reduction in outdoor water usage. The percent reductions should be achieved over baseline water use conditions in the City at the time of development. 5. Require a minimum solid waste diversion rate of 85 percent to be achieved by 2040. 6. Require electric-only appliances and HVAC (e.g. no natural gas heating, cooling, or cooking). 7. Require employers with more than 50 employees to provide a suite of travel demand reduction measures (TDM) capable of reducing single-vehicle trips by at least 20 percent compared to normal trip generation rates.		
Noise			
3.6-1 Implementation of the proposed Plan could expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	**MM NOI-1**. Implement Traffic Noise Reduction Measures at Existing Sensitive Receptors. *Stationary Equipment Noise* Noise from mechanical equipment in the Planning Area could include HVAC and other mechanical equipment (e.g., larger mechanical equipment, emergency generators, etc.). As discussed under Impact 3.6-1 above, Policy P1 under Objective N-1.5 in the City General Plan states that the City shall require that industrial and commercial uses be designed and operated so as to avoid the generation of noise effects on surrounding sensitive land uses	COL	TM, BP, C, PC

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	(e.g., residential, churches, schools, hospitals) from exceeding the following noise levels for exterior environments: (a) 55 dBA L50 (7:00 a.m. to 10:00 p.m.) (b) 45 dBA L50 (10:00 p.m. to 7:00 a.m.). In addition, Policy P-ENV-8 under the proposed Plan, described previously, would ensure that noise from noise-generating land uses, as measured from the property line, would be limited as follows: • In residential areas of the Isabel Neighborhood, exterior noise levels may not exceed 65 dBA from 7:00 a.m. to 12:00 a.m or 60 dBA from 12:00 a.m. to 7:00 a.m. • Along Main Street and in the office, commercial, or business park areas of the Isabel Neighborhood, exterior noise levels may not exceed 75 dBA from 7:00 a.m. to 12:00 a.m or 65 dBA from 12:00 a.m. to 7:00 a.m.		
3.6-3 Implementation of the proposed Plan could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	**MM NOI-1.** Implement Traffic Noise Reduction Measures at Existing Sensitive Receptors. ***Stationary Equipment Noise*** Noise from mechanical equipment in the Planning Area could include HVAC and other mechanical equipment (e.g., larger mechanical equipment, emergency generators, etc.). As discussed under Impact 3.6-1 above, Policy P1 under Objective N-1.5 in the City General Plan states that the City shall require that industrial and commercial uses be designed and operated so as to avoid the generation of noise effects on surrounding sensitive land uses (e.g., residential, churches, schools, hospitals) from exceeding the following noise levels for exterior environments: (a) 55 dBA L50 (7:00 a.m. to 10:00 p.m.) (b) 45 dBA L50 (10:00 p.m. to 7:00 a.m.). In addition, Policy P-ENV-8 under the proposed Plan, described previously, would ensure that noise from noise-generating land uses, as measured from the property line, would be limited as follows:	COL	TM, BP, PC, C

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	• In residential areas of the Isabel Neighborhood, exterior noise levels may not exceed 65 dBA from 7:00 a.m. to 12:00 a.m or 60 dBA from 12:00 a.m. to 7:00 a.m. • Along Main Street and in the office, commercial, or business park areas of the Isabel Neighborhood, exterior noise levels may not exceed 75 dBA from 7:00 a.m. to 12:00 a.m or 65 dBA from 12:00 a.m. to 7:00 a.m.		
Biological Resources			
3.7-1 Implementation of the proposed Plan would have a substantial adverse effect, either directly or through habitat modifications, on special-status species.	**MM-BIO-1**: If impacts to special-status plan species are unavoidable, Prepare and implement a salvage, relocation, or propagation and monitoring plan for special-status plant species. If a protocol-level botanical survey reveals the presence of special-status plant species in the Planning Area, all directly affected areas of special-status plants will be documented by a qualified botanist or ecologist retained by project proponents prior to issuance of grading permits, consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities State of California (CDFW, 2009). Documentation will include density and percent cover; key habitat characteristics, including soil type, associated species, hydrology, and topography; and photographs of preconstruction conditions. Impacts to rare (California Rare Plant Rank 1 and 2) native plant species will be avoided where feasible. If impacts to such species are unavoidable, the project proponent will notify USFWS and/or CDFW and a qualified botanist or restoration ecologist will prepare a salvage, relocation, or propagation and monitoring plan in coordination with USFWS and/or CDFW prior to construction to address affected special-status plant species. The plan will include provisions that address the techniques, location, and procedures required for the successful establishment of the plant populations. The plan will include provisions for performance that address survivability	COL. Zone 7, CDFW, USFW	TM, C, PC

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	requirements, maintenance, monitoring, implementation, and the annual reporting requirements. Monitoring and success criteria applicable to special-status plant salvage, relocation, or propagation will require the following. • At least two surveys by a qualified botanist or ecologist per monitoring year. • At least 80 percent of the planted area must support vegetation composition and density consistent with reference population conditions. • At least 80 percent of the planted area must support target species amounts similar to reference feature conditions. • A minimum of five consecutive years of monitoring to ensure success criteria are met. • Remedial actions to restore intended ecological function of planted areas that fail to meet the success criteria for three consecutive years. MM-BIO-2: Avoid nesting birds where feasible. Proponents (or their contractors) of specific projects under the proposed Plan shall conduct construction activities outside the bird nesting season (February 1 to August 31) to the extent feasible. If construction initiation is unavoidable during this time, the project proponent or its contractor will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds (including raptors, but excluding burrowing owl) within 300 feet and including the near-term or longer-term improvements environmental footprints. Adjacent lands outside the development footprints will be scanned with binoculars from the limit of ground-disturbance and publicly accessible areas. Preconstruction surveys will occur no more than three days prior to the onset of ground-disturbing activities (including clearing, grubbing, and		

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	staging) at each development area. If active nests are found in the development footprints, the biologist will establish a no-disturbance buffer around the nest and mark the buffer perimeter with high-visibility fencing, flagging, or pin flags. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in place until the nest is no longer active, as determined by the biologist. Buffers for any nests found outside but within 300 feet of the development sites will be established based on the biologist's best professional judgment whether the work would result in nest abandonment. If a lapse in construction activities of 15 days or longer at a previously surveyed environmental footprint occurs, another preconstruction survey will be conducted. If structure demolition activities cannot occur outside of the nesting season, the project proponent or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (e.g., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than three days prior to structure demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structures to be demolished/modified and the surrounding areas for the presence of active nests. If active nests are found on the structures or in the affected area, then demolition/modification activities will not proceed until the biologist verifies that all nests on the structures are inactive. After all surveys and/or nest deterrence activities are completed at each development footprint, the biologist will complete a memorandum detailing		

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	the survey effort and results and submit the memorandum to the project proponent within seven days of survey completion. MM-BIO-3: Avoid burrowing owl nesting where feasible. Prior to any construction activity planned during the fall and winter non-nesting season (September 1 through January 31) or at any time during the construction process, proponents of projects proposed within the Planning Area will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. Surveys will be conducted at each area of suitable habitat that will be disturbed no more than seven days prior to ground-disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance pursuant to CDFW's Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game, 2012). If any burrowing owls are found within the disturbance area, the project proponent will notify CDFW and will proceed under CDFW direction. If construction is planned to occur during the nesting season (February 1 through August 31), the project proponent will retain a qualified wildlife biologist to conduct a breeding season burrowing owl survey in the year prior to construction. The survey will be conducted to determine if there is a breeding pair within approximately 500 feet of each development footprint, unless the biologist determines that a smaller survey buffer around the construction footprint is warranted based on preexisting background disturbance and conditions. Survey visits will be timed in accordance with CDFW guidelines (California Department of Fish and Game, 2012). This will provide the project team advance notice of nesting owls in the development area and allow ample time to discuss appropriate avoidance measures with CDFW. In addition, preconstruction surveys will be conducted no more than seven days prior to ground disturbance in all areas of the development footprint supporting burrowing owl habitat. If the biologist identifies the		

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	presence of a burrowing owl nest in an area scheduled to be disturbed by construction, a 660-foot no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, and buffers will be coordinated with CDFW by contacting the appropriate CDFW personnel, and will be subject to CDFW review and oversight. **MM-BIO-4**: Avoid tricolored blackbird breeding habitat where feasible. If construction activities in or within 300 feet of freshwater emergent wetland habitat occur during the breeding season (February 1 through August 31), the project proponent will retain a qualified biologist to conduct surveys for the presence of a tricolored blackbird nesting colony or nests. If an active nest colony or nest is observed by the qualified biologist, then a no-disturbance buffer of 250 feet will be established until the end of the breeding season or until the nesting colony or nest is determined inactive by the biologist. Nest buffers may be reduced if site-specific conditions reduce the possibility of near-term or longer-term improvements disturbance, as determined by the qualified biologist in coordination with CDFW. **MM-BIO-5**: Avoid western pond turtle where feasible. Prior to the start of construction within western pond turtle habitat (i.e., any undeveloped areas within 400 feet of riverine aquatic habitat, freshwater emergent wetlands, vernal pools, or seasonal wetlands), proponents of proposed projects within the Planning Area shall retain a biologist approved by the CDFW to survey for western pond turtles. Surveys will be conducted at each habitat area no more than seven days prior to the initiation of ground disturbance at that location. If preconstruction surveys identify active nests, the biologist will establish 50-foot no-disturbance buffer zones around each nest using temporary orange construction fencing with a four-inch-tall gap		

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	below the fence. The fencing will be permeable to young turtles and allow them to move away from the nest following hatching. The buffer zones and fencing will remain in place until the biologist has confirmed that the young have left the nest. If non-nesting pond turtles are found in the footprint, the biologist will remove and relocate them to suitable habitat outside the environmental footprint. Relocation sites will be subject to CDFW approval. **MM-BIO-6**: Avoid San Joaquin kit fox and American badger where feasible. Within one year but no less than three months prior initiating construction, proponents of specific projects within the Planning Area will retain qualified biologists to identify potential kit fox and badger dens in the development footprint and surrounding 200 feet. The biologist will prepare a report summarizing the survey observations and results, including maps depicting the locations of potential badger dens and, if possible, occupancy. The report will be submitted to the project proponent and CDFW. Prior to construction, the project proponent will retain qualified biologists to implement preconstruction surveys of previously identified potential kit fox and badger dens to determine if they are natal kit fox or American badger dens no less than 14 days and no more than 30 days before the initiation of construction at each development footprint (e.g., one week ahead of the construction crew for linear components). Construction activities will not occur within 100 feet of a potential den during the natal period (February 1 to September 30). If a known den or natal den is present within the permanent construction footprint or within 200 feet of the construction footprint during the natal period (100-foot buffer during the nonnatal period), the kit fox or badger will be excluded outside of the natal period (from November 1 to January 31). A summary report will be prepared by the biologists and submit to the project proponent and CDFW following completion of all kit fox or badger avoidance and exclusion activities.		

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	MM-BIO-7: Avoid California tiger salamander and California red-legged frog where feasible. Proponents of specific projects within the Planning Area shall retain a USFWS and/or CDFW-approved biologist (as appropriate) to identify and flag (pin flags or 4-foot lath) all suitable aquatic habitat for California tiger salamander and California red-legged frog outside of but adjacent to development footprints and ground-disturbance areas prior to staging, vegetation clearing, grading, or other construction activities. The project proponent or its contractor will protect habitat areas by installing orange exclusion and erosion control fencing at the maximum practicable distance from the work site or, if feasible, at least 500 feet from the aquatic habitat edge, wet or dry, to make it easily visible by construction crews. A qualified biologist will conduct a preconstruction survey each morning before construction activities begin and continue to monitor ground-disturbing construction activities where suitable habitat occurs during all phases of construction to remove any California tiger salamander and California red-legged frogs found in the development footprint. Individual salamanders and frogs will be moved immediately to a relocation site that is a minimum of 330 feet from the construction boundary. The relocation site will be determined in coordination with USFWS and/or CDFW prior to the commencement of construction activities. Construction activities near drainages and wetland complexes identified as potential movement corridors shall take place between July 1 and October 1, when the California tiger salamander and California red-legged frog are least likely to be present in the development area. To discourage California tiger salamander and California red-legged frogs from entering the improvements areas via ditches, the ditches will be		

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	equipped with lightweight, one-way flow gates. These will be designed so that water can easily pass from the construction site to the ditches, but small vertebrates such as the salamander or frog cannot move upstream from ditches to the development area. MM-BIO-8: Avoid Callippe silverspot butterfly where feasible. Prior to construction, proponents of specific projects within the Planning Area will retain a qualified botanist or biologist with experience in identifying Viola pedunculata, the host plant for Callippe silverspot butterfly, to identify and flag (with pin flags or 4-foot lath) any Viola pedunculata individuals during its blooming season (February to April) when the species is readily identifiable in and within 50 feet of the near-term and longer-term improvements that will affect California annual grassland. The locations of Viola pedunculata outside of the ground disturbance area of the near-term or longer-term improvements will be included on grading plans and avoided by construction personnel. The biologist will document the number and density of host plants that are unavoidable in development footprints. This information shall be compiled in a report and submit to USFWS prior to initiation of ground disturbance. The project proponent or its contractor will adhere to the following host plant avoidance measures. • No herbicide application will occur within 100 feet of host plant populations. Spot application to cut stumps, frilled stems, or injection into stems is acceptable. No broadcast herbicide applications will be used. • Cut trees that are removed in the vicinity of host plants will be hand carried rather than dragged to disposal areas. • Avoid or minimize the removal of host plant, Viola pedunculata.		

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	• Avoid work in suitable habitat during the flight and mating season (mid-May to mid-July) to the extent feasible. **MM-BIO-9**: Avoid roosting bats where feasible. If tree removal and trimming cannot be conducted between September 15 and October 30, proponents of projects implemented under the proposed Plan will retain a qualified biologist to examine trees to be removed or trimmed for suitable bat roosting habitat no more than 2 weeks before removal and trimming. High-quality habitat features (large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, etc.) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, urine staining, etc.). Mixed willow riparian scrub and stands of mature broadleaf trees should be considered potential habitat for solitary foliage-roosting bat species. Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required. Survey methods will be discussed with CDFW prior to the start of surveys. Measures to avoid and minimize impacts on sensitive bats species will be determined in coordination with CDFW and may include the following. • Tree removal will be avoided between April 1 and September 15 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary). • All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for nonvolant (non-flying) young. • Each tree will be removed in pieces rather than felling the entire tree. • If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or a qualified biologist		

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	has determined the roost is no longer active. • If avoidance of nonmaternity roost trees is not possible, and tree removal or trimming must occur between October 30 and September 15, qualified biologists will monitor tree trimming and removal. If possible, tree trimming and removal should occur in the late afternoon or evening when it is closer to the time that bats would normally arouse. Prior to removal and trimming, each tree will be shaken gently and several minutes should pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologists will search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare biological monitoring report, which will be provided to the project proponent and CDFW.		
3.7-2 Implementation of the proposed Plan would not adversely affect riparian habitat and/or other sensitive natural communities in the Planning Area.	**MM-BIO-10:** Avoid and protect riparian habitat during construction. Proponents of specific projects under the proposed Plan will ensure that a qualified resource specialist (i.e., biologist, botanist, or ecologist) will clearly identify riparian habitat to be preserved abutting the development area and outside of the direct construction area with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site preparation. Construction will not encroach upon sensitive natural communities identified by the resource specialist. The resource specialist will use the project's verified wetland delineation, soils data, and land cover data to confirm the location of riparian habitat boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced sensitive natural	COL. ZONE 7, USFW, CDFW	TM, C

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	community areas. Exclusion fencing and markers will be removed following completion of construction activities. All conditions imposed by State and federal permits for individual improvements will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance. **MM-BIO-11:** Compensate for loss of riparian habitat. • For direct effects on woody riparian trees that cannot be avoided, proponents of specific projects under the proposed Plan will compensate for the loss of riparian habitat to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with the appropriate State and federal agencies during the permitting process. At a minimum, the compensation ratio will be 2:1 (e.g., two acres restored/created/enhanced or credits purchased for every 1 acre removed) for permanent impacts and 1:1 for temporary impacts (where riparian habitat will regenerate to pre-activity character within one year). Compensation may be a combination of offsite restoration or mitigation credits. The project proponent or its contractor will develop a restoration and monitoring plan that describes how riparian habitat will be enhanced or recreated and monitored over at least 5 years, or as determined by the appropriate State and federal agencies. • If the project proponent identifies suitable onsite areas (adjacent to the permanent construction footprint) that are outside the development footprint and chooses to compensate onsite or in the project's vicinity, a revegetation plan will be prepared. The revegetation plan will be developed prior to the removal of existing riparian vegetation and will be conducted onsite or in the near-term		

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	or longer-term improvements vicinity to the extent feasible; however, mitigation site selection will avoid areas where future development or maintenance are likely. The revegetation plan will be prepared by a qualified botanist or restoration specialist with experience in riparian restoration and reviewed by the appropriate agencies. The revegetation plan will specify the planting stock appropriate for each riparian land cover type and each mitigation site, ensuring the use of genetic stock from the corresponding development area by project. The plan will employ the most successful techniques available at the time of planting. Success criteria will be established as part of the plan and will include a minimum of 70 percent revegetation success after three years, 80 percent revegetation success at the end of five years, and 75 percent vegetative coverage after five years. • The project proponent or its contractor will retain a qualified botanist, restoration ecologist, or biologist with experience in riparian restoration to monitor the plantings as necessary for five years. The project proponent or its contractor will be responsible for maintaining the plantings, including managing invasive plants (as defined by the California Invasive Plant Council) and other weeds, and implementing irrigation and plant protection if necessary. The project proponent or its contractor will submit annual monitoring reports to the regulatory agencies issuing permits related to habitat effects, including CDFW, USACE, and USFWS. Replanting will be necessary if success criteria are not met, and replacement plants subsequently will be monitored and maintained to meet the success criteria. The riparian habitat mitigation will be considered successful when the sapling trees established meet the success criteria, the habitat no longer requires substantial active management, and vegetation is arranged in groups that, when mature, replicate the area, natural structure, stratification, and species composition of similar riparian habitats in the region.		

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3.7-3 Implementation of the proposed Plan would not adversely affect federally protected wetlands and other waters regulated under Section 404 of the Clean Water Act.	**MM-BIO-12:** Avoid and protect wetlands during construction. Proponents of specific projects under the proposed Plan will ensure that a qualified resource specialist (i.e., wetland biologist, ecologist, or soil scientist) will clearly identify wetland areas to be preserved abutting the development area and wetland areas outside of the direct construction area with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site preparation. Construction will not encroach upon jurisdictional wetlands identified by the resource specialist. The resource specialist will use the development footprint and verified wetland delineation to confirm the location of wetland boundaries based on existing conditions at the time of the avoidance marking. Exclusion fencing or markers will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas. Exclusion fencing and markers will be removed following the completion of construction activities. All conditions imposed by the projects' State and federal permits will be implemented as part of the construction, with ultimate enforcement oversight by applicable State and federal agencies. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance. **MM-BIO-13**: Compensate for impacts on jurisdictional wetlands and non-wetland waters of the United States (aquatic resources) prior to near-term and longer-term improvements impacts during construction. If projects impact jurisdictional wetlands and non-wetland waters, proponents of these specific projects under the proposed Plan will develop an aquatic resource (wetlands and non-wetland waters of the United States) mitigation plan, subject to approval by the USACE, which will ensure no net	COL. ZONE 7, USFW, CDFW	TM, C

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	loss of wetlands from development impacts. The plan will detail the amount and type of wetlands (based on the projects' verified wetland delineation) that will be compensated for (through preservation, creation, or restoration) for impacts on existing wetlands and non-wetland waters of the United States (aquatic resources), and outline the monitoring and success criteria for the compensation wetlands and non-wetland waters of the United States. Additional enhancement options include fish barrier removal, riparian restoration, floodplain restoration, and streambank layback to improve overall ecologic function and connectivity of wetland and non-wetland waters. Enhancement sites will be located as near the impact location as possible but, in the event that local enhancement opportunities are not available, such activities will occur within the same stream system or watershed to provide improved ecologic function and connectivity of wetlands and non-wetland waters affected by development activities. Monitoring and success criteria applicable to created or restored wetlands will require the following. • At least two surveys by a qualified wetland biologist, botanist, or ecologist per monitoring year. • At least 80 percent of the created or restored features support vegetation consistent with reference feature conditions. • At least 80 percent of the created or restored features support hydrologic regimes similar to reference feature conditions. • A minimum of five consecutive years of monitoring to ensure success criteria are met. • Remedial actions to restore intended ecological function of created or restored features that fail to meet the success criteria for three consecutive years.		

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	Once the plan is approved, the project proponent will implement the aquatic resource compensation measures prior to the initiation of development construction. The project proponent will be responsible for funding compensatory mitigation, monitoring of the created or restored features per the mitigation plan, and any remedial actions necessary. All conditions that are attached to the State and federal permits will be implemented as part of the development project, with ultimate enforcement oversight by applicable State and federal agencies. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.		

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Portola Avenue
N3-A
1.89 AC
Product 1
3-Story Attached
21.2 DU/AC
2,479 Avg Unit Size
40 DU
N3-B
1.50 AC
Neighborhood Park
N3-C
0.45 AC
Rec Center (Private)
N2
3.08 AC
Product 1
3-Story Attached
18.2 DU/AC
2,470 Avg Unit Size
56 DU
N1
5.18 AC
Product 2C
3-Story Attached
18.9 DU/AC
1,943 Avg Unit Size
98 DU
C5
3.79 AC
Product 2
3-Story Attached (Townhouse)
22.1 DU/AC
1,899 Avg Unit Size
84 DU
ROW
A Street
C Street
Main Street
C2-A
1.72 AC
Product 16
Type V Stacked Flat Condos over Retail
67.5 DU/AC
1,396 Avg Unit Size
116 DU
C2-B
0.99 AC
Product 1
3-Story Attached
17.1 DU/AC
2,474 Avg Unit Size
17 DU
C2-C
0.19 AC
Pocket Plaza
C1-A
2.89 AC
Product 17
3-Story Attached (Townhouse)
21.5 DU/AC
1,730 Avg Unit Size
62 DU
C1-B
1.49 AC
Product 15
Type V Apartments over Retail
76.6 DU/AC
889 Avg Unit Size
114 DU
C1-C
0.17 AC
Pocket Plaza
C3
1.88 AC
Product 2
3-Story Attached (Townhouse)
23.9 DU/AC
1,900 Avg Unit Size
45 DU
Existing Office
Gateway Avenue
S2
3.36 AC
Product 4
3-Story Attached (Townhouse)
30.3 DU/AC
1,326 Avg Unit Size
102 DU
S1
2.55 AC
Product 9
Type V Stacked Flat Condos over Grocery or Food Hall
67.5 DU/AC
1,267 Avg Unit Size
172 DU
TS
0.25 AC
Town Square
Isabel Avenue
Shea Center Drive
B Street
S3-A
1.12 AC
Product 10
Type V Apartments
136.3 DU/AC
685 Avg Unit Size
152 DU
S3-B
1.38 AC
Product 12
Type III Apartments
144.9 DU/AC
816 Avg Unit Size
200 DU
S4
1.33 AC
Product 4
3-Story Attached (Townhouse)
30.8 DU/AC
1,340 Avg Unit Size
41 DU
Bike Trail
Parcel
Proposed Produ
Residential
N1 Product 2C
N2 Product 1
N3-A Product 1
C1-A Product 17
C1-B Product 15
C2-A Product 16
C2-B Product 1
C3 Product 2
C5 Product 2
S1 Product 9
S2 Product 4
S3-A Product 10
S3-B Product 12
S4 Product 4
Non-Residential
N3-B
N3-C
C1-C
C2-C
TS
ROW
Total

EXHIBIT D

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 7.1**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Tina Olson, Administrative Services Director

SUBJECT: Resolution adopting 180-day wait period exception to hire retired annuitant, Nancy Dias, former Human Resources Manager, in accordance with Government Code section 7522.56 of the Public Employees' Retirement Law.

RECOMMENDED ACTION

Staff recommends that the City Council adopt a resolution approving the hiring of retired annuitant, Nancy Dias, former Human Resources Manager, in accordance with Government Code section 7522.56 of the Public Employees' Retirement Law.

SUMMARY

A California Public Employees Retirement System (CalPERS) retiree who returns to employment with a CalPERS agency is referred to as a "retired annuitant." CalPERS requires that retirees serve a 180-day waiting period between their retirement date and their first day of post-retirement employment. Government Code 7522.56 permits an agency to waive the 180-day waiting period in instances where the retired annuitant is needed to perform work of a limited duration, work on special projects, or to perform work due to work exceeding staff capacity. Human Resources Manager Nancy Dias retired as the Human Resources Manager on April 19, 2024. While the hiring for a new Human Resources Manager is underway, hiring Ms. Dias back as a retired annuitant will provide operational support as well as allow for a cohesive transition for the new Human Resources Manager.

DISCUSSION

In accordance with Government Code section 7522.56 and to ensure continuity of operations, staff recommends that City Council adopt a resolution approving the hiring of retired annuitant, Nancy Dias as a Special Projects Coordinator absent a 180-day waiting period. The Human Resources division currently has multiple, complex projects in progress. Due to current staffing and employee workloads, additional support is needed to move the projects forward. As the former Human Resources Manager, Ms. Dias has the experience, familiarity, and the skill to work on these complex projects with little to no training and allow for continuity of critical operations, whereas if the City were to hire a consultant or other temporary staff, it would take additional staff time to bring them up to speed. Further, when a new

Human Resources Manager is identified, having Ms. Dias as a retired annuitant will allow for training and knowledge transfer to the new Human Resources Manager. Given the volume of high level, complex projects, that the Human Resources Division currently has, Ms. Dias will provide the Division up to an additional 960 hours of operating support as she knows Livermore's processes, systems, and challenges.

The retiree did not receive any retirement related incentive, such as a "golden handshake" or any other incentive to retire. CalPERS rules dictate that compensation paid to retirees cannot be less than the minimum nor exceed the maximum monthly base salary paid to other employees performing comparable duties.

FISCAL AND ADMINISTRATIVE IMPACTS

The Special Projects Coordinator is not a "regular staff position" and there will be no net increase in headcount to make the temporary hire noted above. Retired annuitants are not entitled to any city employment benefits or property rights associated with regular employment. Therefore, the cost of hire is limited to salary only. The fiscal impact to make the temporary hire noted above is approximately $74,500 that will be funded through savings generated by vacant positions in the Human Resources Division.

COMMUNITY PILLAR

5: A City That Works

GOAL

8: Attract, develop, engage, and retain a diverse and highly skilled workforce across the organization.

ATTACHMENTS

1. Resolution
2. Exhibit A - Offer Letter with Enclosures

Prepared by: Kristen Hilton
Acting Human Resource Manager

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION ADOPTING 180-DAY WAIT PERIOD EXCEPTION TO HIRE A RETIREE IN ACCORDANCE WITH GOVERNMENT CODE SECTIONS 7522.56 AND 21224 OF THE PUBLIC EMPLOYEES' RETIREMENT LAW

WHEREAS, in compliance with Government (Gov.) Code section 7522.56 of the Public Employees' Retirement Law, the City Council for the City of Livermore must provide CalPERS this certification resolution when hiring a retiree before 180 days has passed since their retirement date; and

WHEREAS, Nancy Dias retired from the City of Livermore in the position of Human Resources Manager, effective April 19, 2024; and

WHEREAS, Gov. Code section 7522.56 requires that post-retirement employment commence no earlier than 180 days after the retirement date, which is October 16, 2024 without this certification resolution; and

WHEREAS, Gov. Code section 7522.56 provides that this exception to the 180-day wait period shall not apply if the retiree accepts any retirement-related incentive; and

WHEREAS, the City Council, the City of Livermore, and Nancy Dias, certify that Nancy Dias has not and will not receive a Golden Handshake or any other retirement-related incentive; and

WHEREAS, the City Council for the City of Livermore hereby appoints Nancy Dias as an extra help retired annuitant to perform the duties of a Special Projects Coordinator for the City of Livermore under Gov. Code section 21224, effective August 6, 2024; and

WHEREAS, the entire employment agreement, contract or appointment document between Nancy Dias and the City of Livermore has been reviewed by this body and is attached herein; and

WHEREAS, no matters, issues, terms, or conditions related to this employment and appointment have been or will be placed on a consent calendar; and

WHEREAS, the employment shall be limited to 960 hours per fiscal year for all CalPERS employers; and

WHEREAS, the compensation paid to retirees cannot be less than the minimum nor exceed the maximum monthly base salary paid to other employees performing comparable duties, divided by 173.333 to equal the hourly rate; and

WHEREAS, the maximum base salary for this position is $16,800.01 and the hourly equivalent is $96.92, and the minimum base salary for this position is $13,440.01, and the hourly equivalent is $77.54; and

WHEREAS, the hourly rate paid to Nancy Dias will be $77.54; and

WHEREAS, Nancy Dias has not and will not receive any other benefit, incentive, compensation in lieu of benefit or other form of compensation in addition to this hourly pay rate; and

THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that it hereby certifies the nature of the appointment of Nancy Dias as described herein and detailed in the appointment document, attached hereto as Exhibit A, and that this appointment is necessary to fill the critically needed position of Special Projects Coordinator for the City of Livermore by August 6, 2024, because due to current staffing and employee workloads in the Human Resources Division, additional support is needed to move the projects forward. Nancy Dias has the experience, familiarity, and the skill to work on these complex projects. As the City of Livermore prepares to recruit for a new Human Resources Manager, Nancy Dias will help mitigate any service disruptions, allow for continuity of critical operations, and will assist with training and knowledge transfer to the new Human Resources Manager.

On motion of Council Member _____, seconded by Council Member _____, the foregoing resolution was passed and adopted on July 22, 2024, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

ATTEST:

_____
Deborah L. Elam
Acting City Clerk

APPROVED AS TO FORM:

/s/ Jason R. Alcala
Jason R. Alcala
City Attorney

Exhibit A – Conditional Offer Letter (personal information redacted for publication)

LIVERMORE
CALIFORNIA

[Date to be inserted after the resolution approving the certification is adopted]

Nancy Dias
XXXX **[Home address redacted from publication]**
XXXX

Dear Nancy:

We are pleased to inform you that the City of Livermore is extending an offer of employment to you as a temporary employee in the Human Resources Division of the Administrative Services Department. Your job title will be Special Projects Coordinator. Your first day of employment will be [**date to be inserted**]. Continued temporary employment is contingent upon the successful completion of the City's backgrounding process, which includes Livescan fingerprinting and a DMV report. A Human Resources representative will contact you to provide information on scheduling your Livescan fingerprinting appointment.

In accepting this temporary position, you will be paid at the rate of $77.54 per hour and will be subject to changes in your work shift, schedule, or location as the need of the City may require. Your temporary employment is for up to 29 hours per week not to exceed 960 hours in a fiscal year.

Temporary employees are not eligible for benefits and are at-will employees. As per the City of Livermore Personnel Rules & Regulations, at-will employees are defined as an employee who does not have a legal right to continued employment with the City and who therefore may be disciplined or discharged with or without cause and without the right of appeal. All City of Livermore regular job openings are posted on our website: https://www.governmentjobs.com/careers/livermoreca. Interested candidates are encouraged to review the site regularly as new jobs are frequently posted.

Please confirm your acceptance of our job offer by signing this letter and bringing it to the Human Resources Division on your first day of work.

The Federal Immigration Act requires that you provide us with proof of citizenship or authorization to work in the United States. You are required to provide us with this proof within three days of your hire date. Enclosed is a list of acceptable documents for proof of identity and legal ability to work in the United States. You will need to bring these document(s) to Human Resources on the day you begin your employment with the City, and no later than 72 hours after reporting to work at your jobsite.

EXHIBIT A

We welcome you back and wish you every success in your employment with the City of Livermore.

Please contact us if you have any additional questions at (925) 960-4100.

Sincerely,

Tina Olson
Administrative Services Director

_____ _____
Employee's Signature Date

Enclosures
1. I-9 Lists of Acceptable Documents
2. Special Projects Coordinator Job Specification
3. Unclassified and Hourly Salary Schedule

LISTS OF ACCEPTABLE DOCUMENTS

All documents containing an expiration date must be unexpired.
* Documents extended by the issuing authority are considered unexpired.
Employees may present one selection from List A or a
combination of one selection from List B and one selection from List C.
Examples of many of these documents appear in the Handbook for Employers (M-274).

LIST A Documents that Establish Both Identity and Employment Authorization	OR	LIST B Documents that Establish Identity	AND	LIST C Documents that Establish Employment Authorization
1. U.S. Passport or U.S. Passport Card		**1.** Driver's license or ID card issued by a State or outlying possession of the United States provided it contains a photograph or information such as name, date of birth, gender, height, eye color, and address		**1.** A Social Security Account Number card, unless the card includes one of the following restrictions: **(1)** NOT VALID FOR EMPLOYMENT **(2)** VALID FOR WORK ONLY WITH INS AUTHORIZATION **(3)** VALID FOR WORK ONLY WITH DHS AUTHORIZATION
2. Permanent Resident Card or Alien Registration Receipt Card (Form I-551)		**2.** ID card issued by federal, state or local government agencies or entities, provided it contains a photograph or information such as name, date of birth, gender, height, eye color, and address		**2.** Certification of report of birth issued by the Department of State (Forms DS-1350, FS-545, FS-240)
3. Foreign passport that contains a temporary I-551 stamp or temporary I-551 printed notation on a machine-readable immigrant visa		**3.** School ID card with a photograph		**3.** Original or certified copy of birth certificate issued by a State, county, municipal authority, or territory of the United States bearing an official seal
4. Employment Authorization Document that contains a photograph (Form I-766)		**4.** Voter's registration card		**4.** Native American tribal document
5. For an individual temporarily authorized to work for a specific employer because of his or her status or parole: **a.** Foreign passport; and **b.** Form I-94 or Form I-94A that has the following: **(1)** The same name as the passport; and **(2)** An endorsement of the individual's status or parole as long as that period of endorsement has not yet expired and the proposed employment is not in conflict with any restrictions or limitations identified on the form.		**5.** U.S. Military card or draft record		**5.** U.S. Citizen ID Card (Form I-197)
		6. Military dependent's ID card		**6.** Identification Card for Use of Resident Citizen in the United States (Form I-179)
		7. U.S. Coast Guard Merchant Mariner Card		**7.** Employment authorization document issued by the Department of Homeland Security For examples, see **Section 7** and **Section 13** of the M-274 on **uscis.gov/i-9-central**. The Form I-766, Employment Authorization Document, is a List A, **Item Number 4.** document, not a List C document.
		8. Native American tribal document		
		9. Driver's license issued by a Canadian government authority		
		For persons under age 18 who are unable to present a document listed above:		
		10. School record or report card		
		11. Clinic, doctor, or hospital record		
		12. Day-care or nursery school record		
6. Passport from the Federated States of Micronesia (FSM) or the Republic of the Marshall Islands (RMI) with Form I-94 or Form I-94A indicating nonimmigrant admission under the Compact of Free Association Between the United States and the FSM or RMI				

Acceptable Receipts

May be presented in lieu of a document listed above for a temporary period.
For receipt validity dates, see the M-274.

• Receipt for a replacement of a lost, stolen, or damaged List A document. • Form I-94 issued to a lawful permanent resident that contains an I-551 stamp and a photograph of the individual. • Form I-94 with “RE” notation or refugee stamp issued to a refugee.	OR	Receipt for a replacement of a lost, stolen, or damaged List B document.	Receipt for a replacement of a lost, stolen, or damaged List C document.

*Refer to the Employment Authorization Extensions page on **I-9 Central** for more information.

SPECIAL PROJECTS COORDINATOR

DEFINITION

This is a temporary classification used for temporary employees who are hired to perform project/program support functions requiring specialized knowledge, skills, and abilities. This classification may not be used for ongoing or repetitive use. Duties will vary widely based on the needs of the department, division, or section.

DISTINGUISHING CHARACTERISTICS

This is a temporary, part-time, at-will position working less than 1,000 hours per fiscal year. Temporary employment does not include benefits.

SUPERVISION AND TRAINING RECEIVED

Receives direct supervision and direction from assigned supervisory or management staff.

SUPERVISION EXERCISED

None.

EXAMPLES OF IMPORTANT AND ESSENTIAL FUNCTIONS

The following list is designed to be a sample of the required essential functions:

- Completes special projects requiring specialized skills and knowledge.
- Prepares reports, memos, and records.
- Gathers records, and/or analyzes data.
- May make oral presentations.
- Interfaces orally and in writing with members of the public, and City employees.
- Provides information and assistance to the public.
- Maintains files and records.
- Operates program related equipment.
- Operates general office equipment including word processing, spreadsheet, data base, and other computer applications.
- Performs related work as required.

OTHER

Effectively applies the required knowledge and skills in the daily performance of assigned duties including but not limited to; reads, comprehends, and interprets a variety of City written materials including policies, codes, ordinances, and regulations. Must successfully complete a full background investigation as a condition of employment. May require possession of a valid California Class C Driver's License and a satisfactory driving record as determined by the City.

DocuSign Envelope ID: 5B9333F0-E87C-42A2-B9AE-39AB9CF5B5DF

EXHIBIT A

CITY OF LIVERMORE
UNCLASSIFIED AND HOURLY SALARY SCHEDULE

Class Code	Classification	Salary Range	Effective Date
210	Department Assistant	$16.00 - $26.00 Hourly	01/01/24
438	Field/Maintenance Aide	$16.00 - $26.00 Hourly	01/01/24
240	Law Clerk	$16.00 - $26.00 Hourly	01/01/24
915	Temporary Librarian	$22.00 - $32.00 Hourly	01/01/24
916	Temporary Library Assistant	$20.00 - $30.00 Hourly	01/01/24
917	Temporary Library Clerk	$18.00 - $28.00 Hourly	01/01/24
920	Library Aide	$16.00 - $20.00 Hourly	01/01/24
961	Police Cadet	$16.00 - $26.00 Hourly	01/01/24
956	Special Projects Coordinator	$20.00 - $100.00 Hourly	12/20/21

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 10.1**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Supplemental materials received prior to the meeting.

RECOMMENDED ACTION

SUMMARY

These materials were posted online and made available to the public at the same time that they were distributed to the City Council.

3.1	Livermore Housing Authority annual update presented by Sarah Ramler, Executive Director, Livermore Housing Authority. Material: PowerPoint Presentation
5.15	Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy. Material: Public Comment
5.22	THIS ITEM WAS CONTINUED FROM THE JULY 8, 2024 CITY COUNCIL MEETING. Resolution accepting the recommendation of the Altamont Landfill Open Space Committee to authorize the City's grant request, finding the acquisition of the Hartford Hills Property is categorically exempt from CEQA, authorizing the City Manager to enter into a Purchase and Sale Agreements for open space land, and appropriating funds from the Dougherty Valley Settlement Agreement account. Location: Hartford Hills Property (82 acres – APNs: 902-9-3-1, 902-9-3-2). Materials: Public Comment, Memorandum to Community Development Director
6.1	Public Hearing to consider protests related to the non-payment of solid waste, recycling, and organics handling services provided by Livermore Sanitation for collection on the County Assessor tax roll. Material: PowerPoint Presentation

6.2	Hearing to consider a request for a Vesting Tentative Tract Map, Site Plan Design Review, Development Agreement, Consistency Determination, Conditional Use Permit, Master Sign Program Amendment, and Development Code amendment to develop vacant land located southwest of the Portola Avenue and Isabel Avenue intersection with for-sale residential townhome and condominium units and for-rent apartments with mixed commercial and office uses and a public park and public plazas, known as Isabel Crossing. Materials: PowerPoint Presentation, Applicant Presentation, Public Comment
7.1	Resolution adopting 180-day wait period exception to hire retired annuitant, Nancy Dias, former Human Resources Manager, in accordance with Government Code section 7522.56 of the Public Employees' Retirement Law. Material: PowerPoint Presentation
8.0	Council Committee Reports and Matters Initiated by City Manager, City Attorney, Staff, and Council Members Material: Council Reports

DISCUSSION

ATTACHMENTS

1. Supplemental Materials

Prepared by: Helena Graves
Deputy City Clerk

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

Livermore Housing Authority (LHA)

Annual Update

JULY 2024

PRESENTED BY SARAH RAMLER, EXECUTIVE DIRECTOR

1

Livermore Housing Authority (LHA)

Programs

- **Affordable Housing – 167 units**
  LHA owns and operates
  - 27 units in Springtown – Bluebell Apartments
    Mix of affordable, transitional and market rate units
  - 9 units off of N. Livermore - Las Posadas Apartments
    Affordable units at 50%-60% AMI
  - 6 units off of N. Livermore – Chestnut Apartments
    Affordable units at 30% and 60% AMI
  - 125 units – Leahy Square Apartments
    Project based Section 8 units
- **Section 8/Housing Choice Voucher Program – 707 families**
  LHA administers rental subsidies

2

What is Section 8/Housing Choice Voucher Program?

- The Section 8 Program is a federally funded rental subsidy program administered locally by Public Housing Authorities.
- Established in 1974, Section 8 is the largest rent subsidy program in the US serving over 9 million people.
- The program provides a rental subsidy on behalf of low and extremely low-income households by making housing assistance payments directly to landlords in the open rental market.
- Program participants generally pay approximately 30% of their gross income towards rent in a market rate unit and the Housing Authority pays the remaining portion.
- Funding for this program is appropriated annually by Congress. Funding levels typically do not allow for expansion of the program but rather maintain the current level of funding to ensure the program remains. Some additional funding has been made available for Special Purpose Vouchers which are awarded through a competitive process.
- Program participants renew their program eligibility annually and the Housing Authority inspects the units they reside in to ensure minimum housing quality standards are met.

3

LHA HUD Programing

Housing Choice Voucher Program (Section 8) – *707 rental subsidy vouchers*

- **457** Tenant Based Vouchers – traditional voucher program
- **179** Project Based Vouchers – unit-based subsidy program **(15 committed to the Family Homeless Challenge Grant awarded by the State)**
- **40** Mainstream Vouchers – non-elderly persons with disabilities vouchers
- **24** Veteran Affairs Supportive Housing – homeless Veteran vouchers **(8 committed to Vineyard 2.0)**
- **1** Homeownership Vouchers – mortgage assistance subsidy
- **5** Stability Vouchers – homeless or at-risk, fleeing domestic violence, veterans and families of veterans
- **1** Foster Youth Initiative Voucher *pending award from HUD*

4

Key Accomplishments

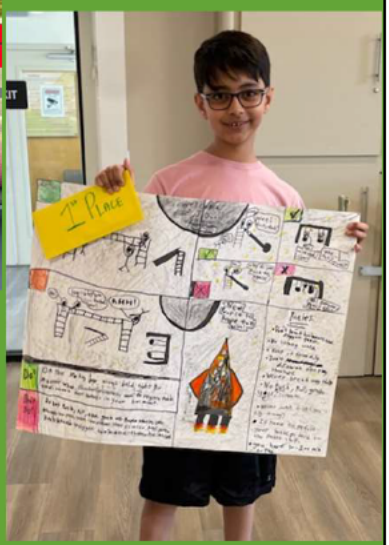
- Achieved "High Performer" rating by US Department of Housing and Urban Development for LHA administered programs
- Increased the utilization of our federal funds by 5% to achieve over 100% utilization for CY2023 - pulled 100 people from our waiting list
- Applied for and were awarded through a competitive process HUD's prestigious designation of a Move to Work (MTW) Agency
  - This allows LHA to creatively utilize federal dollars to create policies and programs that are specifically suited to the needs of Livermore. Exempts LHA from certain regulatory requirements to allow for more efficient use of resources.
- Actively beginning the development process to bring at least 125 new affordable housing units to Livermore.
  - This was made possible by successfully transitioning out of the Public Housing program in August 2023 which significantly increased cashflow to the agency.

5









6

Helena Graves

From: Ronald Ybarra [redacted]
Sent: Monday, July 22, 2024 11:52 AM
To: City Clerk
Subject: Public Comment for 07-22-2024 Meeting Tonight

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

This is regarding Agenda Item 5.15, Item 1. As a taxpayer in the city of Livermore, I oppose any funding for any drag queens, or drag queen story hours. I have nothing against drag queens, but no funding should be permitted towards adult entertainment. This drag queen activity may be considered to be "art" by some, but it is wholly inappropriate to be presented to anyone under the age of 18.

Sincerely,

Ron Ybarra

Helena Graves

From: City of Livermore govAccess CMS Site <info@LivermoreCA.gov>
Sent: Monday, July 22, 2024 11:58 AM
To: City Clerk
Subject: OBJECTION to Item 5.15 - Agenda 7/22 - Liveremore Pride from Livermore, CA

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Message submitted from the <Livermore, CA> website.

Site Visitor Name: Kristen Del Rio
Site Visitor Email: [redacted]

Dear City Council Members,
I strongly encourage a vote against these fund allocations for item 5.15 Livermore Pride. There are many other programs that are in need of additional funds to support our Livermore community values. I have seen other cities that have supported similar funding allocations and I do not feel that these programs are appropriate which has led to unnecessary exposure to our impressionable youths. I don't feel that this is healthy, nor a good source of tax payer dollars. Let these programs be funded privately, should they need support.

LIVERMORE
CALIFORNIA

INTEROFFICE MEMORANDUM

Date: July 22, 2024

To: Brent Smith, Community Development Director

From: Jason R. Alcala, City Attorney

Subject: *Dougherty Valley Settlement Agreement*, Expenditure of Funds
Effect of Citizens for Balanced Growth's Refusal to Meet-and-Confer

This memorandum provides information about the requirements in the *Dougherty Valley Settlement Agreement* for the expenditure of funds and the effect of Citizens for Balanced Growth's refusal to meet-and-confer.

Dougherty Valley Settlement Agreement.

The *Dougherty Valley Settlement Agreement* (DVSA) dated November 2, 1999, is an agreement settling water litigation involving the Dougherty Valley Specific Plan that was approved by Contra Costa County. A copy of the agreement is attached.

The settlement agreement resulted in a fund to be used by the Livermore City Council to purchase permanent easements or fee title to land for conservation or agricultural preservation purposes.[1] The DVSA expressly states that the settlement funds are to be used "exclusively for the purchase from willing sellers."[2] . The current DVSA fund balance is approximately $5,028,960.

Expenditure of Funds.

The DVSA provides that prior to expending its funds the Livermore City Council will receive recommendations from City staff concerning proposed acquisitions.[3] The DVSA also provides that "city staff will meet-and-confer with [Citizens for Balanced Growth] prior to formulating its recommendations for acquisitions."[4] If the recommendations by City staff differ from those preferred by Citizens for Balanced Growth, then "the staff report to the City Council shall specify and explain the differences."[5] The City Council must then place

[1] DVSA, section 6.a.
[2] Ibid.
[3] DVSA, section 6.d.
[4] Ibid.
[5] Ibid.

the acquisition on a City Council meeting agenda for public discussion before deciding whether to expend DVSA funds for an acquisition.

Attempts to Meet and Confer.

City staff has attempted to meet-and-confer with Citizens for Balanced Growth since December 2023 to discuss staff recommendations for open space acquisitions using DVSA funds. Citizens for Balanced Growth has rebuffed those requests, and unilaterally imposed new conditions on the meet-and-confer. It has also demanded documentation not previously required prior to meeting. City staff produced the requested documents within the City's control and attempted to work through the new conditions, but Citizens for Balanced Growth has not yet met with staff. A brief timeline of those efforts is set forth in the staff report for agenda item 5.22 identified in the agenda for the City Council meeting on July 22, 2024.

As a result of Citizens for Balanced Growth refusal to meet, City staff sent the attached letter dated April 9, 2024, stating that in the absence of the meet-and-confer, the staff report would state that Citizens for Balanced Growth did not support staff's recommendations.

Citizens for Balanced Growth's Decision to Not Meet-and-Confer.

On July 8, 2024, a representative from Citizens for Balanced Growth objected to the City's consideration of the staff recommendation to use DVSA funds to acquire the Hartford Property because staff had not met-and-conferred with them. In addition, on July 19, 2024, legal counsel for Citizens for Balanced Growth sent the attached letter to the Mayor and City Council wherein they confirm staff's outreach and their refusal to meet. The letter attempts to justify Citizen for Balanced Growth's failure to accept staff' offer to meet-and-confer, and asserts the City breached the agreement. Their position is that the Council's action is illegal and exposes the City to litigation since City staff had not met-and-conferred with them. The position of Citizens for Balanced Growth is wrong.

The meet-and-confer requirement in the DVSA is a condition precedent to the City Council's consideration of staff's recommendation. However, its purpose is to provide Citizens for Balance Growth with an opportunity to evaluate staff's recommendation and to express its own preference. Citizens for Balanced Growth was afforded the opportunity to meet-and-confer with staff over a period of several months. But it was Citizens for Balanced Growth who failed to meet-and-confer with the City. In addition, Citizens for Balanced Growth has attempted to impose new rules for the meet-and-confer that were not previously utilized. That behavior suggests to staff that Citizens for Balanced Growth is not interested in a meet-and-confer to review and comment on staff's recommendation, and instead is attempting to delay open space acquisitions.

It is important to note that the DVSA does not provide a remedy if a party declines to meet-and-confer. However, contract law provides that Citizens for Balanced Growth cannot prevent the City Council from acting when Citizens for Balanced Growth is the one who failed to perform.[6] Here, it is Citizens for Balanced Growth's own departure from the terms-and-conditions in the DVSA, and their unilateral attempt to change the usual rules for a meet-and-confer, that prevented the meeting from taking place. The party complaining of breach cannot pursue a remedy when it was the one who failed to act.[7]

Therefore, the application of contract law to these facts will most likely find that Citizens for Balanced Growth has either breached the agreement or waived the condition. Regardless of the conclusion at law, they have not been prejudiced since they declined the opportunity afforded them to express their preference, and to the extent they want to comment on staff's recommendation, they have also appeared before the City Council and declined to express their preference in response to staff's recommendation. Citizens for Balanced Growth's refusal to meet-and-confer does not affect the City Council's ability to consider and approve the use of DVSA funds to acquire otherwise eligible property. The City Council can proceed. If litigation is filed, the City Attorney's Office is prepared to meet with your staff within the attorney-client privilege to evaluate the City's response.

Future Meet-and-Confers

Please note the request that legal counsel representing Citizens for Balanced Growth that all future communications to meet-and-confer be through them from this point forward. I will share that the legal counsel has expressed a willingness to meet, so I encourage your staff to follow up and schedule that meeting to discuss future acquisitions that contemplate utilizing DVSA funding.

encl.
1. Dougherty Valley Settlement Agreement
2. Letter to Citizens for Balanced Growth, dated April 9, 2024.
3. Letter from Citizens for Balanced Growth, dated July 19, 2024

cc: Marianna Marysheva, City Manager

[6] California Jurisprudence 3d, Contracts § 325 Performance of Conditions, § 355 Act or omission, or breach by, adverse party as excuse for nonperformance, generally ("Performance is excused when prevented or rendered impossible by the acts of the opposite party."); See also, *Taylor v. Sapritch, (1940) 38 Cal.App.2d 478.*

[7] California Jurisprudence 3d, Contracts § 326 Performance as a condition to recovery from other party.

AGREEMENT TO SETTLE WATER LITIGATION

BY AND BETWEEN

ZONE 7 WATER AGENCY
DUBLIN SAN RAMON SERVICES DISTRICT
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
CITY OF LIVERMORE, CITIZENS FOR BALANCED GROWTH
WINDEMERE RANCH PARTNERS
SHAPELL INDUSTRIES, INC.

NOVEMBER 2, 1999

Citizens for Balanced Growth v. Alameda County Flood Control and Water Conservation District, et al. (Sacramento County Superior Court Case 98CS02670); and *City of Livermore v. Alameda County Flood Control and Water Conservation District, et al.* (Sacramento County Superior Court Case 98CS02671)

AGREEMENT TO SETTLE WATER LITIGATION

THIS AGREEMENT TO SETTLE WATER LITIGATION (the "Agreement") is entered into as of November 2, 1999, by and between Zone 7 of the Alameda County Flood Control and Water Conservation District, commonly known as the Zone 7 Water Agency ("Zone 7"); the Alameda County Flood Control and Water Conservation District ("ACFCWCD"); Dublin San Ramon Services District, a community services district ("DSRSD"); the City of Livermore, a municipal corporation ("City"); Citizens for Balanced Growth, a California non-profit corporation ("Citizens"); Windemere Ranch Partners, a California limited partnership ("Windemere"); and Shapell Industries, Inc., a Delaware corporation ("Shapell"). Zone 7, ACFCWCD, DSRSD, City, Citizens, Windemere and Shapell are referred to collectively below as the "Settling Parties."

RECITALS

A. On December 22, 1992, the Board of Supervisors of Contra Costa County (the "County") approved a specific plan (the "Dougherty Valley Specific Plan") providing for the development of approximately 6,000 acres of real property owned in part by Windemere and in part by Shapell and located in the unincorporated area of the County.

B. As required by a September 1995 agreement settling certain litigation filed by the East Bay Municipal Utility District ("EBMUD") against the County, Windemere and Shapell in connection with the County's approval of the Dougherty Valley Specific Plan, Windemere and Shapell undertook efforts to secure permanent water service to an approximately 4400-acre portion of the Dougherty Valley (as defined more specifically in Section 1(a) below and shown on attached Exhibit A attached hereto, the "Dougherty Valley Service Area") from the Berrenda Mesa Water District ("BMWD") and DSRSD and/or Zone 7.

C. On August 23, 1994, Zone 7 and DSRSD entered into that certain "Contract between Zone 7 of Alameda County Flood Control and Water Conservation District and Dublin San Ramon Services District for a Municipal & Industrial Water Supply" (the "Water Supply

Agreement"). In February and March, 1998, following certification by Zone 7 of a subsequent environmental impact report (the "SEIR"), Zone 7 and DSRSD approved an amendment to the Water Supply Agreement. This amendment, commonly known as the "First Amendment," would expand DSRSD's service area under the Water Supply Agreement to include the Dougherty Valley Service Area and establish certain other terms and conditions pursuant to which Zone 7 will furnish and provide water to DSRSD for delivery to the Dougherty Valley Service Area.

D. In connection with its approval of the First Amendment, Zone 7 has also approved: (1) an agreement, dated January 28, 1998, to purchase from the Berrenda Mesa Water District ("BMWD"), for use in the Dougherty Valley Service Area, entitlements to 7,000 acre-feet of firm water entitlements from SWP (the "Water Purchase Agreement"), which Water Purchase Agreement provides for a transfer of such water entitlements from the Kern County Water Agency ("KCWA") to Zone 7; (2) an agreement, dated January 28, 1998, to purchase from the Semitropic Water Storage District ("SWSD") storage capacity in the groundwater banking program owned and operated by SWSD (as amended, the "Water Storage Agreement"); and (3) an agreement by and between Zone 7, DSRSD and BMWD establishing an escrow for the deposit and delivery of certain funds and instruments relative to the transfer of water entitlements to Zone 7 pursuant to the Water Purchase Agreement, as amended by that certain First Amendment to Water Service Escrow Agreement, dated as of April 30, 1998 (the "Water Service Escrow Agreement").

E. On March 19, 1998, Citizens initiated in the Alameda County Superior Court a proceeding action challenging the legality of the First Amendment and, on April 1, 1998, the City initiated in the Alameda County Superior Court a separate proceeding also challenging, among other things, the legality of the First Amendment. These proceedings subsequently were consolidated and transferred to the Sacramento County Superior Court where they currently are pending as: *Citizens for Balanced Growth v. Alameda County Flood Control and Water Conservation District et al.* (Sacramento County Superior Court Case 98CS02670) and *City of Livermore v. Alameda County Flood Control and Water Conservation District, et al.* (Sacramento County Superior Court Case 98CS02671), respectively (collectively, the "Water Litigation").

F. During the course of the consolidated proceedings, Judge Robie denied motions for summary judgment filed by respondents and petitioners on the question of whether Zone 7 was authorized under its enabling legislation to enter into the First Amendment. Judge Robie further sustained a demurrer to the City's claims that Zone 7's actions were not conducted in compliance with the California Environmental Quality Act (CEQA), which demurrer was sustained on the basis that the City had failed to join certain indispensable parties prior to the expiration of applicable the statute of limitations. Judge Robie thereafter suggested that the parties to the Water Litigation mediate their disputes.

G. Having accepted Judge Robie's suggestion and conducted successfully a mediation through the offices of J.A.M.S. Endispute, the Settling Parties now desire to settle the Water Litigation on the terms and conditions set forth below.

AGREEMENT

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, IT IS HEREBY AGREED as follows:

1. SERVICE TO DOUGHERTY VALLEY SERVICE AREA.

a. **Availability of Water.** Notwithstanding anything contained in section B.4 of Appendix I of the First Amendment, in no year shall Zone 7 provide to DSRSD for service to the "Dougherty Valley Service Area" (as that area currently is shown on Figure 1 attached to the First Amendment and Exhibit A attached hereto) an amount of water that is greater than the amount of water received by Zone 7 in such year for service to the Dougherty Valley Service Area. For the purposes of this Section 1(a), the amount of water so received by Zone 7 in such year for service to the Dougherty Valley Service Area shall be deemed to be equal to the sum of:

(i) the amount of entitlement, interruptible, and turnback pool water that Zone 7 receives in such year from DWR and which is derived from 6,080 acre-feet of the 7,000 acre-foot annual entitlement that Zone 7 will acquire as a result of the transfer of water entitlements from KCWA under the Water Purchase Agreement (the "Dougherty Valley Water Supply");

(ii) the amount of water that is returned by DWR or SWSD to Zone 7 in such year that is derived from that portion of the Dougherty Valley Water Supply previously placed in the 43,000 acre feet of storage acquired in accordance with Article 5 of the Water Storage Agreement; and

(iii) the amount of any other water hereafter secured by or through DSRSD and received by Zone 7 in such year, all in a manner consistent with the terms and provisions of this Agreement applicable to the securing, receipt and delivery of such water for and to the Dougherty Valley Service Area.

b. **Availability of Treatment and Conveyance Facilities.**

(i) *Adequacy of Facilities in General.* DSRSD and Zone 7 shall ensure that any Zone 7 facilities used for the treatment or conveyance of water to the Dougherty Valley Service Area are designed and constructed so that, at times of peak demand, DSRSD's water service to the Dougherty Valley Service Area will not actually and materially impair or actually and materially diminish service to the now-existing customers of Zone 7's contractors (i.e., metered connections served as of the date of this Agreement by DSRSD, California Water Service Company, the City of Pleasanton or the City of Livermore as retailers for Zone 7). DSRSD further agrees to pay to Zone 7, upon close of the water transfer, funds in the following amounts: (1) an amount sufficient to compensate Zone 7 for the Dougherty Valley Service Area's pro rata share of certain general obligation bond debt as and in the amount set forth in Section 3(e) of the Water Service Escrow Agreement; and (2) as and in the amount set forth in Section 3(f) of the Water Service Escrow Agreement, the present value of any projected impact on Zone 7's capital fund due to the provision of service to the Dougherty Valley Service Area (i.e., due to, among other things, an accelerated schedule for the construction of capital facilities) and for which Zone 7 will not receive compensation through the payment of water connection fees by the Dougherty Valley Service Area.

(ii) *Design and Construction.* DSRSD shall evaluate the adequacy of Zone 7 facilities to accommodate peak demands for each new phase of development within the Dougherty Valley Service Area, and if adequate facilities are not so available, design and construct such facilities (and Zone 7 and DSRSD shall cooperate with each other in such design and construction) in accordance with section D.4 of Appendix I of the First Amendment as and

when needed to serve such phase in a manner that avoids causing any actual and material impairment or actual and material diminishment of service to the now-existing customers of Zone 7's contractors. In the event DSRSD so designs and constructs any such facilities, such facilities shall be Zone 7 facilities and DSRSD shall receive compensation for its design and construction costs through a credit against future connection payments otherwise due as set forth in section D.4 of Appendix I of the First Amendment.

(iii) *Suspension of Water Connections.* If Zone 7 and DSRSD fail to provide adequate Zone 7 facilities for any new phase of development within the Dougherty Valley Service Area as required under subsections (b)(i) and (b)(ii) above, and such failure causes an actual and material impairment or actual and material diminishment of service to the now-existing customers of Zone 7's contractors during times of peak demand, then DSRSD shall suspend the issuance of additional water connections for such phase until such time as adequate facilities have been so constructed as required by subsections (b)(i) and (b)(ii) above.

(iv) *Remedies.* A failure by Zone 7 or DSRSD to provide adequate Zone 7 facilities for any new phase of development within the Dougherty Valley Service Area shall be deemed to have caused an actual and material impairment or actual and material diminishment as described above only if such impairment or diminishment would not have occurred but for DSRSD's or Zone 7's failure to provide adequate Zone 7 facilities for such phase. In the event of any disagreement between the parties as to whether such an impairment or diminishment has been so caused by such a failure to design and construct adequate Zone 7 facilities for such phase of development, DSRSD shall not suspend the issuance of additional water connections, if at all, until completion of the dispute resolution process unless otherwise ordered by the Superior Court in accordance with the provisions of Section 8 (including Section 8(d)(ii)) below. The provisions of Subsections 1(b)(iii) and (iv) are the exclusive remedies available to Citizens and Livermore under this Agreement for a violation by DSRSD or Zone 7 of the provisions of Subsections 1(b)(i) or (ii) above.

(v) *Interruptibility of Additional Water Supplies.* Where, pursuant to section B.5 of Appendix I of the First Amendment, DSRSD has secured additional water supplies to supplement the Dougherty Valley Service Area allotment, the use of Zone 7's capacity in the South Bay Aqueduct and of Zone 7 facilities to treat and deliver said additional water shall be

interruptible and contingent on the availability of facilities adequate to treat and convey such water in light of Zone 7's other needs and commitments; except to the extent (1) DSRSD has contributed to the financing of such capacity or facilities; and (2) such capacity or facilities can handle such additional water supplies without causing an actual and material impairment or actual and material diminishment of service to the now-existing customers of Zone 7's contractors during times of peak demand.

2. ZONE 7 SERVICE EXTENSIONS.

a. **Submission to Zone 7 Electorate.** If Zone 7 receives a request to participate in serving water (regardless of whether Zone 7 owns or leases the entitlements to such water or instead wheels such water through Zone 7 facilities) to any development project that will be located outside the boundaries of Zone 7 during the period of such service (other than development within the Dougherty Valley Service Area or for military uses within the U.S. military facility known as Parks Reserve Forces Training Area that, following an objective evaluation of the military's service request, are found by Zone 7 not to have a significant unmitigated impact on Zone 7 water facilities or supplies), the Zone 7 Board, following the completion of an objective evaluation of the service request, shall hold an election of Zone 7 electors before agreeing to provide any such service.

b. **Effect of Elections.** The Zone 7 Board and ACFCWCD Board agree to be bound by the results of the election if the voters disapprove providing the requested service, and this Agreement shall be specifically enforceable as set forth in Section 8(d)(ii) below. If Zone 7 holds the election under the circumstances described above, and the voters approve the requested service, neither Livermore nor Citizens will challenge Zone 7's approval of the requested service on the basis of a violation of this section 2 or of the District Act (West's Cal. Water Code, App. 55). Livermore and Citizens each specifically and without limitation reserves its rights to challenge approval by Zone 7 of future extra-territorial service extensions if Zone 7 does not hold an election as specified above, or if Zone 7 approves a request notwithstanding a negative vote by the electorate.

c. **Annexations.** The Zone 7 Board and ACFCWCD Board agree that, if the proposed legislation described in Section 7 below is enacted by the State of California, then any

annexation of territory to Zone 7 for the purpose of providing water service, which annexation occurs after the date such proposed legislation becomes law, shall be governed by the provisions of subsections (a) and (b) above. Zone 7 and ACFCWCD each acknowledges that it lacks authority under the District Act to annex to its boundaries any area located outside the current boundaries of ACFCWCD and agrees to act in accordance with such legal limitations as set forth in the District Act.

3. DSRSD SERVICE EXTENSIONS IN GENERAL.

a. Service Area.

(i) *In General.* DSRSD will not, except as otherwise specified in this Section 3, provide water service to any area other than (1) DSRSD's current water service area as established by the Alameda County or Contra Costa County Local Agency Formation Commission ("LAFCO"); (2) the Dougherty Valley Service Area; (3) areas located within the City of Dublin's eastern sphere of influence as shown on Exhibit B attached hereto (the "Eastern Sphere"); or (4) areas located adjacent to DSRSD's then-current LAFCO-approved service area, but outside the then-current boundaries of Zone 7, and with respect to which the proposed water service arrangement has first been submitted to and approved by the electorate of Zone 7 in accordance with Section 2 above (following, in the case of a proposed annexation by Zone 7 of any such area, enactment of the legislation described in Section 2(c) above).

(ii) *Implementation.* Except as otherwise specified below, DSRSD agrees that it will neither support nor initiate the annexation to DSRSD for water service of any territory not described in (1), (2), (3) or (4) above. DSRSD's statement that it cannot support any such annexation, together with a statement that DSRSD is unable at such time to deliver a "will-serve" letter with respect to the territory so proposed for annexation, shall be delivered to LAFCO on or prior to the date that LAFCO conducts a public hearing on such annexation proposal in accordance with the provisions of section 56828 of the Government Code. If DSRSD receives notice under section 56837(b) that LAFCO intends to approve any such annexation without notice or public hearing, then DSRSD shall request in writing that a public hearing be conducted and submit its statement of non-support of the proposed annexation on or prior to the date of such public hearing.

(iii) *Notices to Lead Agency.* Upon DSRSD's receipt from the City of Dublin, Alameda County, Alameda County LAFCO or any other public agency (each a "Lead Agency") of any Notice of Preparation ("NOP") of an environmental impact report (CEQA Guidelines, § 15082) or Notice of Intent ("NOI") to Adopt a Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines, § 15072) for any project proposed be developed within territory not described in (1), (2), (3) or (4) above, which NOP or NOI identifies DSRSD as the likely provider of water service to the Proposed Project, DSRSD will provide written notice to such Lead Agency of its obligations under this Section 3 (including its obligation under Section 3(a)(ii) to deliver to LAFCO statements describing DSRSD's inability to support the annexation of the proposed project or deliver a "will-serve" letter with respect thereto). Such notice shall be delivered prior to the close of public comment on the NOP or NOI and, in the case of the preparation of an EIR, on the draft EIR later circulated by such Lead Agency.

(iv) *Orders of Annexation.* Notwithstanding the provisions of this Section 3 or Section 4 below, DSRSD will be bound to annex any area and will not be prevented by the terms of this Agreement from serving such area if, in the absence of a court-ordered stay of or judgment against the proposed annexation, such area is ordered to be annexed to the boundaries of DSRSD in accordance with the provisions of the Local Government Reorganization Act of 1985, as amended, Cal. Gov. Code §56000 et seq., ("Cortese-Knox"). Moreover, nothing in this Section 3(a) shall be deemed to limit any ability of DSRSD to develop or provide to LAFCO or any other agency information relative to DSRSD's ability to provide service to any area not described in 3(a)(1), (2), (3) or (4) above (including, without limitation, any notice, analysis or other information required to be provided by DSRSD to LAFCO or such other agency under the provisions of Section 4 below).

(v) *Eastern Dublin Future Study Area.* DSRSD shall be released from its obligations under this Section 3(a) with respect to any territory located within the "Future Study Area" described in Figure 2B of the Eastern Dublin General Plan Amendment (dated January 7, 1994), as shown on attached Exhibit C (the "Future Study Area"), if the City of Livermore formally initiates or supports any annexation to its boundaries of, or any proposal to amend its sphere of influence to include, any such territory; provided, however, that DSRSD shall not be so released if, prior to any such formal action by the City of Livermore, the City of Dublin has itself taken formal action to initiate or support an annexation to its own boundaries of, or any proposal to amend its sphere of influence to include, any such territory.

b. Institutional Provisions.

(i) *Contracts with DWR.* Except to the extent permitted under Sections 5(a), (b) or (c) of the Water Supply Agreement (as amended by the First Amendment), DSRSD will not enter into any contract with DWR for water entitlements from the SWP.

(ii) *Exercise of Rights under Section 5(c) of the Water Supply Agreement.* In exercising its rights under Section 5(c) of the Water Supply Agreement, any contract entered into by DSRSD with DWR shall be limited to the quantity of treated water that Zone 7 cannot deliver and the time period for which Zone 7 cannot satisfy DSRSD's requirements. Moreover, in no event shall DSRSD exercise its rights under Section 5(c) of the Water Supply Agreement to serve new customers outside of both DSRSD's current LAFCO-approved service area and the Dougherty Valley Service Area unless such customers first have been included within DSRSD's service area under the Water Supply Agreement (following a determination by Zone 7 and DSRSD that adequate supplies of water will be available to serve such customers) but Zone 7 later determines, due to circumstances that were not reasonably foreseeable at the time such customers were included within DSRSD's service area under the Water Supply Agreement, that it is unable to supply sufficient water for such customers.

(iii) *State Water Contractor Status.* Except and solely to the extent required to exercise its rights under Section 5(c) of the Water Supply Agreement in compliance with the foregoing provisions, DSRSD shall not apply to DWR to become a "State Water Contractor;" provided, however, DSRSD shall not be restricted from becoming a State Water Contractor if any of the City of Livermore, the City of Pleasanton or California Water Service Company (or any successor or assign of any of them) become a State Water Contractor. If DSRSD proposes to become a "State Water Contractor" and that proposal is objected to by Citizens or Livermore as not being in compliance with the terms of this Agreement (including the referenced provisions of the Water Supply Agreement), the dispute shall be addressed in accordance with section 8.b of this Agreement. The term "State Water Contractor" shall mean an entity which has executed, or is an assignee of, a contract of the type published in Department of Water Resources Bulletin No. 141 dated November 1965 with the State of California for a dependable supply of water made available by the Water Resources Development System as defined in section 12934(d) of the Water Code.

c. Term. The obligations of DSRSD and Zone 7 under this section 3 and sections 4 and 5 below shall remain in effect until the later of (i) August 23, 2024; or (ii) so long as the 1994 Water Supply Agreement remains in effect; or (iii) so long as Zone 7 continues deliveries to DSRSD following the expiration of the Water Supply Agreement absent a new or renewed contract as described in Section 33 of the Water Supply Agreement.

4. SERVICE EXTENSIONS TO EAST DUBLIN AND WEST DUBLIN

The following procedure shall govern DSRSD's evaluation of requests for water service to (1) areas located within the "Eastern Sphere" as defined in Section 3 above; (2) any territory located within the Future Study Area; or (3), unless such area will be served by DSRSD with a water supply provided by Zone 7 following a vote of the electorate of Zone 7 under Section 2 above, any area that is located within the "Western Extended Planning Area" described on Figure 1-2 of the Dublin General Plan (as revised July 7, 1992), which is the same area as that shown on Exhibit D attached hereto, and that has not been annexed to Zone 7 and DSRSD as of the date of this Agreement (a "Non-Voting West Dublin Area").

a. In General. Upon DSRSD's receipt from a "Lead Agency" (as defined in Section 3(a)(iii) above) of any NOP or NOI for any project within the Eastern Sphere, the Future Study Area or a Non-Voting West Dublin Area (a "Proposed Project"), which NOP or NOI identifies DSRSD as the likely provider of water service to the Proposed Project, then DSRSD shall, in consultation with Zone 7 and at the times specified below, prepare and submit to the Lead Agency a "Preliminary Water Service Analysis" and "Preliminary Impact Analysis" as described below.

b. Preparation of Water Service Analysis. The Preliminary Water Service Analysis shall include an evaluation by DSRSD of (1) whether the projected water demand associated with the Proposed Project was included as part of DSRSD's most recently adopted urban water management plan; (2) whether the total firm sustainable water supplies that reasonably may be expected to be available to DSRSD ("Projected Supplies") will meet the projected water demand associated with the Proposed Project, together with all other existing uses and uses under build-out of the applicable general plans for all areas lying within DSRSD's water service area, as and when such demand is expected to arise (collectively, "Projected Demand"); and (3) if the

Projected Supplies are insufficient to meet the Projected Demand, what feasible mitigation measures (e.g., offsets, additional supplies, storage) should be imposed by the Lead Agency to provide adequate supplies of water to serve the Projected Demand and thereby ensure that there will be no adverse effects on reliability of service or water quality as described in subsection 4(c) below. If DSRSD cannot identify any such feasible mitigation measures, then it will include with the Preliminary Water Service Analysis a statement that it does not have adequate supplies of water to serve the Proposed Project. For the purposes of section 4(b)(2) above, the term "total firm sustainable water supplies available to DSRSD" shall mean water supplies for which, prior to the time the actual demand for such water supplies is expected to arise, DSRSD (or Zone 7 acting as a wholesaler to DSRSD) will hold a water right, contract, or other entitlement that can be relied upon to provide such supplies for the then foreseeable future and at least until August 23, 2024.

c. **Performance Standards.**

(i) *In General.* In making its preliminary determination under (b)(2) above, DSRSD shall consider its Projected Supplies to be adequate to meet the Projected Demand only if DSRSD would be able to provide water service to the Proposed Project during a "Credible Worst-Case Drought Scenario" (defined below), using the Projected Supplies, without significantly and adversely affecting the reliability of service or quality of water provided to DSRSD's then-existing customers.

(ii) *Definition of Adverse Effects.* The provision of water by DSRSD to a Proposed Project shall be deemed to "adversely affect the quality of water" provided to DSRSD's existing customers only if it would cause a significant ongoing increase in the post-treatment concentration of any contaminant for which a maximum contaminant level is specified under the Safe Drinking Water Act to a level that exceeds the post-treatment concentration of such contaminant in water then being delivered by DSRSD to its customers. The provision of water by DSRSD to a Proposed Project shall be deemed to so "adversely affect the reliability of water" only if it would cause a significant decrease in DSRSD's ability to fully meet customer demand at all times without significantly increasing the likelihood, severity or duration of use by DSRSD of those voluntary or mandatory rationing, conservation, or other demand reduction or water

management measures described in DSRSD's current water use reduction plan (as set forth in Section VI of DSRSD's current Urban Water Management Plan).

(iii) *Definition of Credible Worst-Case Drought Scenario.* As used above, the term "Credible Worst-Case Drought Scenario" shall mean the most severe drought scenario for (i) the hydrologic period of 1922 to 1998, including, without limitation, either a 1976-1977 drought scenario or a 1987-1992 drought scenario; or (ii) any drought occurring subsequent to 1998 for which records are available at the time of preparation of the Water Service Analysis (the "Credible Worst-Case Drought Scenario").

d. **Preparation of Preliminary Impact Analysis.** Concurrently with its preparation of any Preliminary Water Service Analysis, DSRSD shall prepare a preliminary evaluation ("Preliminary Impact Analysis") of the potential significant adverse water-related environmental impacts that fairly may be argued could result from its provision of water service to the Proposed Project, including impacts arising from any mitigation measures identified by DSRSD in the Water Service Analysis. The Preliminary Impact Analysis, and any supporting data, shall be submitted as described below by DSRSD to the Lead Agency concurrently with its delivery of the Preliminary Water Service Analysis, together with a request that the Lead Agency impose feasible measures to mitigate any significant impacts identified by DSRSD in the Preliminary Water Service Analysis or the Preliminary Impact Analysis.

e. **Submittal of Preliminary Analyses.**

(i) *In General.* The Preliminary Water Service Analysis and Preliminary Impact Analysis shall be submitted by DSRSD to the Lead Agency (with a copy to each of Livermore and Citizens) as early as reasonably feasible. Not in limitation of the foregoing, (1) if the Lead Agency is preparing an environmental impact report, DSRSD shall use its best efforts to deliver the Preliminary Water Service Analysis and Preliminary Impact Analysis prior to the close of the public comment period on the NOP; and (2) if the Lead Agency is preparing a negative declaration or a mitigated negative declaration, DSRSD shall (x) use its best efforts to deliver the Preliminary Water Service Analysis and Preliminary Impact Analysis no later than two weeks prior to the last public hearing on the Proposed Project and (y) if DSRSD is unable to complete and delivery such analyses by such dates, shall request the Lead Agency to schedule any such

public hearing so as to allow two weeks of public review of DSRSD's analyses prior to such hearing.

(ii) *Accompanying Statements.* The Preliminary Water Service Analysis and Preliminary Impact Analysis shall be delivered to the Lead Agency together with a statement that DSRSD's determinations in such analyses are preliminary only; delivered to assist the Lead Agency in scoping its environmental review of the Proposed Project; and subject to further review in accordance with the provisions of this Agreement.

(iii) *Timing of Public Hearing.* If the Lead Agency refuses any request by DSRSD under subsection (i) above to schedule any public hearing on a negative declaration or mitigated negative declaration so as to allow DSRSD to complete its analysis at least two weeks prior to such public hearing, then DSRSD shall (1) deliver written notice to the Lead Agency that, due to the insufficient time allowed for DSRSD to conduct its evaluation in light of limitations on its supply, DSRSD cannot determine that it has adequate supplies of water to serve the Proposed Project and is thus unable at that time to deliver a "will-serve" letter with respect to the Proposed Project; and (2) complete the Preliminary Water Analysis and Preliminary Impact Analysis and submit such analyses to the Lead Agency as soon as reasonably feasible.

f. Responses to Negative Declarations.

(i) *In General.* If the Lead Agency is considering approval of the Proposed Project based upon the adoption of a negative declaration or mitigated negative declaration, then the Preliminary Water Service Analysis shall be considered to be a "Final Water Service Analysis" and shall be delivered to the Lead Agency without the accompanying statements described in subsection (e)(ii) above. If such Final Water Service Analysis includes a negative determination under (b)(2) above, then DSRSD shall (1) together with its delivery to the Lead Agency of such Final Water Service Analysis, deliver to the Lead Agency a statement that, unless mitigation measures sufficient to ensure that there will be no adverse effects upon reliability of service or water quality (as identified by DSRSD under (b)(3) above) are imposed upon the Proposed Project, DSRSD does not support the Proposed Project and is unable at such time to deliver a "will-serve" letter with respect to the Proposed Project; and (2), if and when the Proposed Project is proposed to be annexed to the boundaries of DSRSD and unless mitigation measures sufficient to ensure that there will be no adverse effects upon reliability of service or water quality (as

identified by DSRSD under (b)(3) above) have then been imposed upon the Proposed Project, deliver to LAFCO (at the times specified for delivery of notices of non-support under subsection 3(a) above) a statement that DSRSD does not support such annexation and is unable at such time to deliver a "will-serve" letter with respect to the territory so proposed for annexation.

(ii) *Initiation of Dispute Resolution Process.* If Citizens or Livermore initiates the dispute resolution process established under Section 8(c) below with respect to any Preliminary Water Service Analysis or Preliminary Impact Analysis submitted by DSRSD in response to an NOI, then DSRSD promptly shall notify the Lead Agency that a material issue has been raised regarding the adequacy of such analysis and request that the Lead Agency's adoption of the proposed negative declaration or mitigated negative declaration be continued until such time as the Mediator has issued its decision with respect thereto.

(iii) *Compliance with Orders of LAFCO.* Notwithstanding the previous provisions of this subsection (f), DSRSD will be bound to annex a Proposed Project and will not be prevented by the terms of this Agreement from serving such Proposed Project if, in the absence of a court-ordered stay of or judgment against the proposed annexation, the area is ordered to be annexed to the boundaries of DSRSD in accordance with the provisions of Cortese-Knox.

g. **Review of Preliminary Water Service Analysis.**

(i) *In General.* If the Lead Agency is considering approval of the Proposed Project based upon an environmental impact report ("EIR") then, within thirty (30) days following receipt of the Preliminary Water Service Analysis, Citizens or Livermore may deliver in writing to DSRSD (with a copy to the Lead Agency) a statement of any objections it may have as to whether the Preliminary Water Service Analysis complies with the provisions of this Section 4, which statement of objections shall identify with particularity such party's objections and the factual basis for such objections. Unless the objection can informally be resolved by DSRSD and the objecting party as set forth in Subsection 8(c)(i) below, then DSRSD and the party that has submitted such statement of objections (the "Objecting Party") shall thereafter attempt to resolve their dispute through mediation as set forth in Subsection 8(c)(ii) below.

(ii) *Revisions to Preliminary Water Service Analysis.* If DSRSD and the Objecting Party are able to resolve their dispute informally or through mediation under Section 8(c) below,

then DSRSD shall revise the Preliminary Water Service Analysis as agreed and, prior to the close of the public comment period on the draft EIR, submit to the Lead Agency (with copies to Citizens and Livermore) such revised analysis (the "Final Water Service Analysis") together with any other comments it may have on the draft EIR. Citizens and Livermore each agrees that if (x) such party fails to object to a Preliminary Water Service Analysis within the period specified above for such objection; or (y) such party objects to a Preliminary Water Service Analysis and DSRSD revises such analysis to reflect any resolution reached informally or through mediation under Section 8(c) below, then such party may not seek judicial review of the question of whether the Final Water Service Analysis complies with the provisions of this Section 4.

h. Objection to Unmitigated Projects.

(i) *In General.* If either a Final Water Service Analysis or a Preliminary Water Service Analysis that is not revised in accordance with subsection (g)(ii) above includes a negative determination under (b)(2) above, then DSRSD shall (1) on or prior to the close of the public comment period on the draft EIR, deliver to the Lead Agency a statement that, unless mitigation measures sufficient to ensure that there will be no adverse effects upon reliability of service or water quality (as identified by DSRSD under (b)(3) above) are imposed upon the Proposed Project, DSRSD does not support the Proposed Project and is unable at such time to deliver a "will-serve" letter with respect to the Proposed Project and (2) if and when the Proposed Project is proposed to be annexed to the boundaries of DSRSD and unless mitigation measures sufficient to ensure that there will be no adverse effects upon reliability of service or water quality (as identified by DSRSD under (b)(3) above) have then been imposed upon the Proposed Project, deliver to LAFCO (at the times specified for delivery of notices of non-support under subsection 3(a)(ii) above) a statement DSRSD does not support such annexation and is unable at such time to deliver a "will-serve" letter with respect to the territory so proposed for annexation.

(ii) *Compliance with Orders of LAFCO.* Notwithstanding the previous provisions of this subsection (h), DSRSD will be bound to annex a Proposed Project and will not be prevented by the terms of this Agreement from serving such Proposed Project if, in the absence of a court-ordered stay of or judgment against the proposed annexation, the area is ordered to be annexed to its boundaries in accordance with the provisions of Cortese-Knox.

5. CONTROL OF WATER FACILITIES.

a. South Bay Aqueduct. Except to the extent required to exercise its rights under subdivision (c) of section 5 of the Water Supply Agreement, DSRSD will not enter into any agreement with DWR to secure permanent capacity in the South Bay Aqueduct ("SBA") independent of Zone 7, and to the extent additional permanent capacity in the SBA is needed to convey water for use within DSRSD's service area, shall rely upon Zone 7 to contract for and provide any such additional capacity. If DSRSD proposes to secure permanent capacity in the SBA and that proposal is objected to by Citizens or Livermore as not being in compliance with the terms of this Agreement (including the referenced provisions of the Water Supply Agreement), the dispute shall be addressed in accordance with section 8.b of this Agreement.

b. Main Groundwater Basin. DSRSD will continue to abide by the provisions of section 16 of the Water Supply Agreement, which acknowledges explicitly that Zone 7 manages the Main Basin and establishes certain terms and restrictions on the extraction by DSRSD of groundwater from the Main Basin. DSRSD further agrees that it will not deliver to the Dougherty Valley Service Area: (1) any water extracted from the Main Basin as part of DSRSD's 645 acre-foot annual "Groundwater Pumping Quota" (as defined in sections 1(d) and 16 of the Water Supply Agreement); or (2) any water extracted from the Main Basin and for which DSRSD pays Zone 7 a recharge fee pursuant to sections 17 of the Water Supply Agreement. Nothing in this section 5.b shall limit any right of DSRSD to deliver to the Dougherty Valley Service Area water derived from "Other Sources" (as defined in sections 1(h) and 5(a), (b), (c), (e) or (f) of the Water Supply Agreement).

c. Review and Consideration of Groundwater Extraction Proposals. Contingent upon the substantially identical amendment of all water supply agreements between Zone 7 and the other Zone 7 contractors, the contract between Zone 7 and DSRSD shall be amended to add the following provision:

Section C. Groundwater Extraction Provision

22a. In the event that the Contractor proposes to engage in groundwater pumping beyond its Groundwater Pumping Quota in any year, Contractor must first notify Zone 7 of its intent to conduct such additional pumping. Zone 7 shall, within thirty (30) days of receipt of

such notification, provide to Contractor a written evaluation of the potential impact of any such pumping on groundwater levels and quality (taking into account recharge fees to be paid to Zone 7) and Zone 7's ability to provide reliable water service.

6. FUNDING OF CONSERVATION EFFORTS.

a. In General. Windemere or its successors will pay to Livermore a $1,000/residential dwelling unit open space conservation fee, payable at building permit issuance, to be used by Livermore or its designee exclusively for the purchase from willing sellers of permanent easements or fee title for conservation or agricultural preservation purposes.

b. Method of Payment. This fee is to be assessed only against dwelling units actually constructed on property now owned by Windemere in the Dougherty Valley. Of the expected $5,170,000 to be paid to Livermore (which amount is subject to escalation as described below), $200,000 will be paid in advance within ten (10) days following the date that Windemere's obligations under this Agreement commence in accordance with Section 9(o) below. There shall be a full credit against the fee to be paid on the last 200 of the 5,170 units expected to be developed on the Windemere property (i.e., units 4,971 through 5,170).

c. Adjustment. The fee set forth above is to be adjusted annually based upon CPI, with the base year to be the year of construction of the first dwelling unit on Windemere property.

d. Expenditure of Funds.

(i) *In General.* Prior to approving expenditures of funds collected through this fee, the City Council of Livermore will receive recommendations from its staff concerning proposed acquisitions of permanent easements or fee title for conservation or agricultural preservation purposes. City staff will meet and confer with Citizens prior to formulating its recommendations for acquisitions. Should staff recommendations differ from those preferred by Citizens, the staff report to the City Council shall specify and explain the differences. Following receipt of the staff report, the City Council will place the proposed acquisitions(s) on its agenda for public discussion; and only after such discussion render its decision.

(ii) *Priorities for Funding.* Funds collected under this Section 6 shall be used for acquisitions, including permanent trails, open space, or agricultural preservation easements, (1) in areas north of Interstate 580 and east of Collier Canyon Road in Alameda County and/or (2) in the Tassajara Valley area of Contra Costa County. For open space acquisitions, priority shall be given to purchases in areas containing unique vegetation and/or endangered species habitat. Funds shall not be used for acquisitions within areas that are candidates for funding by development fees.

7. ZONE 7 INITIATIVE AND REFERENDUM.

ACFCWCD, Zone 7, DSRSD, Citizens and Livermore agree to support the following proposed legislation that would amend the District Act to provide that Zone 7 voters would vote on initiatives or referenda concerning Zone 7 matters or annexations. Windemere and Shapell agree not to oppose this legislation. Each party's obligation to support or remain neutral on this legislation is removed if provisions are added to or deleted from the proposed legislation without the consent of all parties to this agreement.

a. Proposed Addition to the Alameda County Flood Control and Water Conservation District Act, California Water Code Appendix, section 55-36.

"9. For the purposes of any initiative pursuant to Election Code sections 9300 et seq., or referendum pursuant to Elections Code sections 9340 et seq., that solely and specifically addresses or relates to a zone formed pursuant to this section 36, the electorate for purposes of such initiative or referendum shall be the electorate of the zone created pursuant to this section 36."

b. Proposed Addition to the Alameda County Flood Control and Water Conservation District Act, California Water Code Appendix, section 55-37.

"6. Annexation of territory, for the purposes of providing water service, to a zone formed pursuant to section 36 of this chapter shall not become effective unless approved by a majority vote of the electors of that zone."

8. DISPOSAL OF LITIGATION.

a. Dismissal and Judgment. The terms of this Agreement will be implemented by judgment entered in the Water Litigation (including dismissal of BMWD, SWSD and DWR) pursuant to the application of the Settling Parties and stipulation in the form attached hereto as Exhibit E (the "Stipulation and (Proposed) Judgment"). ACFCWCD and Zone 7 each agrees that it will not use the judgment as precedential legal basis for any purpose, including (except to the extent any such service proposal complies with Sections 2 or 7 above) future proposals for extra-territorial service extensions.

b. Procedure. The Settling Parties agree to execute and file with the Sacramento Superior Court, by and through their respective counsel, one fully-signed original of this Agreement, the Stipulation and (Proposed) Judgment, and a joint application for the filing of this Agreement and entry of the proposed judgment. Such documents shall be so filed no earlier than one (1) calendar day, and no later then five (5) calendar days, following the satisfaction or waiver of any and all conditions to the close of the escrow established under the Water Service Escrow Agreement (the "Water Service Escrow") other than that certain condition requiring the delivery of notice by DSRSD to Zone 7 and BMWD, pursuant to Section 1 of the First Amendment to Water Service Escrow Agreement, that the Water Litigation has been resolved to the satisfaction of DSRSD (the "Escrow Closing Notice"). If for any reason the Court determines not to enter the judgment in accordance with the stipulation, this Settlement Agreement shall be deemed null and void, without recourse to any Settling Party to seek damages or other relief for the failure of any other Settling Party to comply with the provisions hereof in any respect.

c. Dispute Resolution.

(i) *Informal Resolution.* The parties will attempt in good faith to resolve through negotiation any dispute, claim or controversy regarding the interpretation or application of this Agreement. Any party may initiate negotiations by providing written notice in letter form to the party from whom relief is requested, with notice to the other parties, setting forth the subject of the dispute and the relief requested. The recipient of such notice shall (and each of the other parties may) respond within five days with a written statement of its position on, and

recommended solution to, the dispute. If the dispute is not resolved by this exchange of correspondence, then representatives of the disputing parties will meet at a mutually agreeable time and place within ten days of the date of the initial notice in order to exchange relevant information and perspectives, and to attempt to resolve the dispute. If the dispute is not resolved during such meeting, the dispute must be presented, prior to reference to the Superior Court except as specifically permitted below, to Daniel Weinstein at JAMS (or, in the event Judge Weinstein or JAMS has insufficient time promptly available, some other mutually agreeable third-party mediation service) (the "Mediator") for issuance of an advisory decision. The Mediator's decision shall not be binding on the parties, but may be presented in any subsequent proceedings in the Superior Court for such purposes, other than evidentiary purposes, as the court may deem appropriate.

(ii) *Conduct of Mediation.* The mediation proceeding shall be commenced within ten (10) days following the later to occur of referral to the Mediator or, in the event of a dispute arising under Section 1 or with respect to whether any Preliminary Water Service Analysis prepared by DSRSD complies with the provisions of Section 4(b) or 4(c) of this Agreement, selection of a technical advisor under subsection (iii) below; and shall last no more than two days unless further proceedings are agreed to by the disputants. The Mediator shall issue its decision within 15 days of the conclusion of the proceedings. If any party does not agree with the Mediator's decision, such party may treat the decision as advisory only or, in the alternative, refer the decision to the Superior Court. In proceedings before the Mediator or the Superior Court, the party that referred the dispute to such decisionmaker shall bear the burdens of proof and persuasion, based upon a preponderance of the evidence as presented to the Mediator, to show a violation of this Agreement.

(iii) *Use of Technical Advisors.* In any dispute over whether DSRSD or Zone 7 has complied with its obligations under Section 1 above or whether any Preliminary Water Service Analysis prepared by DSRSD complies with the provisions of Section 4(b) and 4(c) above, the Mediator shall be advised by a registered civil engineer with at least fifteen (15) years' experience in municipal water supply planning in California and who is mutually acceptable to the disputing parties. If the disputing parties are unable promptly to agree upon one such person, there shall be appointed (within five (5) days following referral of the dispute to the Mediator) to serve as an advisor to the Mediator a panel of three such registered civil

engineers with such experience: one named jointly by the responding parties (including, in the event of a dispute resolution process initiated by Citizens or Livermore and arising under Section 1, Windemere and Shapell); one named jointly by the Objecting Parties; and a third chosen by the two appointed. If such a panel is so appointed, the panel shall issue a single recommendation to the Mediator approved by at least two of the panelists.

(iv) *Findings and Recommendations Regarding Preliminary Water Service Analyses.* In any dispute over whether DSRSD or Zone 7 has complied with its obligations under Section 1 above or whether any Preliminary Water Service Analysis prepared by DSRSD complies with the provisions of Section 4(b) and 4(c) above, the Mediator (and the court upon any reference) shall sustain the actions of such water agency unless it is shown, by a preponderance of the evidence, that the methodology or conclusions supporting such water agency's actions (or, in the case of a dispute arising under Section 4(b) or 4(c), contained in a Preliminary Water Service Analysis) are contrary to generally-accepted engineering practices within the State of California. If the Mediator finds that any Preliminary Water Service Analysis does not comply with the provisions of Sections 4(b) or 4(c) above, he or she shall specify any practicable modifications needed to cure such noncompliance. Notwithstanding the pendency of any further judicial proceedings, the findings of the Mediator with respect to any dispute arising under Section 4(b) or 4(c) may be submitted by any party to a Lead Agency in connection with such Lead Agency's consideration of a Proposed Project.

d. **Further Legal Actions.**

(i) *Limitations.* The parties agree that any dispute regarding compliance with Section 1(a) of this Agreement shall be brought, if at all, within thirty (30) days following notice of approval by Zone 7 of the "Preliminary Water Delivery Schedule" (as defined in Section 10 of the Water Supply Contract and Section B of Appendix I of the First Amendment) that would result in water being delivered to the Dougherty Valley Service Area in excess of that permitted under Section 1(a). DSRSD agrees to supply to each of Livermore and Citizens, simultaneously with their annual delivery to Zone 7, a copy of the Preliminary Water Delivery Schedule and Annual Water Supply Report. Zone 7 agrees to supply to each of Livermore and Citizens, simultaneously with its delivery to DSRSD, a copy of Zone 7's approval of any Preliminary Water Delivery Schedule. Livermore and Citizens each agrees that, if it fails to initiate the

dispute resolution process with respect to Zone 7's approval of any Preliminary Water Delivery Schedule within the thirty (30) day period specified above, then it shall not be permitted thereafter to initiate the dispute resolution process or judicial review of any water deliveries anticipated by such Preliminary Water Delivery Schedule.

(ii) *Equitable Relief.* In addition to other remedies available at law, this Agreement may be enforced (and any dispute, claim or controversy regarding the interpretation or application of this Agreement may be resolved) by appropriate equitable action, including court-issued injunction, specific performance or declaratory relief. Initial reference to the Mediator shall not be required as described above when a disputing or objecting party seeks immediate injunctive relief from the Superior Court; provided, however, that in the event a party to this Agreement so seeks immediate injunctive relief, the parties shall (concurrently with any further judicial proceedings) commence a mediation proceeding within five (5) days following the court hearing on such relief.

(iii) *Appeals.* For purposes of appellate jurisdiction, the parties agree that any order of the Superior Court issued under subsections (b) or (c)(ii) above may be treated as an ancillary post-judgment order immediately appealable to the Court of Appeal.

(iv) *Further Litigation.* Livermore and Citizens (and each of the officers of Citizens) each agrees that, except to the extent such litigation is permitted to cure a breach of the Settlement Agreement, no further litigation will be filed by such person or entity challenging directly or indirectly the adequacy or propriety of water service by Zone 7 or DSRSD to the Dougherty Valley Service Area. The parties further agree neither to appeal or collaterally attack the Judgment.

(v) *Attorneys' Fees and Costs.* Citizens and Livermore will recover from Windemere and Shapell their reasonable fees and costs in the present matter, including those of mediation as well as litigation, said fees and costs to be paid within thirty (30) days following entry of judgment pursuant to this Section 8 and without further condition. In any legal action to enforce this Agreement as indicated by injunction, specific performance, or otherwise, the prevailing party or parties shall be entitled to recover their reasonable fees and costs (including fees and costs associated with any related mediation proceeding conducted under subsection (c) above) from their adverse parties.

(vi) *Other.* Except as specifically provided in Section 1 of this Agreement and solely to cure violations of such Section 1, in no event shall any relief for a violation of this Agreement include any reduction or elimination of water service to the Dougherty Valley Service Area.

9. GENERAL PROVISIONS

a. Sole and Final Agreement. Except as otherwise specifically provided herein, this Agreement (including the documents attached as exhibits hereto) is intended to be and is the final expression of the agreement between Citizens and Livermore ("Settling Petitioners"), on one hand, and the rest of the Settling Parties ("Settling Respondents"), on the other hand, with respect to the settlement of the Water Litigation, and is intended as and is the complete, exclusive and entire statement of the terms of the settlement between Settling Petitioners and Settling Respondents. As such, this Agreement supersedes and fully and completely extinguishes any prior understandings or agreements between Settling Petitioners and Settling Respondents (other than understandings regarding press communications as set forth in the September 20, 1999 Memorandum of Understanding By and Between Settling Parties) with respect to such settlement, whether oral or written, express or implied.

b. Severability. If any term, provision, or condition of this Agreement becomes invalid, void or unenforceable for any reason or is determined by a court of competent jurisdiction to be invalid, void or unenforceable, then the remainder of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated by such determination, the provisions of this Agreement being severable in such instance; except that if as a result of any such event DSRSD or Zone 7 becomes legally unable to provide service to the Dougherty Valley Service Area as anticipated herein and under the Water Supply Agreement and the First Amendment, then DSRSD, Zone 7, ACFCWCD, Windemere and Shapell shall be relieved of their obligations under this Agreement.

c. Warranty of Authority. By executing this Agreement, each of the undersigned covenants, warrants, and represents that he, she or it is fully authorized to enter into this Agreement.

d. Mutual Cooperation. Each of the Settling Parties agrees that it will not oppose, nor encourage any other person or entity to oppose, entry by the court of the Judgment and that it

will not appeal the Judgment nor seek any reconsideration or modification of same. Each of the Settling Parties shall execute and deliver to the others all such other further instruments and documents as may be reasonably necessary to carry out the terms and provisions of this Agreement and secure to the others the full and complete enjoyment of their respective rights and privileges hereunder.

e. Notices. Except as otherwise specifically set forth herein, all notices or other communications specifically required or permitted to be given under this Agreement shall be in writing and personally delivered or sent by certified mail, return receipt requested and postage prepaid, or sent by reputable overnight courier (such as Federal Express), or by telefacsimile with confirmation by overnight courier or U.S. Postal Service the following day, to the addresses or telefacsimile numbers set forth below. Any Settling Party may at any time change its address or telefacsimile number for the delivery of notice upon five (5) days' written notice to the other Settling Parties.

CITY OF LIVERMORE
1052 South Livermore Avenue
Livermore, CA 94550
c/o Thomas Curry, Esq.
Telephone: (925) 373-5120
Telefacsimile: (925) 373-5125

with a copy to:

Antonio Rossmann, Esq.
Law Offices of Antonio Rossmann
380 Hayes St., Suite 1
San Francisco, CA 94102
Telephone (415) 861-1401
Telefacsimile (415) 861-1822

ZONE 7 WATER AGENCY
5997 Parkside Drive
Pleasanton, CA 94588
c/o Mr. Dale Myers
Telephone(925) 484-2600
Telefacsimile (925) 462-2908

with a copy to:

Office of the County Counsel
County of Alameda
1221 Oak Street, Room 463
Oakland, CA 94612
Att'n: Brian Washington, Esq.
Telephone (510) 272-6705
Telefacsimile (510) 272-5020

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
399 Elmhurst Street
Hayward, CA 94544
Att'n: Donald J. LaBelle, Director
Telephone (510) 670-5545
Telefacsimile (510) 670-5541

with a copy to:

Office of the County Counsel
County of Alameda
1221 Oak Street, Room 463
Oakland, CA 94612
Att'n: Brian Washington, Esq.
Telephone (510) 272-6705
Telefacsimile (510) 272-5020

DUBLIN SAN RAMON SERVICES DISTRICT
7051 Dublin Boulevard
Dublin, CA 94568
Att'n: Mr. Bert Michalczyk
Telephone: (925) 828-0515
Telefacsimile: (925)829-1180

with a copy to each of :

Kevin O'Brien, Esq.
Downey, Brand, Seymour & Rohwer LLP
555 Capitol Mall, 10th Fl.
Sacramento, CA 95814-4686
Telephone (916) 441-0131
Telefacsimile (916)441-4021

David Schricker, Esq.
Law Offices of David Schricker

702 Marshall Street, Suite 314
Redwood City, CA 94063
Telephone (650) 363-1173
Telefacsimile (650) 365-8901

CITIZENS FOR BALANCED GROWTH
2862 Waverly Way
Livermore, California 94550-1740
Att'n: Donald Miller and Margaret Tracy
Telephone: (925) 447-4875
Telefacsimile (925) 447-4875 (advance telephonic notice required)

or

Telephone: (925) 447-0115
Telefacsimile (925) 447-5864

with a copy to:

Stuart Flashman, Esq.
Law Offices of Stuart Flashman
5626 Ocean View Drive
Oakland, California 94618
Telephone (510) 652-5373
Telefacsimile (510) 652-5373

WINDEMERE RANCH PARTNERS
1350 Treat Boulevard
Walnut Creek, CA 94596
c/o Mr. F. Allan Chapman
Telephone: (925) 933-1405
Telefacsimile: (925) 933-1404

with a copy to:

R. Clark Morrison, Esq.
Morrison & Foerster LLP
101 Ygnacio Valley Rd., Suite 450
Walnut Creek, CA 94596
Telephone (925) 295-3317
Telefacsimile (925) 946-9912

SHAPELL INDUSTRIES, INC.
100 N. Milpitas Blvd., 2nd floor

Milpitas, CA 95035
Att'n: Daniel W. Hancock
Telephone: (408) 946-1550
Telefacsimile: (408) 946-2942

with a copy to:

Sanford Skaggs, Esq.
McCutchen, Doyle, Brown & Enersen LLP
1333 N. California Blvd., Suite 210
Post Office Box "V"
Walnut Creek, CA 94596
Telephone (925) 937-8000
Telefacsimile (925)975-5390

f. No Third Party Beneficiary. This Agreement is intended solely for the benefit of the Settling Parties and shall not be construed to create any rights in any other person or entity.

g. Execution in Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument. Furthermore, this Agreement may be executed and delivered by the exchange of electronic facsimile copies or counterparts of the signed documents, which facsimile copies or counterparts shall be binding upon the Settling Parties; provided, however, that any electronic facsimile counterpart shall be followed by delivery to counsel for Windemere of an original signed counterpart.

h. Time of the Essence. Time is of the essence of this Agreement.

i. Interpretation; Governing Law. This Agreement shall be interpreted, and the rights and the duties of the Settling Parties shall be determined, in accordance with the laws of the State of California, as applied to contracts entered into and performed (or capable of performance) in California by California persons or entities.

j. Denial of Wrongdoing and Liability. Neither the negotiation of this Agreement, nor any action taken to carry out this Agreement, (1) is or may be construed or used as an admission or concession by or against any Settling Party of any fault, wrongdoing or liability whatsoever or (2), except as specifically set forth herein, may be offered or received in evidence in any action

or proceeding against any Settling Party in or before any court, administrative agency or tribunal for any purpose.

k. Headings; Cross-References; Exhibits. The headings and captions used in this Agreement are for convenience and ease of reference only and shall not be used to construe, interpret, expand or limit the terms of this Agreement. All cross-references in this Agreement, unless specifically directed to another agreement or document, shall refer to provisions in this Agreement and shall not be deemed to be references to any other agreements or documents. Each of the exhibits attached to this Agreement is hereby incorporated into this Agreement by this reference.

l. No Duress. This Agreement is executed voluntarily by each of the Settling Parties without any duress or undue influence on the part of, or on behalf of, any of them. Each of the Parties to this Agreement has read and full understands the meaning of each provision of this Agreement and has relied on the independent advice and representation of legal counsel in entering into this Agreement.

m. Successors and Assigns. The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the Settling Parties and, with respect to Windemere and Shapell only, their respective successors and assigns.

n. Construction. This Agreement has been reviewed by legal counsel for all Settling Parties, and no presumption or rule that ambiguities shall be construed against the drafting party shall apply to the interpretation or application of this Agreement.

o. Conditions Precedent. The obligations of the Settling Parties hereunder (other than their obligations under Section 8 above and this Section 9) shall not commence until the later to occur of (1) thirty-one (31) days following notice of entry of the Judgment or, if such Judgment is appealed, the date any and all such appeals have been resolved affirming the Judgment and become final and (2) the escrow established under the Water Service Escrow Agreement (the "Water Service Escrow") has closed.

p. Close of Water Service Escrow. No later than November 2, 1999, Zone 7, DSRSD, Windemere and Shapell each shall (1) deliver into the Water Service Escrow any and all funds,

security instruments and other documents required under the Water Service Escrow Agreement to be delivered by such Settling Party into the Water Service Escrow and (2) satisfy or waive any further conditions to the close of the Water Service Escrow except for (x) the execution and delivery into the Water Service Escrow of the Zone 7/DWR Amendment and the KCWA/DWR Amendment and (y) delivery by DSRSD to Zone 7 and BMWD of the Escrow Closing Notice. The Water Service Escrow shall not be required under this Agreement to close until at least thirty-one (31) days following notice of entry of the Judgment or, if such Judgment is appealed, the date any and all such appeals have been resolved affirming the Judgment and become final. Upon the expiration of such time period, DSRSD immediately shall deliver the Escrow Closing Notice to Zone 7, the other Settling Parties and BMWD; provided, however, that nothing herein shall prevent the Water Service Escrow from closing, in accordance with the terms and provisions of the Water Service Escrow Agreement, prior to the expiration of such time period. Immediately upon close of the Water Service Escrow, DSRSD shall deliver to the Settling Parties notice that the Water Service Escrow has closed.

IN WITNESS WHEREOF, the Settling Parties have caused this Agreement to be duly executed as of the date hereinabove written.

Legal representation by:

RICHARD E. WINNIE
County Counsel

By:_____
Assistant County Counsel

Date:_____

RICHARD E. WINNIE
County Counsel

By:_____
Assistant County Counsel

Date:_____

DOWNEY, BRAND, SEYMOUR & ROHWER LLP

By:_____
Kevin O'Brien

Date:_____

By: Thomas Curry
Thomas Curry, City Attorney

Date: 11-1-99

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

By:_____

Its:_____

Date:_____

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By:_____

Its:_____

Date:_____

DUBLIN SAN RAMON SERVICES DISTRICT, a community services district

By:_____

Its:_____

Date:_____

CITY OF LIVERMORE,
a municipal corporation

By: Cathie Brown

Its: Mayor

Date: 11.1.99

Legal representation by:

RICHARD E. WINNIE
County Counsel

By: _____
Assistant County Counsel

Date: 11/1/99

RICHARD E. WINNIE
County Counsel

By: _____
Assistant County Counsel

Date: 11/1/99

DOWNEY, BRAND, SEYMOUR & ROHWER LLP

By: _____
Kevin O'Brien

Date: _____

By: _____
Thomas Curry, City Attorney

Date: _____

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

By: _____

Its: Chief Mayo

Date: 11-1-99

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By: _____

Its: _____

Date: _____

DUBLIN SAN RAMON SERVICES DISTRICT, a community services district

By: _____

Its: _____

Date: _____

CITY OF LIVERMORE,
a municipal corporation

By: _____

Its: _____

Date: _____

Legal representation by:

RICHARD E. WINNIE
County Counsel

By: _____
Assistant County Counsel

Date: 11/1/99

ALAMEDA COUNTY FLOOD
CONTROL AND WATER
CONSERVATION DISTRICT, ZONE 7

By: _____

Its: _____

Date: _____

RICHARD E. WINNIE
County Counsel

By: _____
Assistant County Counsel

Date: 11/1/99

ALAMEDA COUNTY FLOOD
CONTROL AND WATER
CONSERVATION DISTRICT

By: _____
PRESIDENT OF THE BOARD OF SUPERVISOR
OF ALAMEDA COUNTY, CALIFORNIA

Its: _____

Date: OCT 19 1999

I hereby certify under penalty of perjury that the President of the Board of Supervisors was duly authorized to execute this document on behalf of the County of Alameda by a majority vote of the Board on 10/19/99 and that a copy has been delivered to the President as provided by Government Code Section 25103.

Date: _____

ATTEST: _____
LESLIE J. BURNS, Asst. Clerk of the Board of
Supervisors, County of Alameda, State of California

By: _____

CITY OF LIVERMORE,
a municipal corporation

By: _____

Its: _____

Date: _____

By: _____
Thomas Curry, City Attorney

Date: _____

Legal representation by:

RICHARD E. WINNIE
County Counsel

By:_____
Assistant County Counsel

Date:_____

RICHARD E. WINNIE
County Counsel

By:_____
Assistant County Counsel

Date:_____

DOWNEY, BRAND, SEYMOUR & ROHWER LLP

By: Heather B Lee
Heather B. Lee

Date: 10/30/99

By: _____
Thomas Curry, City Attorney

Date:_____

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

By:_____

Its:_____

Date:_____

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By:_____

Its:_____

Date:_____

DUBLIN SAN RAMON SERVICES DISTRICT, a community services district

By: Georgean M. Vonheeder

Its: President

Date: 10/30/99

CITY OF LIVERMORE,
a municipal corporation

By:_____

Its:_____

Date:_____

LAW OFFICES OF STUART FLASHMAN

By: Stuart Flashman
Stuart Flashman
Date: Oct. 29, 1999

CITIZENS FOR BALANCED GROWTH,
a California non-profit corporation

By: Donald Miller
Donald Miller
Date: Oct. 29, 1999

By: James A. Day
Jim Day
Date: Oct. 28, 1999

By: Gerald S. Dzakowic
Gerald Dzakowic
Date: Oct. 29, 1999

By: Margaret J. Tracy
Margaret Tracy
Date: Oct. 24, 1999

MORRISON & FOERSTER LLP

By: _____
R. Clark Morrison
Date: _____

WINDEMERE RANCH PARTNERS,
a California limited partnership

By: SOMERSET HOMES,
a California corporation
Its: General Partner

By: _____
F. Allan Chapman
Its: President

By: WINDEMERE GENERAL PARTNERS,
a California general partnership
Its: Managing General Partner

By: CWL Windemere Associates, L.P.,
L.P., a California general partnership
Its: Managing General Partner

LAW OFFICES OF STUART FLASHMAN

By:_____
Stuart Flashman

Date:_____

CITIZENS FOR BALANCED GROWTH, a California non-profit corporation

By:_____
Donald Miller

Date:_____

By:_____
Jim Day

Date:_____

By:_____
Gerald Dzakowic

Date:_____

By:_____
Margaret Tracy

Date:_____

MORRISON & FOERSTER LLP

By: R. Clark Morrison
R. Clark Morrison

Date: 10/29/99

WINDEMERE RANCH PARTNERS,
a California limited partnership

By: SOMERSET HOMES,
a California corporation
Its: General Partner

By: F. Allan Chapman
F. Allan Chapman
Its: President

By: WINDEMERE GENERAL PARTNERS,
a California general partnership
Its: Managing General Partner

By: CWL Windemere Associates, L.P.,
L..P., a California general partnership
Its: Managing General Partner

By: CWL Windemere Group, a California limited partnership
Its: General Partner

By: _____
F. Allan Chapman
Its: General Partner

McCUTCHEN, DOYLE, BROWN & ENERSEN LLP

By: _____
Sanford Skaggs
Date: _____

SHAPELL INDUSTRIES, INC., a Delaware corporation

By: _____

Its: _____

Date: _____

By: CWL Windemere Group,
a California limited
partnership
Its: General Partner

By:_____
F. Allan Chapman
Its: General Partner

McCUTCHEN, DOYLE, BROWN & ENERSEN LLP

By: Sanford M. Skaggs
Sanford Skaggs
Date: 10-29-99

SHAPELL INDUSTRIES, INC., a Delaware corporation

By: [signature]
Its: Vice Pres
Date: Oct 22, 1999

Exhibit A

Dougherty Valley Service Area

Exhibit A
Dougherty Valley Service Area
KEY
Dougherty Valley Service Area
NORTH
6000 feet
1000 0 1000
1 Mile
Fallon Rd
Tassajara Rd
Santa Rita Rd
Dougherty Valley
Contra Costa County
Alameda County
Hopyard Rd
Dougherty Rd
Stoneridge Dr
Foothill Rd
San Ramon Rd
Dublin Blvd
Alcosta Blvd
Interstate-680
Crow Canyon Rd
Bollinger Canyon Rd

Exhibit B

Eastern Sphere

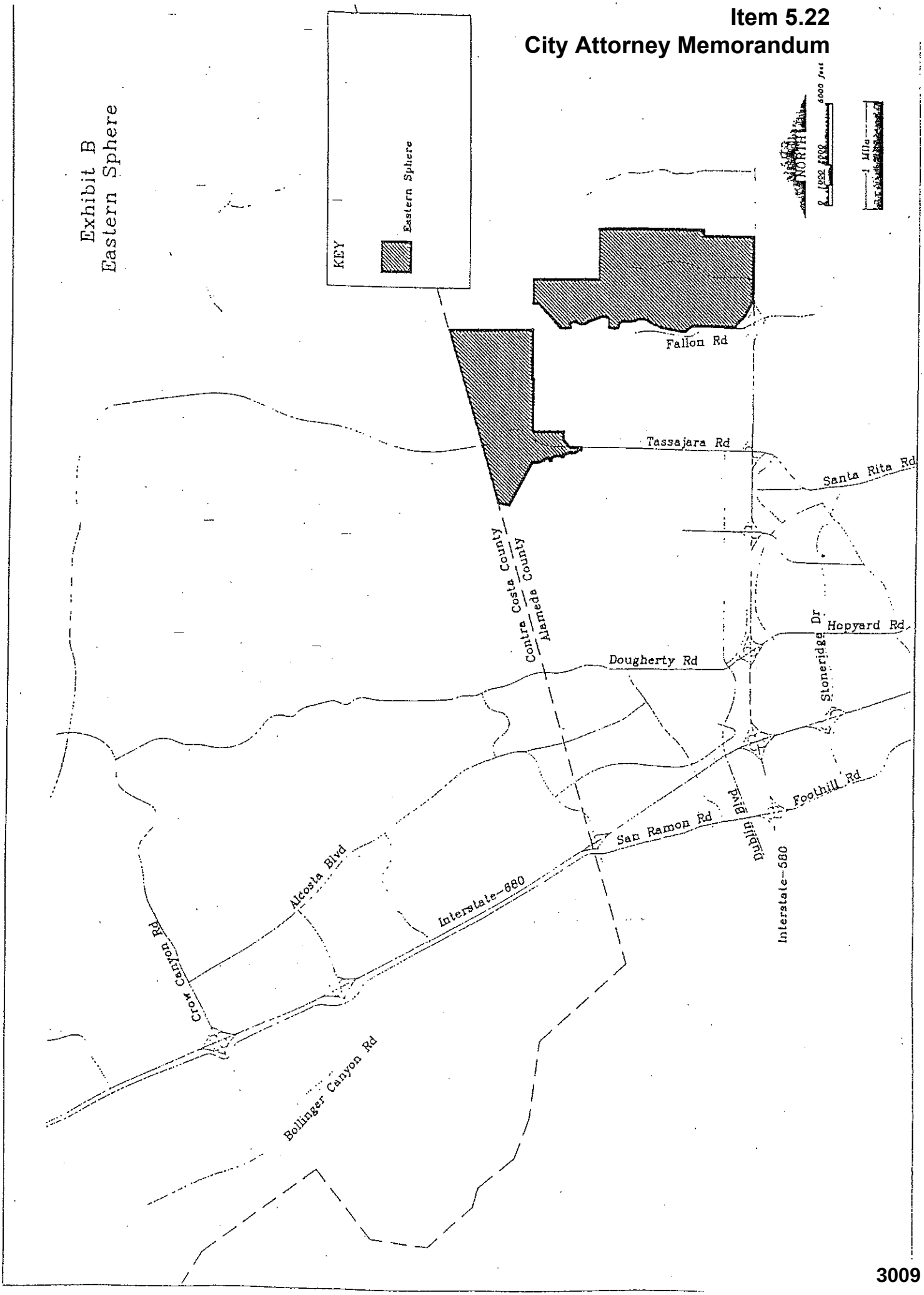

Exhibit B
Eastern Sphere
KEY
Eastern Sphere
NORTH
1 Mile
Fallon Rd
Tassajara Rd
Santa Rita Rd
Contra Costa County
Alameda County
Hopyard Rd
Dougherty Rd
Stoneridge Dr
Foothill Rd
San Ramon Rd
Dublin Blvd
Interstate-680
Alcosta Blvd
Crow Canyon Rd
Bollinger Canyon Rd

Exhibit C

Future Study Area

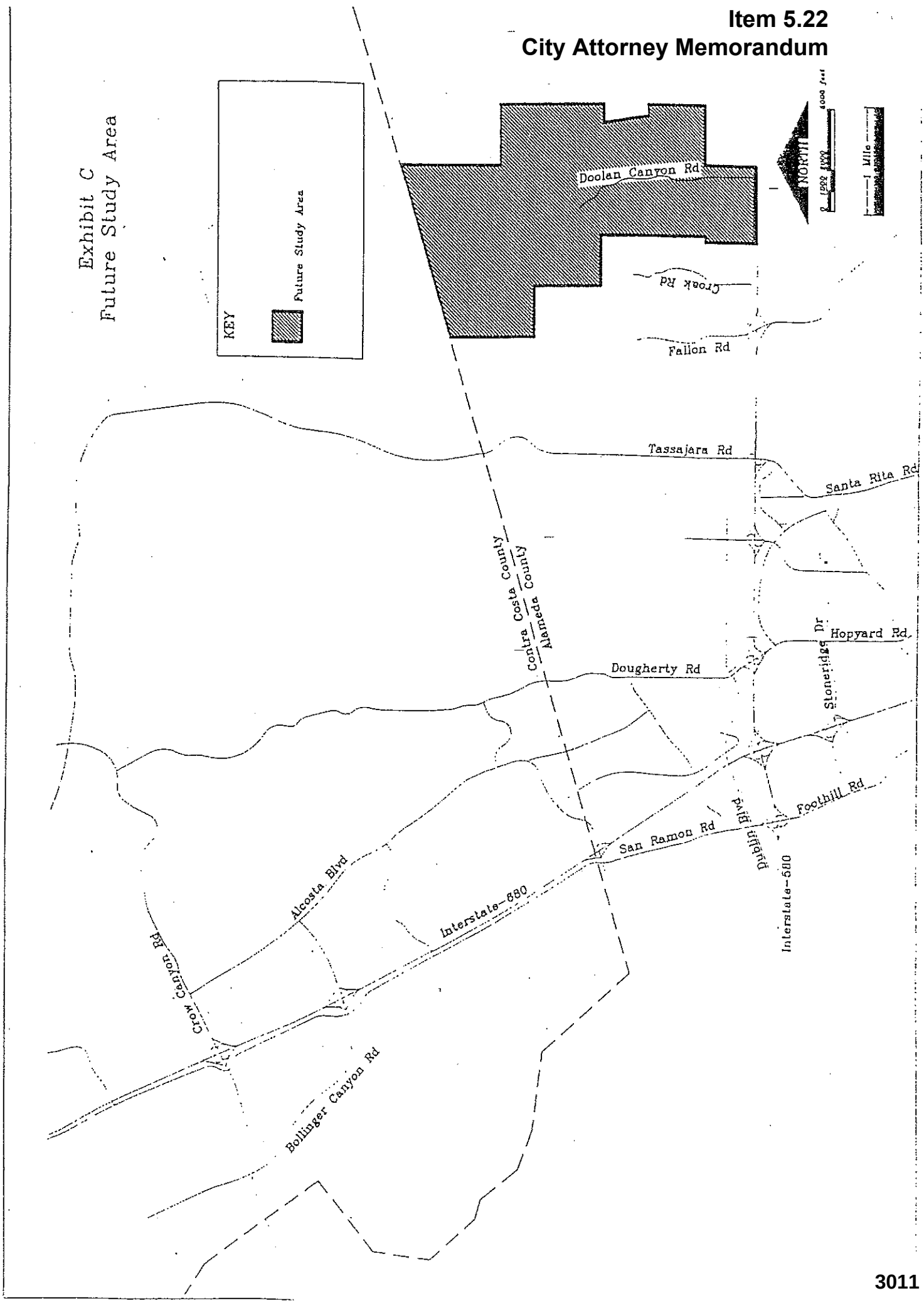
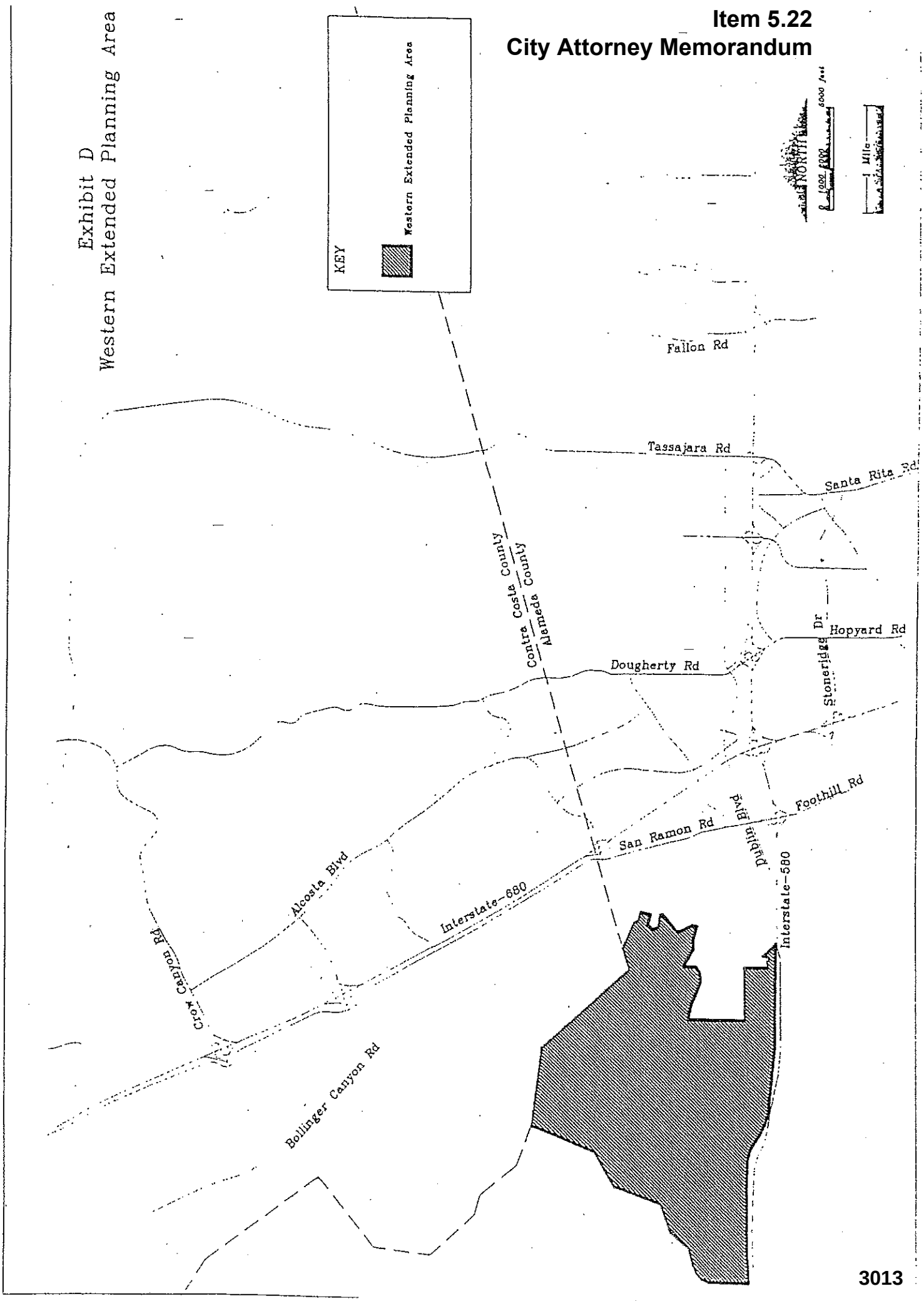

Exhibit C
Future Study Area
KEY
Future Study Area
Doolan Canyon Rd
NORTH
1 Mile
Croak Rd
Fallon Rd
Tassajara Rd
Santa Rita Rd
Contra Costa County
Alameda County
Hopyard Rd
Dougherty Rd
Stoneridge Dr
Foothill Rd
Dublin Blvd
San Ramon Rd
Interstate-680
Alcosta Blvd
Crow Canyon Rd
Bollinger Canyon Rd

Exhibit D

Western Extended Planning Area


Exhibit D
Western Extended Planning Area
KEY
Western Extended Planning Area
NORTH
6000 Feet
1000 2000
1 Mile
Fallon Rd
Tassajara Rd
Santa Rita Rd
Contra Costa County
Alameda County
Dougherty Rd
Hopyard Rd
Dr
Stoneridge
Foothill Rd
San Ramon Rd
Dublin Blvd
Alcosta Blvd
Interstate-680
Interstate-580
Crow Canyon Rd
Bollinger Canyon Rd

RICHARD E. WINNIE (BAR NO. 68048)
County Counsel
BRIAN WASHINGTON (BAR NO. 146807)
Deputy County Counsel
COUNTY OF ALAMEDA
1221 Oak Street, Suite 463
Oakland, California 94612-4296
Telephone: (510) 272-6700

Attorneys for ZONE 7 DEFENDANTS

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Attorneys for Real Party In Interest
WINDEMERE RANCH PARTNERS

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

CITIZENS FOR BALANCED GROWTH, Petitioner and Plaintiff, v. ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; et al., Respondents and Defendants	No. 98CS02670 STIPULATION FOR ENTRY OF JUDGMENT AND (PROPOSED) JUDGMENT Date: Time: Dept.: 41 Courtroom of the Hon. Ronald E. Robie
DUBLIN SAN RAMON SERVICES DISTRICT; SHAPELL INDUSTRIES, INC.; WINDEMERE RANCH PARTNERS, et al., Real Parties In Interest.	CONSOLIDATED WITH CASE No. 98CS02671 (City Of Livermore v. Alameda County Flood Control And Water Conservation District, et al.)

Petitioner and Plaintiff Citizens For Balanced Growth ("Citizens"); Petitioner and Real Party in Interest City Of Livermore ("Livermore"); Respondents and Defendants Alameda County Flood Control And Water Conservation District et al. ("Respondents"); Real Parties in Interest Shapell Industries, Inc. ("Shapell") and Windemere Ranch Partners ("Windemere"); Real Party in Interest Dublin San Ramon Services District ("DSRSD") (collectively the "Settling Parties"), through their respective counsel, HEREBY STIPULATE AND AGREE that Judgment be entered in this consolidated proceeding as set forth below.

Dated:_____

ANTONIO ROSSMANN
ROGER B. MOORE
LAW OFFICE OF ANTONIO ROSSMANN

By: _____

Antonio Rossmann
Attorneys for Petitioner
City of Livermore

Dated:_____

STUART M. FLASHMAN

By: _____

Stuart M. Flashman
Attorneys for Petitioner and Plaintiff
Citizens for Balanced Growth

Dated:_____

RICHARD E. WINNIE
BRIAN WASHINGTON
OFFICE OF COUNTY COUNSEL
ALAMEDA COUNTY

By: _____
Brian E. Washington
Attorneys for Alameda County
Flood Control and Water
Conservation District

Dated:_____

KEVIN T. HAROFF
R. CLARK MORRISON
ROBERT L. McKAGUE
MORRISON & FOERSTER

By: _____
Kevin T. Haroff
Attorneys for Real Party in Interest
Windemere Ranch Partners

Dated:_____

KEVIN O'BRIEN
HEATHER LEE
DOWNEY, BRAND, SEYMOUR &
ROHWER

By: _____
Kevin O'Brien
Attorneys for Real Party in Interest
Dublin San Ramon Services District

JUDGMENT

IT IS HEREBY ADJUDGED, DECLARED, ORDERED, AND DECREED that:

1. Real Parties in Interest Berrenda Mesa Water District ("BMWD"), Semitropic Water Storage District ("SWSD") and State Of California, Department Of Water Resources ("DWR") are dismissed with prejudice as parties in Case No. 98CS02670.

2. The petitions for writ of mandate and claims for injunctive and declaratory relief in Cases 98CS02671 and 98CS02670 are denied.

3. That certain *Amendment No. 1 to Contract Between Zone 7 of Alameda County Flood Control and Water Conservation District and Dublin San Ramon Services District for a Municipal & Industrial Water Supply* (the "First Amendment") is and shall be construed and implemented to require that in no year shall Zone 7 of the Alameda County Flood Control and Water Conservation District ("Zone 7") provide an amount of water to the Dublin San Ramon Services District ("DSRSD"), for service to the Dougherty Valley Service Area (as defined in section A of Appendix I to the First Amendment and Exhibit A to that certain *Agreement to Settle Water Litigation* entered into as of October 26, 1999 by and between Zone 7, the Alameda County Flood Control and Water Conservation District, DSRSD, the City of Livermore, Citizens for Balanced Growth, Windemere Ranch Partners and Shapell Industries (the "Settlement Agreement")), that is greater than the sum of:

(a) the amount of entitlement, interruptible, and turnback pool water that Zone 7 receives in such year from DWR and which is derived from 6,080 acre-feet of the 7,000 acre-foot annual entitlement that Zone 7 will acquire as a result of the transfer of water entitlements from the Kern County Water Agency pursuant to that certain January 28, 1998 water purchase agreement between Zone 7 Zone 7 and the Berrenda Mesa Water District (the "Dougherty Valley Water Supply")

(b) the amount of water that is returned by DWR or SWSD to Zone 7 in such year that is derived from that portion of the Dougherty Valley Water Supply previously placed in the 43,000 acre feet of storage acquired in accordance with Article 5

of the Water Storage Agreement, dated January 28, 1998 and as amended, between Zone 7 and SWSD; and

(c) the amount of any other water hereafter secured by or through DSRSD and received by Zone 7 in such year, all in a manner consistent with the terms and provisions of the Settlement Agreement applicable to the securing, receipt and delivery of such water for and to the Dougherty Valley Service Area.

As so construed and implemented, the First Amendment is valid pursuant to sections 860 *et seq.* of the Code of Civil Procedure and does not and will not result in a violation of the District Act.

4. This Judgment is a final judgment resolving all claims and causes of action in Cases 98CS02671 and 98CS02670. Pursuant to Code of Civil Procedure section 664.6, this Court retains jurisdiction over the parties who are not dismissed for the sole and limited purpose of enforcing the Settlement Agreement in accordance with its terms (including those provisions of the Settlement Agreement relating to, among other things, available remedies, alternative dispute resolution, severability and burdens of proof and persuasion) and not to disturb, modify or amend such terms in any manner. Any enforcement proceedings will be heard by the Honorable Ronald B. Robie or such other judge in the Sacramento Superior Court as may be assigned if Judge Robie becomes unavailable.

5. This Judgment shall be final and binding regardless of the invalidity or unenforceability of any provision of the Settlement Agreement. This Judgment is specific to the facts and law of this case and is of no precedential effect either within or outside of the ACFCWCD.

6. Citizens for Balanced Growth and the City of Livermore shall recover from Windemere Ranch Partners and Shapell Industries, Inc. their reasonable fees and costs in the present matter, including those of mediation as well as litigation.

Dated: _____

_____
Judge of the Superior Court

From: Stephen Riley
To: Doug Mann; MIchael Ferrucci
Cc: Paul Spence; Jason Alcala; Sukhamrit Purewal
Subject: Re: Citizens for Balanced Growth
Date: Tuesday, April 9, 2024 1:09:31 PM
Attachments: CBG Letter 4-9-24.pdf
Outlook-y50c1l5v.png

Hi Doug and Michael,

Please see my attached letter regarding the urgency for City staff to meet with Citizens for Balanced Growth (CBG) to confer on the use of Dougherty Valley Settlement Agreement open space funds. City staff will confer with CBG on the four properties listed in the letter. We have sent you information on the properties. In addition, all four were presented and discussed at the two Altamont Landfill Open Space Committee (ALOSC) meetings that Doug attended (and recorded) in February and March.

Also, I want to remind you that City staff reached out to both Native American organizations you requested. Sogorea Te' Land Trust responded via e-mail on March 19th and stated: "*Thanks for reaching out about this. With the recent Rematriation of the West Berkeley Shellmound and the ongoing work at all of our other land sites, we currently do not have the capacity to explore these opportunities in Livermore. If there is an opportunity for us to plug in at a later date, please do not hesitate to let us know. Thank you.*"

City staff also met with the Confederation of Ohlone People, and they are interested in further discussing partnerships with the City, but they do not have any funds at this time to buy land in the Livermore area.

Finally, as you heard at the ALOSC meetings, the Garaventa Hills landowners have said three different times in writing they are not willing to sell their land to the City.

Thanks and I look forward to hearing from you.

Steve

Stephen Riley
Acting Planning Manager
Community Development
City of Livermore
(925) 960-4461
spriley@cityoflivermore.net
www.cityoflivermore.net

LIVERMORE CALIFORNIA

From: Doug Mann <doug@citizensforbalancedgrowth.org>
Sent: Sunday, March 24, 2024 6:24 PM
To: Stephen Riley <spriley@LivermoreCA.gov>
Subject: Re: Citizens for Balanced Growth

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Steve,

Sorry for the delay in responding. We are fashioning a response which will include information requests and it's taking longer than any of us would like. Wednesday is not feasible, but I hope to have our reply by Tuesday or Wednesday. Thanks for your patience.

-Doug

> On Mar 24, 2024, at 3:06 PM, Stephen Riley <spriley@LivermoreCA.gov> wrote:
>
> Hi Doug and Michael,
>
> I just want to check again if you can make this scheduled meeting between City staff and the Citizens for Balanced Growth representatives. Last week, I sent you an outlook meeting request for this Wednesday March 27, from 3:30 to 5 pm (see below). We can meet in person or on Teams, whichever works for you. Please let me know. Thanks
>
> Steve
>
> Stephen Riley
> Acting Planning Manager
> Community Development
> City of Livermore
> (925) 960-4461
> spriley@cityoflivermore.net
> www.cityoflivermore.net
> <Outlook-wi040fox.png>

From: Stephen Riley <spriley@LivermoreCA.gov>
Sent: Monday, March 18, 2024 10:28 PM

To: Andy Ross <aaross@LivermoreCA.gov>; doug@citizensforbalancedgrowth.org <doug@citizensforbalancedgrowth.org>; MIchael Ferrucci [redacted]

Subject: Citizens for Balanced Growth
When: Wednesday, March 27, 2024 3:30 PM-5:00 PM.
Where: Riesling Conference Room (1052 S. Livermore Avenue, Livermore, California 94550)

Hi Doug and Michael,
City staff wants to meet and confer with the CBG on the open space acquisitions recently heard by the Altamont Landfill Open Space Committee. We can either meet in person at City Hall or on Teams. Either is ok with us. We can meet later if necessary. Thanks.

Steve Riley, Acting Planning Manager

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

Meeting ID: 256 457 203 197
Passcode: Eps9M5
Download Teams | Join on the web

Or call in (audio only)
+1 323-433-2133,,53030249# United States, Los Angeles
Phone Conference ID: 530 302 49#
Find a local number | Reset PIN

Learn More | Meeting options

Doug Mann
Secretary, Citizens for Balanced Growth
925 449-8147
citizensforbalancedgrowth.org
youtube.com/@citizensforbalancedgrowth

LIVERMORE
CALIFORNIA

April 9, 2024

Doug Mann
On behalf of Citizens for Balanced Growth
Sent via Email to: doug@citizensforbalancedgrowth.org

Michael Ferruci
On behalf of Citizens for Balanced Growth
Sent via Email to: [redacted]

RE: Dougherty Valley Settlement Fund Recommendation
Acquisition of Open Space Properties
Buyer: City of Livermore

Messrs. Mann and Ferruci on behalf of Citizens for Balances Growth,

This letter is a final request to meet-and-confer with Citizens for Balanced Growth regarding the recommendation being formulated by City staff to the Livermore City Council regarding the expenditure of Dougherty Valley settlements funds for acquisition of the following properties for conservation preservation purposes (collectively known as the "Properties"):

- Garaventa Hills property - 32 acres (APN 099B-53-0-1)
- Hartford Hills Property – 82 acres (APNs: 902-9-3-1 and 902-9-3-2)
- Altamont Hills Property (formerly called the Cross property) – 32 acres (APN: 99B-5680-4)
- Greenville Road Property – 125.5 acres (APN: 99B-5685-12)

As you are aware, the Agreement to Settle Water Litigation dated November 2, 1999, and commonly known as the Dougherty Valley Settlement Agreement, contains the following clause in section 6(d)(i) for the expenditure of funds realized from the settlement:

> "City staff will meet and confer with [Citizens for Balanced Growth] prior to formulating its recommendations for acquisitions."

City staff has made numerous attempts to meet-and-confer with Citizens for Balanced Growth concerning the recommendations being prepared by City staff to the City Council regarding the expenditure of settlement funds for acquisition of the Properties by the City of Livermore for conservation preservation purposes. Those requests were

made in December, January, February, and March, but Citizens for Balanced Growth has not met with City staff.

Even though Citizens for Balanced Growth deviated from past practices and rebuffed requests to meet-and-confer by requesting information not previously requested for prior meet-and-confers and inserting new demands that the City identify the buyer before meeting, City staff provided the requested information and advised that the recommendation is based upon the City being the buyer.

It appears that Citizens for Balanced Growth is reluctant to meet because it does not support the expenditure of Dougherty Valley Settlement funds for the City's acquisition of the Properties for conservation preservation purposes. It may also be that Citizens for Balanced Growth is attempting to delay staff's recommendation concerning the proposed acquisitions.

Mr. Mann has expressed his personal opinion, at both the Livermore City Council meeting on February 26, 2024, and the Altamont Open Space Committee meeting on February 16 and March 15, 2024, that he does not support the City's acquisition of the Properties. However, he has not met-and-conferred with City staff on behalf of Citizens for Balanced Growth.

City staff proposes the following dates and times to meet-and-confer with Citizens for Balanced Growth about the staff recommendation being formulated to the Livermore City Council regarding the expenditure of Dougherty Valley settlements funds for the City's acquisition of the Properties:

Date: Thursday, April 18, 2024
Time: 4-5 pm or later if necessary
Location: Teams call or City Hall

Date: Tuesday, April 23, 2024
Time: 5-6 pm or later if necessary
Location: Teams call or City Hall

Date: Wednesday, April 24,2024
Time: 5-6 pm or later if necessary
Location: Teams call or City Hall

City staff is prepared to meet after hours if needed and can also meet at a publicly accessible location other than City Hall if that works better for both of you.

In the event Citizens for Balanced Growth does not meet-and-confer with City staff by April 24, 2024, staff will then formulate its recommendation to the City Council consistent with the Dougherty Valley Settlement Agreement with the following as the preferred recommendation by Citizens for Balanced Growth:

> "Citizens for Balanced Growth does not support the expenditure of Dougherty Valley settlement funds for the City of Livermore to acquire the following Properties:

- Garaventa Hills property - 32 acres (APN 099B-53-0-1)
- Hartford Hills Property – 82 acres (APNs: 902-9-3-1 and 902-9-3-2)
- Altamont Hills Property (formerly called the Cross property) – 32 acres (APN: 99B-5680-4)
- Greenville Road Property – 125.5 acres (APN: 99B-5685-12)"

I am be reached at (925) 960-4461 or via e-mail at spriley@livermoreca.gov. **Please contact me to accept one of the proposed dates to meet-and-confer or to identify a date-and-time that will occur before April 24, 2024, that works for Citizens for Balanced Growth and City staff.**

Sincerely,

Stephen Riley
Acting Planning Manager
City of Livermore Planning Division

Cc Paul Spence, Assistant City Manager
Jason Alcala, City Attorney
Kam Purewal, Assistant Planner

GREENFIRE LAW, PC

JESSICA L. BLOME
2748 Adeline Street, Suite A
Berkeley, CA 94703
Phone: (510) 900-9502
Email: jblome@greenfirelaw.com
www.greenfirelaw.com

July 19, 2024

By email only

Hon. Mayor John Marchand
Hon. Member Bob Carling
Hon. Member Ben Barrientos
Hon. Member Evan Branning
Hon. Member Brittni Kiick
City of Livermore, City Hall
1052 S. Livermore Ave.
Livermore, CA 1052
LivermoreCityCouncil@LivermoreCA.gov
cityclerk@LivermoreCA.gov

RE: Distributions from Dougherty Valley Settlement Fund

Dear Mayor Marchand and Members of the Livermore City Council:

This firm represents Citizens for Balanced Growth, a registered non-profit group representing conservation-minded citizens in the Tri-Valley. Founded in 1982, CBG strives to support activities that enhance the quality of life for the residents of Livermore, Pleasanton, Sunol, and Dublin. I understand you wish to meet with CBG regarding the City's desire to distribute monies from the Dougherty Valley Settlement Fund to potentially fund the purchase of four properties for "conservation preservation purposes," known as the Garaventa Hills, Hartford Hills, Altamont Hills properties.

As you know, CBG is a beneficiary of the Dougherty Valley Settlement Agreement, which constituted the Dougherty Valley Settlement Fund, a fee-funded account to be used "exclusively for the purchase from willing sellers of permanent easements or fee title for conservation or agricultural purposes." Agreement, § 6(a). According to the Agreement, "**Prior to approving expenditures of funds** collected through this fee, the City Council of Livermore will receive recommendations from its staff concerning proposed acquisitions of permanent easements or fee title for conservation or agricultural preservation purposes. City staff **will meet**

and confer with Citizens [for Balanced Growth] **prior to formulating its recommendations** for acquisitions." Agreement, § 6(d)(1). Should staff recommendations differ from those preferred by Citizens, "the staff report to the City Council **shall** specify and explain the differences." *Id.*

Importantly, per Section 9(d) of the Agreement, "Each of the Settling Parties shall execute and deliver to the others all such other further instruments and documents as may be reasonably necessary to carry out the terms and provisions of this Agreement and secure to the others the full and complete enjoyment of their respective rights and privileges hereunder."

On July 8, 2024, City Staff brought recommendations for acquisition of some of the properties to City Council for approval, even though it had not:

- met and conferred with CBG;
- formulated its recommendation based on its meet and confer;
- considered CBG alternative proposals (if any); or
- explained differences in writing (if any).

Staff's provision of recommendations to City Council without first complying with the terms of the Dougherty Valley Settlement Agreement constitutes a breach of the Agreement, and because Section 6 represents the benefit of CBG's bargain, in exchange for which CBG agreed to dismiss its water lawsuit against the City, there can be no doubt that the City's breach is material in nature. Fortunately, the City Council took no action on July 8, instead postponing its decision to approve or deny Staff's recommendations to a later date, ostensibly giving Staff more time to meet and confer with CBG per the Agreement.

Unfortunately, CBG has learned that City Staff placed its recommendations back on Council's agenda for Monday, July 22. On behalf of CBG, please accept this letter as a formal request to comply with the Agreement by meeting and conferring with CBG *before* Staff makes recommendations to Council for expenditure of Settlement Funds and *before* Council acts on those recommendations.

I understand that Staff represented to Council that CBG has refused to meet with Staff for "five months," which Staff accepted as CBG's rejection of Staff's proposal. Neither statement is true.

First, Staff first reached out to CBG on December 11, 2023, proposing two dates in mid-December to discuss unspecified acquisitions of "properties" with Settlement Funds. CBG responded four days later indicating that the end of the year was bad timing for CBG. Staff responding by pushing for a meeting in December because "we're in active negotiations." CBG requested information about the planned acquisitions to study in advance of the meeting with Staff. Staff refused to provide documentation but vaguely identified two properties in North Livermore. The parties decided to put the meeting off until January when Staff was available but reiterated the importance of Staff providing information about the properties in advance of the meeting.

On January 23, 2024, Staff sent a meeting invitation to CBG to take place on January 30. CBG accepted the invitation. Staff cancelled the meeting on January 26, 2024.

In early February, CBG again asked for information about the properties, and Staff allowed that the City intended to purchase the properties, but nothing more. On February 13, CBG learned that Staff had approached the Altamont Landfill Open Space Committee about using Altamont Landfill Open Space Funds to purchase certain properties for conservation, some of which appeared to overlap with properties in "North Livermore." CBG at least now had some sense of what the City was planning.

On March 18, the City responded to CBG request for information, admitting that the projects discussed with the Altamont Open Space Committee mirrored those it hoped to discuss with CBG. The City proposed a meeting time on March 27 and directed CBG to review the agenda packet for the meeting with the Altamont Open Space Committee for more information. CBG immediately responded to explain it would seek additional information and was preparing a list of specific requests. CBG advised that March 27 did not work for CBG.

On April 9, 2024, Staff wrote to CBG, accusing its president of deliberately avoiding a meeting with Staff. The timeline of events related above does not support such an inflammatory accusation. Staff proposed three meeting times in April. CBG responded with a list of specific requests for information, including:

1. Any existing letters of intent for purchase for each of the properties targeted for DVSA funding.
2. Proposed sales contracts for each of the properties targeted for DVSA funding.
3. Purchase agreements and all encumbrance documents for the following properties: Eddies' Flat, Farber Property.
4. Plans, in progress or complete, for environmental stewardship in perpetuity for targeted acquisitions.
5. All contact information in the City's possession for Lisa Quisto.

The City responded with some, but not all, of the information requested and refused to provide certain information and documents altogether later in April. CBG advised Staff that it would need remaining documentation before it could meaningfully meet and confer and fulfill its obligations under the Agreement. Staff did not respond to CBG, and, alongside the public, in advance of the July 8, 2024, CBG reviewed Staff's recommendations to Council for the first time when Staff posted the council agenda.

CBG does not understand why Staff has acted as if CBG is uncooperative, when Staff refuses to set the parties up for success during this meet and confer process. CBG is and remains willing meet with City staff as soon as it receives all reasonable requests for documents and has had time to analyze the various aspects of the purchases in question. CBG takes its responsibilities under the Agreement seriously and remains committed to the excellent stewardship of the Settlement Fund.

With that in mind, in addition to its information and document requests, as re-stated herein, CBG requests an audit of the Settlement Fund. CBG understands this audit may take time, so this is not a pre-condition to meeting over the City's present desire to purchase properties.

Please direct your communication to CBG regarding this meet and confer through me from this point onward. I hope you will avoid the City's continuing breach of the Dougherty Valley Settlement Agreement by taking this matter off the agenda until CBG can meaningfully meet and confer with Staff.

Sincerely,

Jessica L. Blome
Greenfire Law, PC

C: Doug Mann, Michael Ferrucci
Jason Alcala, Livermore City Attorney

Helena Graves

From: Jessica Blome <jblome@greenfirelaw.com>
Sent: Friday, July 19, 2024 3:23 PM
To: Livermore City Council; City Clerk
Cc: Jason Alcala; Jason Alcala; Doug Mann; MIchael Ferrucci
Subject: Letter on behalf of Citizens for Balanced Growth
Attachments: 2024-07-19 Ltr to Livermore DVSA Funds, FINAL.pdf

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Mayor and Members of the Livermore City Council,

Please see attached letter sent on behalf of Citizens for Balanced Growth.

Sincerely,

Jessica L. Blome
Greenfire Law, PC
2748 Adeline, Ste. A
Berkeley, CA 94703
Office: (510) 900-9502 ext. 703
Direct: (641) 431-0478
jblome@greenfirelaw.com

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GREENFIRE LAW, PC

JESSICA L. BLOME
2748 Adeline Street, Suite A
Berkeley, CA 94703
Phone: (510) 900-9502
Email: jblome@greenfirelaw.com
www.greenfirelaw.com

July 19, 2024

By email only

Hon. Mayor John Marchand
Hon. Member Bob Carling
Hon. Member Ben Barrientos
Hon. Member Evan Branning
Hon. Member Brittni Kiick
City of Livermore, City Hall
1052 S. Livermore Ave.
Livermore, CA 1052
LivermoreCityCouncil@LivermoreCA.gov
cityclerk@LivermoreCA.gov

RE: Distributions from Dougherty Valley Settlement Fund

Dear Mayor Marchand and Members of the Livermore City Council:

This firm represents Citizens for Balanced Growth, a registered non-profit group representing conservation-minded citizens in the Tri-Valley. Founded in 1982, CBG strives to support activities that enhance the quality of life for the residents of Livermore, Pleasanton, Sunol, and Dublin. I understand you wish to meet with CBG regarding the City's desire to distribute monies from the Dougherty Valley Settlement Fund to potentially fund the purchase of four properties for "conservation preservation purposes," known as the Garaventa Hills, Hartford Hills, Altamont Hills properties.

As you know, CBG is a beneficiary of the Dougherty Valley Settlement Agreement, which constituted the Dougherty Valley Settlement Fund, a fee-funded account to be used "exclusively for the purchase from willing sellers of permanent easements or fee title for conservation or agricultural purposes." Agreement, § 6(a). According to the Agreement, "**Prior to approving expenditures of funds** collected through this fee, the City Council of Livermore will receive recommendations from its staff concerning proposed acquisitions of permanent easements or fee title for conservation or agricultural preservation purposes. City staff **will meet**

and confer with Citizens [for Balanced Growth] **prior to formulating its recommendations** for acquisitions." Agreement, § 6(d)(1). Should staff recommendations differ from those preferred by Citizens, "the staff report to the City Council **shall** specify and explain the differences." *Id.*

Importantly, per Section 9(d) of the Agreement, "Each of the Settling Parties shall execute and deliver to the others all such other further instruments and documents as may be reasonably necessary to carry out the terms and provisions of this Agreement and secure to the others the full and complete enjoyment of their respective rights and privileges hereunder."

On July 8, 2024, City Staff brought recommendations for acquisition of some of the properties to City Council for approval, even though it had not:

- met and conferred with CBG;
- formulated its recommendation based on its meet and confer;
- considered CBG alternative proposals (if any); or
- explained differences in writing (if any).

Staff's provision of recommendations to City Council without first complying with the terms of the Dougherty Valley Settlement Agreement constitutes a breach of the Agreement, and because Section 6 represents the benefit of CBG's bargain, in exchange for which CBG agreed to dismiss its water lawsuit against the City, there can be no doubt that the City's breach is material in nature. Fortunately, the City Council took no action on July 8, instead postponing its decision to approve or deny Staff's recommendations to a later date, ostensibly giving Staff more time to meet and confer with CBG per the Agreement.

Unfortunately, CBG has learned that City Staff placed its recommendations back on Council's agenda for Monday, July 22. On behalf of CBG, please accept this letter as a formal request to comply with the Agreement by meeting and conferring with CBG *before* Staff makes recommendations to Council for expenditure of Settlement Funds and *before* Council acts on those recommendations.

I understand that Staff represented to Council that CBG has refused to meet with Staff for "five months," which Staff accepted as CBG's rejection of Staff's proposal. Neither statement is true.

First, Staff first reached out to CBG on December 11, 2023, proposing two dates in mid-December to discuss unspecified acquisitions of "properties" with Settlement Funds. CBG responded four days later indicating that the end of the year was bad timing for CBG. Staff responding by pushing for a meeting in December because "we're in active negotiations." CBG requested information about the planned acquisitions to study in advance of the meeting with Staff. Staff refused to provide documentation but vaguely identified two properties in North Livermore. The parties decided to put the meeting off until January when Staff was available but reiterated the importance of Staff providing information about the properties in advance of the meeting.

On January 23, 2024, Staff sent a meeting invitation to CBG to take place on January 30. CBG accepted the invitation. Staff cancelled the meeting on January 26, 2024.

In early February, CBG again asked for information about the properties, and Staff allowed that the City intended to purchase the properties, but nothing more. On February 13, CBG learned that Staff had approached the Altamont Landfill Open Space Committee about using Altamont Landfill Open Space Funds to purchase certain properties for conservation, some of which appeared to overlap with properties in "North Livermore." CBG at least now had some sense of what the City was planning.

On March 18, the City responded to CBG request for information, admitting that the projects discussed with the Altamont Open Space Committee mirrored those it hoped to discuss with CBG. The City proposed a meeting time on March 27 and directed CBG to review the agenda packet for the meeting with the Altamont Open Space Committee for more information. CBG immediately responded to explain it would seek additional information and was preparing a list of specific requests. CBG advised that March 27 did not work for CBG.

On April 9, 2024, Staff wrote to CBG, accusing its president of deliberately avoiding a meeting with Staff. The timeline of events related above does not support such an inflammatory accusation. Staff proposed three meeting times in April. CBG responded with a list of specific requests for information, including:

1. Any existing letters of intent for purchase for each of the properties targeted for DVSA funding.
2. Proposed sales contracts for each of the properties targeted for DVSA funding.
3. Purchase agreements and all encumbrance documents for the following properties: Eddies' Flat, Farber Property.
4. Plans, in progress or complete, for environmental stewardship in perpetuity for targeted acquisitions.
5. All contact information in the City's possession for Lisa Quisto.

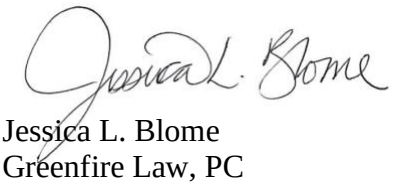
The City responded with some, but not all, of the information requested and refused to provide certain information and documents altogether later in April. CBG advised Staff that it would need remaining documentation before it could meaningfully meet and confer and fulfill its obligations under the Agreement. Staff did not respond to CBG, and, alongside the public, in advance of the July 8, 2024, CBG reviewed Staff's recommendations to Council for the first time when Staff posted the council agenda.

CBG does not understand why Staff has acted as if CBG is uncooperative, when Staff refuses to set the parties up for success during this meet and confer process. CBG is and remains willing meet with City staff as soon as it receives all reasonable requests for documents and has had time to analyze the various aspects of the purchases in question. CBG takes its responsibilities under the Agreement seriously and remains committed to the excellent stewardship of the Settlement Fund.

With that in mind, in addition to its information and document requests, as re-stated herein, CBG requests an audit of the Settlement Fund. CBG understands this audit may take time, so this is not a pre-condition to meeting over the City's present desire to purchase properties.

Please direct your communication to CBG regarding this meet and confer through me from this point onward. I hope you will avoid the City's continuing breach of the Dougherty Valley Settlement Agreement by taking this matter off the agenda until CBG can meaningfully meet and confer with Staff.

Sincerely,



Jessica L. Blome
Greenfire Law, PC

C: Doug Mann, Michael Ferrucci
Jason Alcala, Livermore City Attorney



Assessments for FY 2022 and 2023

July 22, 2024

Presented by Anna Zamboanga, Recycling Specialist

LIVERMORE CALIFORNIA

1

Assessment for Non-Payment of Livermore Sanitation's (LSI) Collection Services

- Of 29,000 accounts served by LSI, 70 accounts are overdue
- The net value is approximately $70,611.12 to be recovered
- All properties must subscribe to service; LSI cannot stop service for delinquent accounts

LIVERMORE CALIFORNIA

2

Assessment for Non-Payment of LSI Collection Services

- LSI and City have sent 6 notifications:
  - LSI sends first notice 30 days after non-payment to account holder and and owner
  - LSI sends second notice to account holder and owner
    - Service is reduced to one 20-gal garbage cart for residential accounts and one 32-gal garbage cart for commercial accounts until payment is made.
  - First notice from City of intent to assess was sent April 3, 2024
  - Second notice from City was sent June 14, 2024
  - Third notice from City was sent June 28, 2024
  - Fourth notice from City was sent July 15, 2024
- LSI has been willing to negotiate payment plans for past-due accounts.

LIVERMORE CALIFORNIA

3

Frequency of Assessment

- 80% of the accounts on this year's list are being assessed for the first time and 20% have been assessed prior years
- The number of accounts assessed are trending downward compared to previous years.

LIVERMORE CALIFORNIA

4

Staff Recommendation

- Consider protests related to the non-payment of solid waste, recycling, and organics services;
- Adopt a resolution overruling protests and confirm the 2022 and 2023 assessments if applicable; and,
- Direct staff to forward a finalized copy of the assessment report to the County Tax Assessor

LIVERMORE CALIFORNIA

5

Questions?

LIVERMORE CALIFORNIA

6

Frequency of Assessment

	Percent	Number of Accounts	Frequency of Assessment
	80.0%	56	First
	20.0%	14	Two or more
Total	100%	70	

LIVERMORE CALIFORNIA

7

Frequency of Assessment

	Percent	Number of Accounts	Frequency of Assessment
	80.0%	56	First
	2.9%	2	Second
	0.0%	0	Third
	5.7%	4	Fourth
	0.0%	0	Fifth
	0.0%	0	Sixth
	1.4%	1	Seventh
	1.4%	1	Eight
	1.4%	1	Ninth
	2.9%	2	Tenth
	1.4%	1	11th
	2.9%	2	12th
Total	100%	70	

LIVERMORE CALIFORNIA

8



INSP Core – Isabel Crossing – City Council Hearing

July 22, 2024

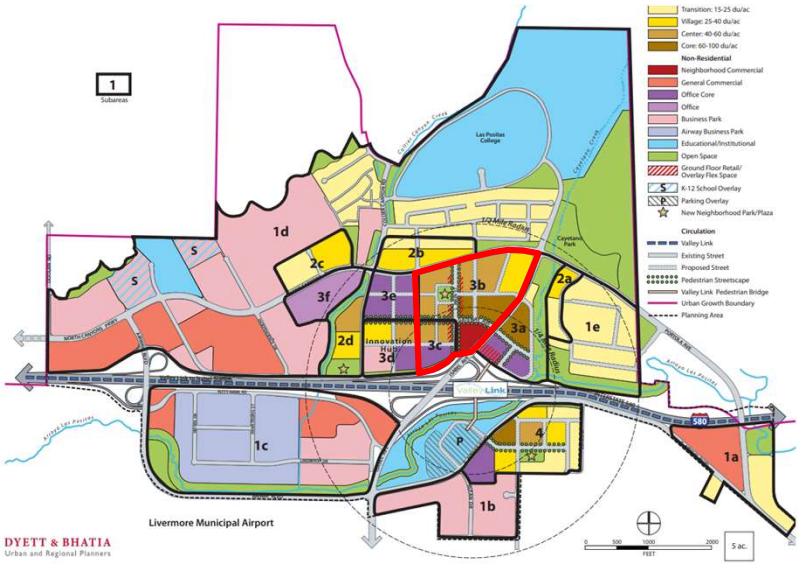
Jake Potter, Senior Planner

Jennifer Ackerman, Assistant Planner

LIVERMORE CALIFORNIA

1

Background



2

Application and Council Actions

Legislative
- Development Agreement (DA) 22-001;
- Specific Plan Amendment (SPPA) 24-001;
- Development Code Amendment (DCA) 24-001;

Quasi-Judicial
- Addendum to the Isabel Neighborhood Specific Plan Environmental Impact Report
- Subdivision (SUB) 22-008
- Conditional Use Permit (CUP) 24-002
- Site Plan Design Review (SPDR) 24-003
- Master Sign Plan Amendment (MSP) 24-001
- Proposed Master Plan
- Proposed Alternative Affordable Plan

Ministerial
- Requested Density Bonus Waiver and incentive/concessions
- No Net Loss findings



LIVERMORE

3

Negotiated Package Components

Development Agreement

City Benefits
- Public Infrastructure
- Commercial
- Affordable Housing
- Construction Sales Tax
- Financial Contributions
- Public Art
- Public Safety Features
- Architecture and Design

Developer Benefits
- Vested Rights
- Community Facilities District
- Fee Reimbursements/ Credits







Land Subdivision

Design/ Environmental Review

Specific Plan/ Development Code Amendments

State Laws

LIVERMORE

4

Existing Conditions and Site Plan



Product Summary		
Market-Rate For Sale Duplex & Triplex	211	
Market-Rate For Sale Townhomes:	334	
Market-Rate For Sale Condos:	231	
Affordable For Sale Condos:	57	
Market-Rate For Rent Apartments:	160	
Affordable For Rent Apartments:	306	
Total Market-Rate Units:	**936**	72%
Total Affordable Units:	**363**	28%
Total Units:	**1299**	100%



LIVERMORE

5

Architectural and Landscape Design









LIVERMORE

6

Affordable Housing

- Located near amenities
- Alternative Affordable Plan
  - 28% affordable
  - Deeper level of affordability
- Timing requirements, tied to commercial development



	Lower Income (% of total)	Median Income (% of total)	Moderate Income (% of total)	Total (% of total)
Required	62 (4.7%)	60 (4.6%)	137 (10.5%)	259 (20%)
Proposed	178 (13.7%)	83 (6.3%)	102 (7.8%)	363 (28%)
Net Difference	+116 (+9%)	+23 (+1.7%)	-35 (-2.7%)	+104 (+8%)

LIVERMORE

7

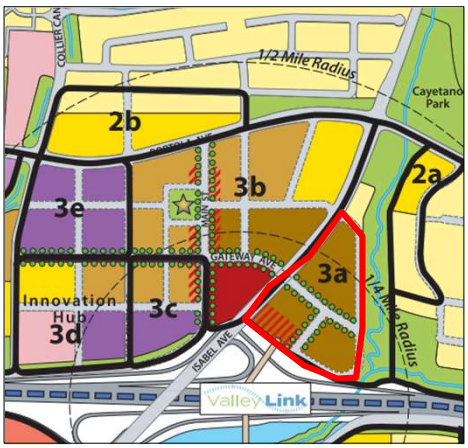
Specific Plan and Development Code Amendment

<u>Specific Plan Amendment</u>

- Master Plan Policy
  - Allow for averaging of densities and mixing of uses.
- Affordable Policy
  - Alternative Affordable Plan
  - Increased For-Sale Lower Income requirement (7.5%)
- Map Amendment
  - No Net Loss
  - Surplus of 120 Lower Income Units

<u>LDC Amendment</u>

- Codify affordable modifications in Inclusionary Ordinance



LIVERMORE

8

State Density Bonus Law

Density Bonus

- Increased Height
- Reduced Office Floor Area Ratio (FAR)
- Reduced Commercial FAR



ENCROACHMENTS IN VIEW CORRIDOR

PARCEL	APPROX. ENCROACHMENT
S1	11.5'
C2-A	8.5' (North End)
S3-A	6'
S3-B	20.5'

9

Planning Commission and Public Outreach

Neighborhood Meeting

- Approximately 50 residents attended

Letters of Support

- 10 letters of support

Planning Commission

- Unanimous recommendation of approval

10

Recommendation

Staff and the Planning Commission recommend the City Council adopt the following resolutions to:

1. Certify/adopt an Addendum to the Isabel Neighborhood Specific Plan Environmental Impact Report, in accordance with the California Environmental Quality Act.
2. Approve Subdivision (SUB) 22-008, Conditional Use Permit (CUP) 24-002, Site Plan Design Review (SPDR) 24-003, Master Sign Plan Amendment (MSP) 24-001; the proposed Master Plan; the Alternative Affordable Plan; the requested Density Bonus Waivers and Incentive/Concessions; and the No Net Loss findings;
3. Approve Development Agreement (DA) 22-001;
4. Approve Specific Plan Amendment (SPPA) 24-001;
5. Approve Development Code Amendment (DCA) 24-001; and
6. Direct the Planning Manager to file a Notice of Determination, in accordance with the provisions of the California Environmental Quality Act, subject to project approval.

LIVERMORE

11

Item 6.2
Applicant Presentation

vimeo

Join Vimeo



Isabel Crossing | Livermore, CA

Uploaded 1 month ago

WHA. **WHA**

https://vimeo.com/955029095/2a082e0cf5?share=copy

Helena Graves

From: JULIE HOWARD [redacted]
Sent: Wednesday, July 17, 2024 12:41 PM
To: City Clerk
Subject: Isabel Crossing - in favor!

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Attn: Livermore City Clerk

We are writing this email to address the Isabel Crossing Project up for consideration this coming Tuesday. We have lived in Livermore over 50 years and have multiple generations also residing here. We are both still full-time employees of Livermore businesses. It is our hope that Livermore will approve the Isabel Crossing Project so that many, many new homes will be developed, enhancing the ability of our fellow employees and families to live here. While the Downtown is thriving, we need housing to support the employees. This project will add to the overall ambiance and livability of Livermore.

Thank you for your consideration,
Julie and John Howard

Helena Graves

From: Lingagoud Memula [redacted]
Sent: Friday, July 19, 2024 6:43 PM
To: City Clerk
Subject: Isabel Crossing Project

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Livermore City Clerk:

I am a resident of Livermore and a devotee of the Hindu Temple in Livermore.
I support greater housing opportunities for our children and for employees who can work and live in Livermore.
This project adds a lot value to Livermore community.

I support strongly the Isabel Crossing project and ask that you approve the project.

Thank you.

Sent from my iPhone
Goud Memula PhD
[redacted]

Helena Graves

From: Lingagoud Memula [redacted]
Sent: Friday, July 19, 2024 6:47 PM
To: City Clerk
Subject: Isabel Crossing Development

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Livermore City Clerk:

I am a resident of Livermore and a devotee of the Hindu Temple in Livermore.
I support greater housing opportunities for our children and for employees who can work and live in Livermore.
This project adds a lot value to Livermore community.

I support strongly the Isabel Crossing development and ask that you approve the project.

Thank you.

Sent from my iPhone
Chandrakala Memula
[redacted]

Helena Graves

From: flukifer [redacted]
Sent: Saturday, July 20, 2024 11:14 AM
To: City Clerk
Subject: Isabel Crossing Project

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Livermore City Clerk:

I am a resident of Livermore and am writing to express my support of the Isabel Crossing Project.
I would like to have greater housing opportunities for our children and for employees who can work and live in Livermore. I believe this project adds a lot of value to Livermore community.

I ask that you approve the project.

Thank you

Jenn Bowman
[redacted]

Helena Graves

From: Drew Felker [redacted]
Sent: Sunday, July 21, 2024 6:55 PM
To: City Clerk
Subject: Please approve the Isabel Neighborhood Plan

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi City Clerk,

I am a livermore resident near the proposed isabel neighborhood. Please approve the plan as is, or with minor changes that will make it the easiest possible way to get approved. The community needs this development.

Sincerely,
Drew Felker
[redacted]

Helena Graves

From: Kristin Memula [redacted]
Sent: Monday, July 22, 2024 9:04 AM
To: City Clerk
Subject: Housing Project

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Good Morning,

I am a Livermore resident and I support greater housing opportunities for our community members so they can work and live in Livermore. I support the Isabel Crossing project and I ask that you approve the project.

Thank you,
Kristin Memula



Resolution Adopting180-Day Wait Period Exception to Hire Retired Annuitant Nancy Dias

July 22, 2024

Presented by:

Kristen Hilton, Acting Human Resources Manager

CITY OF LIVERMORE CALIFORNIA

1

Resolution Adopting180-Day Wait Period Exception to Hire Retired Annuitant Nancy Dias

- State law requires City Council approval to hire a retired annuitant before the required 180-day waiting period.
- Ms. Dias will help provide operational support for critical, time-sensitive, projects in progress including:
  - Citywide compensation study,
  - Employee onboarding program,
  - Wellness program, and
  - Multiple key recruitments.
- Staff recommends that the City Council adopt a resolution adopting 180-day wait period exception to hire retired annuitant Nancy Dias in accordance with the Government Code.

CITY OF LIVERMORE CALIFORNIA

2

Council Member	Date of Meeting or Event	Committee or Organization	Meeting or Event Type (ex. board meeting or ribbon cutting)	Summary of Meeting or Event
Mayor Marchand	7/9/2024	Shepherd's Gate	40th Anniversary Celebration	Presented a Proclamation recognizing their 40th Anniversary and the over 14,000 women and children whom they have helped.
Mayor Marchand	7/10/2024	Alameda County Mayors Conference	Business meeting	The Conference appointed me to LAFCO and we heard a presentation on sea-level rise resiliency.
Mayor Marchand	7/11/2024	Innovation Tri-Valley - Housing, Infrastructure, Transportation Committee (ITV H.I.T Committee)	Subcommittee meeting	Reviewed and made recommendations on proposed positions on up-coming bills for ITV.
Mayor Marchand	7/11/2024	San Joaquin Regional Rail commission	Swearing in	Was sworn in to serve on the Commission.
Mayor Marchand	7/11/2024	LAFCO (Local Agency Formation Commission	Commission meeting	Approved the sphere of influence change for SMP (Surface mining permit) 39 and SMP40.
Mayor Marchand	7/12/2024	Innovation Tri-Valley	Business meeting	Heard updates and a presentation from Topcon.
Mayor Marchand	7/12/2024	City of Livermore	Tour	Attended a tour with transit officials from around the County and the staff representatives from Congressman Swalwell and Senator Butler.
Mayor Marchand	7/15/2024	Chamber of Commerce	Ribbon-cutting	Presented a Certificate of Welcome to Verace Gelato.
Mayor Marchand	7/16/2024	Livermore Morning Rotary	Business meeting	Attended for the installation of Jill Duerig (Former Zone 7 G.M.) as District Governor.
Mayor Marchand	7/17/2024	City of Livermore Econ. Devel.	Ribbon-cutting	Pacific Fusion (Inertial Confinement fusion) former LLNL workers.
Mayor Marchand	7/17/2024	City of Livermore Water Resources	Retirement	Presented a proclamation for retiring staff Steve Aguiar.
Mayor Marchand	7/17/2024	Chamber of Commerce	Business mixer	Business networking.
Mayor Marchand	7/18/2024	San Joaquin Regional Rail Commission	Commission and Special Commission meetings	Received information updates on programing and promotions.
Mayor Marchand	7/20/2024	Shiva Vishnu Hindu Community and Cultural Center	Health fair	Presented a Certificate of Appreciation for hosting a community health fair.
Mayor Marchand	7/21/2024	City of Livermore	Celebration of Life	Spoke at a Celebration of Life for Friends of the Vineyards founder and SLVSP visionary Barbara Stear.

Council Member	Date of Meeting or Event	Committee or Organization	Meeting or Event Type (ex. board meeting or ribbon cutting)
Vice Mayor Carling	7/17/2024	Pacific Fusion in Fremont	Ribbon-cutting
Vice Mayor Carling	7/19/2024	Altamont Landfill Open Space Committee (ALOSC)	Board meeting

LIVERMORE
CALIFORNIA

CITY COUNCIL STAFF REPORT **ITEM NO. 10.2**

DATE: July 22, 2024

TO: Honorable Mayor and City Council

FROM: Marianna Marysheva, City Manager

SUBJECT: Supplemental materials received at the meeting.

RECOMMENDED ACTION

SUMMARY

DISCUSSION

ATTACHMENTS

1. Additional Material Received

Prepared by: Helena Graves
Deputy City Clerk

Approved by:

Marianna Marysheva
City Manager

Fiscal Review by:

Tina Olson
Administrative Services Director

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Colin Ponce	I support Livermore Pride! Please continue to support this event and others that celebrate diversity in our community.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Sally Jones	Independence Day celebrations were supposedly cancelled due to a potential crowd of 12,000, yet this event states the crowd is expected to reach 30,000. That indicates the city needs to reevaluate it's priorities. How are you going to guarantee municipal codes will not be broken, including public decency and sexual exploitation of a minor during the planned entertainment? Overall, not an appropriate use of taxpayer dollars.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Tara Boyce	Please approve the grant for Pride! This event, along with Juneteenth, Lunar New Year and others, celebrates the wonderful patchwork of humans that makes Livermore the amazing community it is to live in. Our Pride celebration celebrates the joy within and around the LGBTQ+ community and is looked forward to by our family every year!

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Carol King	Supporting Livermore Pride through this grant is crucial in promoting diversity, and community cohesion. This event not only celebrates and supports the LGBTQ+ community but also showcases our city as a welcoming and vibrant place for all residents and visitors. Approving this grant will enable us to continue this tradition, ensuring that our city remains an example of inclusivity and pride in the future.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Madison Martin	Please approve these grants for these activities and events. Since it's inception, I have looked forward to attending the Livermore Pride festival because it is one of the few pride events accessible to me. Please continue to support such grants that enable community building events for our diverse regional residents.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Trenton Thomsen	I am writing today to urge the Livermore City Council to approve the arts grant to Livermore Pride. People come from all across the Tri-Valley for this amazing event to feel accepted, seen, and uplifted for who they are. That is what Livermore should support. I urge you to approve this grant, thank you.

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Taylor denBroeder	I fully support the use of the art grant funds for the Livermore pride event! Pride events are essential for the LGBTQ+ community and their loved ones to remind them that they are seen, valued and protected here! Hosting events such as this serve as a powerful reminder to the community, year long, that this city is truly a safe and affirming place!
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Steven Drouin	As a Livermore resident, I support inclusive programming such as Livermore Pride. I, my family, and friends love attending events that affirm and celebrate the diversity of our vibrant community. Please approve grant funds for this event. We are stronger together.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Nancy denBroeder	A very big YES to support the LGBTQ+ community in Livermore to receive the grant money for PRIDE events! Everyone deserves to be seen and heard and to feel supported and protected! I stand in support! Thank you!!
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Wade Matthews	Support pride events in Livermore by approving the grant. These kind of events are critical to the inclusiveness of the community. Rejecting the grant proposal only serves as regressive policy.

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Dawn Matthews	Pride events are so vital to our community; Pride gatherings are not just about individuals celebrating their own humanity, but about protesting for the civil rights of our neighbors, friends, and family whose sexual orientation or gender identity are under attack. I strongly encourage the Livermore City Council to support and allocate this grant money to help facilitate Pride events in Livermore. These events and community support of them allow LGBTQ+ indivuals to feel supported and protected by their community.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Rachel Brumley	I'm writing in support of the arts grant for Livermore Pride. The events they put on are important for our LGBTQ+ youth and adults to be seen, accepted, and celebrated. We are happy to be a part of a diverse city like Livermore.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Teresa Gonzalez	I strongly support the Livermore Pride event. Please, consider granting the grant for this type of events!

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	B.J. Reynolds-Koonce	Please approve this grant to support Livermore Pride. Our family looks forward to attending this uplifting event every year. In this day and age, it means a lot to the LGBTQ+ community. Thank you.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Lainie Pascall	I'm writing to urge the City Council to approve the arts commission grant to Livermore Pride. This is the ONLY Pride event in the entire Tri-Valley area, and hundreds of people come to our city to celebrate in October. Events like this make our LGBTQ+ community feel seen, supported, and uplifted. As a Livermore resident, I strongly support the City approving grant funds for this event.

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Steven Paradise	Please approve the grant to support Livermore Pride. This event and the organizations that support it are essential to the well-being of our LGBTQIA+ youth, family members, friends, and neighbors, so they know they are seen, supported, included and loved. These members of our community have a significantly higher risk of attempted suicide and self-harm when they do not feel that they belong. I know that there are queer teenagers and young adults in Livermore and nearby communities who often feel that Livermore is often not safe or accepting of them, and it is imperative that we work to change that perception and make Livermore a safe and welcoming community for all people.

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Merry Heather Welker-Tartar	This event is extremely important to our community. We pride ourselves on being an inclusive, accepting, welcoming city which embraces diversity. This event is important for the LGBT+ community in order to feel seen, safe, and celebrated. And it is also important for the rest of the community in order to understand our neighbors, to learn from them, and to show our LGBT+ citizens that they belong here. Any society will grow ill from pushing the marginalized into the shadows. A chance to shine light should not be thrown away. Let's be the city we say are. Let's be the best Livermore that we can be. I strongly support approving this grant.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Lindsey Kremmel	I strongly support Livermore Pride. This event is an important and meaningful community event for youth, adults, and families. Please approve this grant.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Katherine Kozioziemski	I strongly support a City Grant being used to support Pride. It's a wonderful time to celebrate members of our LGBTQ+ community. Thank you for your continued support of the arts and LGBTQ+ artists and community members.

Item	Name	Comment
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Jennifer Nelson	I support Livermore Pride. It is a wonderful thing for our community. Please approve the grant.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Carrie McNeil	Strong support. Our family really appreciates and enjoys Livermore Pride and glad to know city is providing this support.
5.15) Resolution authorizing the execution of Project and Program Grant Agreements with Livermore Pride, Livermore Valley Opera (LVO) and Thomasin Dewhurst Fine Art consistent with the City's Public Art Policy.	Tonya Gonzales-Clenney	I am commenting in support of the grant from Livermore Pride. Livermore Pride events are so important for our community because they show our LGBTQ+ community members and loved ones how much we support them.

Item	Name	Comment
5.18) Resolution establishing fees for a concealed carry weapons (CCW) permit and appropriating $15,000 of the fee revenue to cover the costs to implement the CCW permit program.	Alan Marling	White-hat cowboys would never carry a concealed weapon. That's something I would expect more from a black-hat villain. Even if the motive were purely self defense, nowadays we have more practical options that are less lethal. And no, carrying around guns won't help white hats protect good people from bad actors; not even armed guards or police have been able to stop school shooters. For that we need healthier environments, more counseling, and fewer automatic rifles. The weapon itself causes violence. Its presence brings to mind violent solutions to problems that could be solved peaceably. Weapons escalate. They lead to bloody accidents that cannot be reversed. Unfortunately, the corrupt SCOTUS cares more about the bottom line of gun-selling corporations than the lives of Americans. I understand those Supreme Injustices have made it difficult for Livermore to protect its citizens from senseless gun violence, but I urge the council to do all it can.

Item	Name	Comment
6.2) Hearing to consider a request for a Vesting Tentative Tract Map, Site Plan Design Review, Development Agreement, Consistency Determination, Conditional Use Permit, Master Sign Program Amendment, and Development Code amendment to develop vacant land located southwest of the Portola Avenue and Isabel Avenue intersection with for-sale residential townhome and condominium units and for-rent apartments with mixed commercial and office uses and a public park and public plazas, known as Isabel Crossing.Â	Sullivan Figurskey	Housing and community are vital necessities, now as ever. Especially when they are built for the people living there, rather than the cars they drive. I appreciate the dedication that must have been required to bring this project to light. I am concerned the changes may have affected the longevity of the neighborhood. Specifically the sequestering of VLI and LI housing and the loss of retail space possibly hindering easy access to basic services sans automobile. However, I trust that the City staff understand development limitations better than I, and this project reassures me that I am living in a city that is looking forward, rather than in the rear view. Thank you all.

July 22,2024

Public Forum
Re: Need to start selling GAMI G100UI/ Support Open Space Buffer between Dublin and Livermore.

Received at the Livermore City Council meeting of:
July 22, 2024

Dear City Council Members:

Thank you to the City Manager and the staff for working with the FBO to offer UL 94 at Livermore Airport. Offering UL 94 at Livermore Airport is a small step towards eliminating the impacts of lead aviation pollution on several residential developments, schools, and preschools close to the airport. Unfortunately, UL 94 cannot be used in all piston engine aircraft.

Clearly, the most important step is for Five Rivers Aviation FBO Pete Sandhu to start selling GAMI G100UL --- an aviation fuel that can be used and or mixed with fuel in any plane or tank. GAMI G100UL is FAA approved, insurable, and can be purchased from a distributor in Fresno by the end of 2024.
Mr. Sandhu says he will offer GAMI G100UL by the end of 2025. Why delay for a year?
We need to reduce the impacts of leaded aviation fuel to our community as soon as possible.

On another issue, the Dublin City Council voted last week to put an advisory measure on the ballot November 5th that would break the Dublin Urban Growth Boundary and significantly reduce the open space buffer between Dublin and Livermore. The City Council has stated repeatedly it will safeguard this buffer between the two cities. I urge you to continue to protect and preserve the current buffer between the two cities.

Thank you for your time and attention to these issues.

Sincerely,
Donna Cabanne
Donna Cabanne

Helena Graves

From: Austin Bruckner Carrillo <austin@castrovalleypride.com>
Sent: Monday, July 22, 2024 2:16 PM
To: John Marchand; Robert Carling; Barrientos, Ben; Evan Branning; Brittni Kiick
Cc: City Clerk; livermorepride@gmail.com; david.haubert@acgov.org
Subject: ITEM 5.15 Letter or Support
Attachments: LETTER -Livermore Pride - Allocation 7.22.24.pdf

Categories: Helena

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Mayor and Council,

Please see the attached letter of support sent on behalf of the Board of Directors of Castro Valley Pride.

In a world full of Joes, Ryans and Lindas, be a Superintendent Molly,

Austin Bruckner Carrillo
Castro Valley Pride - President
Email Address: www.castrovalleypride.com
Phone: (510) 401-7391

WWW.CASTROVALLEYPRIDE.COM INFO@CASTROVALLEYPRIDE.COM

July 22, 2024

Livermore City Council
Livermore City Hall
1052 S. Livermore Ave.
Livermore, CA 94550

Dear Mayor Marchand and Members of the Livermore City Council,

I am writing on behalf of Castro Valley Pride, Alameda County's oldest Pride organization, to express our enthusiastic support for the allocation of $10,000 to Livermore Pride (Item 5.15). This item presents a fantastic opportunity to support both the LGBTQ+ community and the local arts scene at a minimal cost to the city.

With nearly 15 years of advocacy in our region, I understand you may have received numerous emails from right-wing activists urging you to oppose this item. While they may be vocal, it is essential to remember that **your duty as elected officials is to champion and uplift the quieter voices, to advocate for the underrepresented, and to celebrate the most vulnerable members of our community.**

This past weekend, we celebrated the 14th Annual Castro Valley Pride event, which showcased local artists, including performers from Livermore, as well as businesses and organizations from across Alameda County. Events like Castro Valley, Livermore, Dublin, Fremont, and San Leandro Pride play a crucial role in building community, celebrating diversity, and promoting acceptance. Simply put, this work saves lives.

Tonight, you have the opportunity to contribute to this life-saving work by supporting Item 5.15, which authorizes a Project and Program Grant Agreement with Livermore Pride, Livermore Valley Opera, and Thomasin Dewhurst Fine Art. I respectfully request your full support for this Grant Agreement.

Sincerely,

AUSTIN BRUCKNER CARRILLO
President
Castro Valley Pride

Helena Graves

From: James Lowder [redacted]
Sent: Monday, July 22, 2024 4:06 PM
To: City Clerk
Subject: Item 5.15

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Under no circumstances should the City of Livermore be providing funds to “Pride” organizations. They, like all other special interest organizations, can raise money through private funds. DO NOT USE PUBLIC MONEY FOR THIS PURPOSE.

In case you’ve not watched what’s happened in Sunol, do not bring a mess into your town.

Sincerely,

James R. Lowder

Helena Graves

From: Ryan Jergensen [redacted]
Sent: Monday, July 22, 2024 5:38 PM
To: City Clerk
Subject: Item 5.15 Project Program and Grant VOTE NO

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Livermore City Council-

PLEASE VOTE AGAINST THIS ITEM

As your immediate neighbor and one who has seen this played it firsthand I strongly recommend that you vote against this item and refuse to get involved with divisive, private, special interest groups. They can raise funds from on their own from those interested, but should not be funded by the taxpayers as it is impossible to represent all views equally and remain neutral when special interest groups are funded.

If you are not familiar with what has happened in nearby Sunol and other communities you should think twice as this becomes extremely divisive. It is extremely difficult to represent all voices in the community when the public government starts picking and choosing special interest groups to elevate.

Please keep Livermore neutral and stay out of divisive politics and divisive agendas.

Ryan Jergensen

Helena Graves

From: Alfred Twu [redacted]
Sent: Monday, July 22, 2024 7:30 PM
To: City Clerk
Subject: In support of Item 5.15, Livermore Pride

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi City Councilmembers

I'm writing in support of funding Livermore Pride (Item 5.15). Many other cities have events and they're great showcases for local businesses and community organizations.

Thanks
Alfred

Helena Graves

From: Yao Poo Saeteurn [redacted]
Sent: Monday, July 22, 2024 11:24 PM
To: City Clerk
Subject: Public Art and Livermore Pride

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello Livermore City Council,

I am writing today to express my support for the allocation of grant to Livermore Pride and urge you to vote to do the same. Show your support for inclusion and not exclusion. Let us celebrate differences and joy and love and art. Please do not allow hate to triumph.

Best,
Yao Saeteurn

No on Drag Adult Cabaret Grant. Protect Livermore Kids from Exposure to Adult Entertainment! I oppose any funding or approval for community drag adult cabaret performances in Livermore. The City of Livermore has strict laws on adult business under Municipal Code Chapter 5.08, including 5.08.480 (B) strictly prohibiting exposure to minors under 18 years of age and (D) Performances restricted upon the stage within licensed closed-door establishments under strict zoning laws for adult sexually oriented businesses. Once these performances occur in public spaces, they violate a slew of laws, including public decency, sexual exploitation of minors, luring minors for sexual exploitation, and more. The city has a responsibility to protect the community, especially minors, from being exposed to sexually oriented adult entertainment spilling out into public spaces and events. It must not engage in funding, organizing, and advertising Drag Adult Cabaret performances. I am calling on you to vote against the "AGREEMENT BETWEEN CITY OF LIVERMORE AND LIVERMORE PRIDE FOR FISCAL YEAR 2024-25 PROJECT AND PROGRAM GRANT AGREEMENT." I am calling on you only to approve grants for this program that would meet family-appropriate standards because your obligation is to protect minors from being exposed to anything inappropriate. The arts should uplift and benefit the entire community and focus on encouraging and inspiring the next generation, not indoctrinating and sexualizing them. Your re-electability will be weighed by your 'No' vote.

Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
renita Miller	[redacted]		pleasanton	California	94566	0	0	0	petition	1
Jim Hutchinson			Livermore	California	94551	0	0	0	petition	1
Alleyson Winderl			Livermore	California	94550	0	0	0	petition	1
Leslie Alves			Castro Valle	California	94546	14	20	9	petition	1
Wendy Zendejas			Livermore	California	94550	14	16	5	petition	1
Susan Abughalya			Livermore	California	94551	14	16	5	petition	1
Christie Zulim			Castro Valley	California	94646	14	20	9	petition	1
B Covarelli			Livermore	California	94551	14	16	5	petition	1
Jeannie Lewis			Livermore	California	94550	0	0	0	petition	1
ALEX SANCHEZ			Coarsegold	California	93614	0	0	0	petition	1
Michael Duncan			Livermore	California	94550	14	16	5	petition	1
Tom Hernandez			Livermore	California	94550	0	0	0	petition	1
Tim Cyr			Hayward	California	94541	14	20	10	petition	1
Samantha Naval			Tracy	California	95376	0	0	0	petition	1
Melinda Nannini			Livermore	California	94550	0	0	0	petition	1
Janine Matthews			Livermore	California	94550	0	0	0	petition	1
JAMES CURTIS STUNKEL			Livermore	California	94550	14	16	5	petition	1
Fayez El Giheny			Oakland	California	94611	12	18	7	petition	1
Dawn Clark			Tracy	California	95304	9	13	5	petition	1
celeste anaya-peper			Livermore	California	94551	0	0	0	petition	1
Diana Brink			Modesto	California	95358	0	0	0	petition	1
Donald McCauley			Los Altos Hills	California	94024	0	0	0	petition	1
Aliona Chistol			Livermore	California	94551	0	0	0	petition	1
Lafe Ray			Livermore	California	94551	0	0	0	petition	1
Peter Sobrero			Oakley	California	94561	0	0	0	petition	1

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Slava Chistol	[redacted]		Livermore	California	94551	0	0	0	petition	1
Lynn Barnes			Livermore	California	94551	0	0	0	petition	1
Yen Pham			Fremont	California	94536	14	24	10	petition	1
Tracy Heskett			Livermore	California	94551	14	16	5	petition	1
Dan Schlitt			Livermore	California	94550	0	0	0	petition	1
Marla Hardesty			Livermore	California	94551	0	0	0	petition	1
Mackenzie Ryder			Livermore	California	94551	0	0	0	petition	1
Claudia Clark			Morgan Hill	California	95037	18	28	15	petition	1
John Bridges			Santa Rosa	California	95401	2	2	2	petition	1
Kim Rogers			Livermore	California	94550	14	16	5	petition	1
Louise Gonzales			Livermore	California	94551	14	16	5	petition	1
John Franklin			Livermore	California	94551	14	16	5	petition	1
John Collins			Livermore	California	94550	14	16	5	petition	1
Brad Medine			Chino	California	91708	35	53	22	petition	1
Feather Ray			Livermore	California	94551	14	16	5	petition	1
Petra Holm			Livermore	California	84551	14	16	5	petition	1
Alan Grace			Livermore	California	94551	14	16	5	petition	1
Gerri Baker			Clayton	California	94517	10	15	9	petition	1
robert b mack			hillsborough	California	94010	15	21	13	petition	1
Chris Clark			Livermore	California	94551	14	16	5	petition	1
CJ Hayes			Stockton	California	95219	9	13	5	petition	1
Greg Pane			Livermore	California	94551	14	16	5	petition	1
Monica Dockman			Clayton	California	94517	10	15	9	petition	1
Tanya Lopez			Antioch	California	94509	8	15	9	petition	1
Thomas Jaegel			Livermore	California	94550	14	16	5	petition	1

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Robert Nafzinger	[redacted]	[redacted]	Livermore	California	94550	14	16	5	petition	1
Sharon Kowalski			West Sacramen	California	95605	7	4	3	petition	1
Stephen Murphy			Danville	California	94526	10	16	9	petition	1
Emiliano Hernandez			Soquel	California	95083	19	30	17	petition	1
Evelina Villa			Walnut Creek	California	94598	10	16	9	petition	1
Christine Andreotti			Livermore	California	94550	14	16	5	petition	1
Sheryl Morgan			Modesto	California	95355	5	22	4	petition	1
James Raymer			Modesto	California	95356	5	22	4	petition	1
Elizabeth Meisenbach			Livermore	California	94551	14	16	5	petition	1
Fabian Moreno			Livermore	California	94550	14	16	5	petition	1
Scott Mackey			San Jose	California	95130	16	23	15	petition	1
Robert Nunes			Tracy	California	95391	9	13	5	petition	1
Carl Estes			Boulder Creek	California	95006	19	28	17	petition	1
Demitris kaplanis			Livermore	California	94550	14	16	5	petition	1
Lisa Pedro			Livermore	California	94550	14	16	5	petition	1
DeDe Arenas			Livermore	California	94551	14	16	5	petition	1
John Frick			Livermore	California	94551	14	16	5	petition	1
Brittany Hillis			Livermore	California	94551	14	16	5	petition	1
Nancy Stoyer			Livermore	California	94550	14	16	5	petition	1
Christine Wagner			Shingle Sorings	California	95682	5	5	4	petition	1
Teresa Hartford			Pleasanton	California	94588	14	16	5	petition	1
Danielle Lane			Livermore	California	94550	14	16	5	petition	1
Stephanie Featherstone			Livermore	California	94551	14	16	5	petition	1
Cory Hudson			Livermore	California	94551	14	16	5	petition	1
James Hooper			Livermore	California	94551	14	16	5	petition	1

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Jill Weeber	[redacted]		Livermore	California	94550	14	16	5	petition	1
Annette Khaliq			Livermore	California	94551	14	16	5	petition	1
Beth Albert			Manteca	California	95337	9	9	5	petition	1
Kristina Caldeira			LIVERMORE	California	94551	14	16	5	petition	1
Charles Henze			Pleasanton	California	94588	14	20	5	petition	1
Cynthia Chisholm			Livermore	California	94551	14	16	5	petition	1
Bruce Hoppe			Livermore	California	94550	14	16	5	petition	1
Kelly Haug			Livermore	California	94550	14	16	5	petition	1
Domonique Minnis			Livermore	California	94550	14	16	5	petition	1
Chloe Gomez			Livermore	California	94550	14	16	5	petition	1
Teresa Perry			Livermore	California	94550	14	16	5	petition	1
Kim Ancira			Livermore	California	94550	14	16	5	petition	1
Kathryn Abdalian			Pleasanton	California	94566	14	16	5	petition	1
Nicole Pickett			Livermore	California	94550	14	16	5	petition	1
Natalie Swanson			Livermore	California	94550	14	16	5	petition	1
Annie Terwilliger			Livermore	California	94550	14	16	5	petition	1
Gina Tavares			Livermore	California	94550	14	16	5	petition	1
Sarah Baker			Livermore	California	94551	14	16	5	petition	1
Katie Balch			Livermore	California	94550	14	16	5	petition	1
Audrey Ibarra			Livermore	California	94551	14	16	5	petition	1
Cynthia Silz			Livermore	California	94551	14	16	5	petition	1
Jessica Choate			Livermore	California	94550	14	16	5	petition	1
Bonnie Bergh			Livermore	California	93551	14	16	5	petition	1
Brett Adams			Livermore	California	94550	14	16	5	petition	1
Tony Capra			Livermore	California	94550	14	16	5	petition	1

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Sandra Hosier	[redacted]		Livermore	California	94550	14	16	5	petition	1
Angela Butherus			Livermore	California	94551	14	16	5	petition	1
Melanie Hendrickson			Livermore	California	94551	14	16	5	petition	1
Natalie Robinson			Livermore	California	94550	14	16	5	petition	1
Michelle White			Livermore	California	94550	14	16	5	petition	1
Robin Struss			Livermore	California	94550	14	16	5	petition	1
Corie Menniti			Livermore	California	94550	14	16	5	petition	1
Shelby Mossi			Livermore	California	94550	14	16	5	petition	1
Lorenzo Menniti			Livermore	California	94550	14	16	5	petition	1
Anna marie Duran			Livermore	California	94551	14	16	5	petition	1
Karen Muser			Livermore	California	94550	14	16	5	petition	1
Lisa Molina			Livermore	California	94550	14	16	5	petition	1
Brandon Howard			Livermore	California	94550	14	16	5	petition	1
David Romero			Livvermore	California	94551	14	16	5	petition	1
Andrew Hamel			Livermore	California	94551	14	16	5	petition	1
Amanda Howard			Livermore	California	94550	14	16	5	petition	1
Nikol Howard			Livermore	California	94550	14	16	5	petition	1
Natalie Bianco			Livermore	California	94550	14	16	5	petition	1
Sinder Rios			Livermore	California	94550	14	16	5	petition	1
Diana Howard			Livermore	California	94550	14	16	5	petition	1
Anthony Arsondi			Livermore	California	94550	14	16	5	petition	1
Martha Morales			Livermore	California	94550	14	16	5	petition	1
Quincey Tappa			Livermore	California	94551	14	16	5	petition	1
Richard Howard			Livermore	California	94550	14	16	5	petition	1
Amber Sanchez Frick			Livermore	California	94551	14	16	5	petition	1

No on Drag Adult Cabaret Grant. Protect Livermore Kids from Exposure to Adult Entertainment! I oppose any funding or approval for community drag adult cabaret performances in Livermore. The City of Livermore has strict laws on adult business under Municipal Code Chapter 5.08, including 5.08.480 (B) strictly prohibiting exposure to minors under 18 years of age and (D) Performances restricted upon the stage within licensed closed-door establishments under strict zoning laws for adult sexually oriented businesses. Once these performances occur in public spaces, they violate a slew of laws, including public decency, sexual exploitation of minors, luring minors for sexual exploitation, and more. The city has a responsibility to protect the community, especially minors, from being exposed to sexually oriented adult entertainment spilling out into public spaces and events. It must not engage in funding, organizing, and advertising Drag Adult Cabaret performances. I am calling on you to vote against the "AGREEMENT BETWEEN CITY OF LIVERMORE AND LIVERMORE PRIDE FOR FISCAL YEAR 2024-25 PROJECT AND PROGRAM GRANT AGREEMENT." I am calling on you only to approve grants for this program that would meet family-appropriate standards because your obligation is to protect minors from being exposed to anything inappropriate. The arts should uplift and benefit the entire community and focus on encouraging and inspiring the next generation, not indoctrinating and sexualizing them. Your re-electability will be weighed by your 'No' vote.

Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Dillon Wright	[redacted]		Livermore	California	94551	14	16	5	petition	1
Alyssa Schlitt			Livermore	California	94550	14	16	5	petition	1
Mark Marlett			Livermore	California	94550	14	16	5	petition	1
Tammy Earls			Livermore	California	94550	14	16	5	petition	1
Amanda Hamel			Livermore	California	94551	14	16	5	petition	1
Ellie Roddewig			LIVERMORE	California	94550	14	16	5	petition	1
Alex Izarraraz			Livermore	California	94551	14	16	5	petition	1
ALICIA THORPE			Livermore	California	94550	14	16	5	petition	1
Ryan Lawson			livermore	California	94551	14	16	5	petition	1
Kendall Lawson			Livermore	California	94551	14	16	5	petition	1
Chandra Sheehan			Livermore	California	94550	14	16	5	petition	1
Nicole Pilkington			Livermore	California	94551	14	16	5	petition	1
Michael McKee			Livermore	California	94550	14	16	5	petition	1
Zachary Roth			Livermore	California	94551	14	16	5	petition	1
Cheryl Lowry			Livermore	California	94551	14	16	5	petition	1
Cathryn Villasenor			Livermore	California	94550	14	16	5	petition	1
Teresa Estrada Carter			Livermore	California	94550	14	16	5	petition	1
Max Braun			LIVERMORE	California	94550	14	16	5	petition	1
Deborah Gibson			Livermore	California	94551	14	16	5	petition	1
Jeff Siragusa			Pleasanton	California	94588	14	16	5	petition	2
Christine Hackett			Livermore	California	94550	14	16	5	petition	1
Christopher Featherstone			Livermore	California	94551	0	0	0	email	1
Christopher Featherstone			Livermore	California	94551	0	0	0	email	1
renita Miller			pleasanton	California	94566	0	0	0	email	1
renita Miller			pleasanton	California	94566	0	0	0	email	1

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Alleyson Winderl	[redacted]		Livermore	California	94550	0	0	0	email	5
Leslie Alves			Castro Valle	California	94546	14	20	9	email	5
Rebecca Ferris			Livermore	California	94551	14	16	5	email	5
Rebecca Ferris			Livermore	California	94551	14	16	5	email	5
Wendy Zendejas			Livermore	California	94550	14	16	5	email	5
Scott Otvos			Granite Bay	California	95746	3	5	6	email	5
Susan Abughalya			Livermore	California	94551	14	16	5	email	5
Christie Zulim			Castro Valley	California	94646	14	20	9	email	5
B Covarelli			Livermore	California	94551	14	16	5	email	5
B Covarelli			Livermore	California	94551	14	16	5	email	5
B Covarelli			Livermore	California	94551	14	16	5	email	5
B Covarelli			Livermore	California	94551	14	16	5	email	5
ALEX SANCHEZ			Coarsegold	California	93614	0	0	0	email	5
Jeannie Lewis			Livermore	California	94550	0	0	0	email	5
Michael Duncan			Livermore	California	94550	14	16	5	email	5
Michael Duncan			Livermore	California	94550	14	16	5	email	5
Tom Hernandez			Livermore	California	94550	0	0	0	email	5
Tim Cyr			Hayward	California	94541	14	20	10	email	5
Samantha Naval			Tracy	California	95376	0	0	0	email	5
Samantha Naval			Tracy	California	95376	0	0	0	email	5
Melinda Nannini			Livermore	California	94550	0	0	0	email	5
Janine Matthews			Livermore	California	94550	0	0	0	email	5
JAMES CURTIS STUNKEL			Livermore	California	94550	14	16	5	email	5
JAMES CURTIS STUNKEL			Livermore	California	94550	14	16	5	email	5
Fayez El Giheny			Oakland	California	94611	12	18	7	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Fayez El Giheny	[redacted]		Oakland	California	94611	12	18	7	email	5
Dawn Clark			Tracy	California	95304	9	13	5	email	5
celeste anaya-peper			Livermore	California	94551	0	0	0	email	5
celeste anaya-peper			Livermore	California	94551	0	0	0	email	5
Diana Brink			Modesto	California	95358	0	0	0	email	5
Diana Brink			Modesto	California	95358	0	0	0	email	5
Donald McCauley			Los Altos Hills	California	94024	0	0	0	email	5
Aliona Chistol			Livermore	California	94551	0	0	0	email	5
Lafe Ray			Livermore	California	94551	0	0	0	email	5
Slava Chistol			Livermore	California	94551	0	0	0	email	5
Lynn Barnes			Livermore	California	94551	0	0	0	email	5
Yen Pham			Fremont	California	94536	14	24	10	email	5
Yen Pham			Fremont	California	94536	14	24	10	email	5
Dan Schlitt			Livermore	California	94550	0	0	0	email	5
Marla Hardesty			Livermore	California	94551	0	0	0	email	5
Marla Hardesty			Livermore	California	94551	0	0	0	email	5
Mackenzie Ryder			Livermore	California	94551	14	16	5	email	5
Mackenzie Ryder			Livermore	California	94551	14	16	5	email	5
Claudia Clark			Morgan Hill	California	95037	18	28	15	email	5
John Bridges			Santa Rosa	California	95401	2	2	2	email	5
Kim Rogers			Livermore	California	94550	14	16	5	email	5
Louise Gonzales			Livermore	California	94551	14	16	5	email	5
Louise Gonzales			Livermore	California	94551	14	16	5	email	5
John Franklin			Livermore	California	94551	14	16	5	email	5
John Franklin			Livermore	California	94551	14	16	5	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
John Collins	[redacted]		Livermore	California	94550	14	16	5	email	5
Brad Medine			Chino	California	91708	35	53	22	email	5
Brad Medine			Chino	California	91708	35	53	22	email	5
Feather Ray			Livermore	California	94551	14	16	5	email	5
Petra Holm			Livermore	California	84551	14	16	5	email	5
Alan Grace			Livermore	California	94551	14	16	5	email	5
Gerri Baker			Clayton	California	94517	10	15	9	email	5
robert b mack			hillsborough	California	94010	15	21	13	email	5
Chris Clark			Livermore	California	94551	14	16	5	email	5
CJ Hayes			Stockton	California	95219	9	13	5	email	5
CJ Hayes			Stockton	California	95219	9	13	5	email	5
Greg Pane			Livermore	California	94551	14	16	5	email	5
Greg Pane			Livermore	California	94551	14	16	5	email	5
Monica Dockman			Clayton	California	94517	10	15	9	email	5
Monica Dockman			Clayton	California	94517	10	15	9	email	5
Tanya Lopez			Antioch	California	94509	8	15	9	email	5
Thomas Jaegel			Livermore	California	94550	14	16	5	email	5
Robert Nafzinger			Livermore	California	94550	14	16	5	email	5
Robert Nafzinger			Livermore	California	94550	14	16	5	email	5
Sharon Kowalski			West Sacramen	California	95605	7	4	3	email	5
Sharon Kowalski			West Sacramen	California	95605	7	4	3	email	5
Stephen Murphy			Danville	California	94526	10	16	9	email	5
Emiliano Hernandez			Soquel	California	95083	19	30	17	email	5
Evelina Villa			Walnut Creek	California	94598	10	16	9	email	5
Evelina Villa			Walnut Creek	California	94598	10	16	9	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Christine Andreotti	[redacted]		Livermore	California	94550	14	16	5	email	5
Sheryl Morgan			Modesto	California	95355	5	22	4	email	5
James Raymer			Modesto	California	95356	5	22	4	email	5
Elizabeth Meisenbach			Livermore	California	94551	14	16	5	email	5
Kim Ancira			Livermore	California	94550	14	16	5	email	5
Fabian Moreno			Livermore	California	94550	14	16	5	email	5
Scott Mackey			San Jose	California	95130	16	23	15	email	5
Carl Estes			Boulder Creek	California	95006	19	28	17	email	5
Demitris kaplanis			Livermore	California	94550	14	16	5	email	5
Lisa Pedro			Livermore	California	94550	14	16	5	email	5
DeDe Arenas			Livermore	California	94551	14	16	5	email	5
John Frick			Livermore	California	94551	14	16	5	email	5
Brittany Hillis			Livermore	California	94551	14	16	5	email	5
Nancy Stoyer			Livermore	California	94550	14	16	5	email	5
Tracie Whiteley			Livermore	California	94551	14	16	5	email	5
Christine Wagner			Shingle Sorings	California	95682	5	5	4	email	5
Teresa Hartford			Pleasanton	California	94588	14	16	5	email	5
Danielle Lane			Livermore	California	94550	14	16	5	email	5
Stephanie Featherstone			Livermore	California	94551	14	16	5	email	5
Stephanie Featherstone			Livermore	California	94551	14	16	5	email	5
Cory Hudson			Livermore	California	94551	14	16	5	email	5
James Hooper			Livermore	California	94551	14	16	5	email	5
James Hooper			Livermore	California	94551	14	16	5	email	5
Jill Weeber			Livermore	California	94550	14	16	5	email	5
Annette Khaliq			Livermore	California	94551	14	16	5	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Annette Khaliq	[redacted]	[redacted]	Livermore	California	94551	14	16	5	email	5
Beth Albert			Manteca	California	95337	9	9	5	email	5
Beth Albert			Manteca	California	95337	9	9	5	email	5
Kristina Caldeira			LIVERMORE	California	94551	14	16	5	email	5
Charles Henze			Pleasanton	California	94588	14	20	5	email	5
Charles Henze			Pleasanton	California	94588	14	20	5	email	5
Cynthia Chisholm			Livermore	California	94551	14	16	5	email	5
Cynthia Chisholm			Livermore	California	94551	14	16	5	email	5
Bruce Hoppe			Livermore	California	94550	14	16	5	email	5
Kelly Haug			Livermore	California	94550	14	16	5	email	5
Domonique Minnis			Livermore	California	94550	14	16	5	email	5
Chloe Gomez			Livermore	California	94550	14	16	5	email	5
Chloe Gomez			Livermore	California	94550	14	16	5	email	5
Teresa Perry			Livermore	California	94550	14	16	5	email	5
Kim Ancira			Livermore	California	94550	14	16	5	email	5
Kathryn Abdalian			Pleasanton	California	94566	14	16	5	email	5
Jeff Siragusa			Pleasanton	California	94588	14	16	5	email	5
Natalie Swanson			Livermore	California	94550	14	16	5	email	5
Annie Terwilliger			Livermore	California	94550	14	16	5	email	5
Gina Tavares			Livermore	California	94550	14	16	5	email	5
Gina Tavares			Livermore	California	94550	14	16	5	email	5
Sarah Baker			Livermore	California	94551	14	16	5	email	5
Katie Balch			Livermore	California	94550	14	16	5	email	5
Audrey Ibarra			Livermore	California	94551	14	16	5	email	5
Audrey Ibarra			Livermore	California	94551	14	16	5	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Cynthia Silz	[redacted]		Livermore	California	94551	14	16	5	email	5
Jessica Choate			Livermore	California	94550	14	16	5	email	5
Jessica Choate			Livermore	California	94550	14	16	5	email	5
Paula Glauber			Livermrore	California	94550	14	16	5	email	5
Paula Glauber			Livermrore	California	94550	14	16	5	email	5
Bonnie Bergh			Livermore	California	93551	14	16	5	email	5
Brett Adams			Livermore	California	94550	14	16	5	email	5
Brett Adams			Livermore	California	94550	14	16	5	email	5
Brett Adams			Livermore	California	94550	14	16	5	email	5
Brett Adams			Livermore	California	94550	14	16	5	email	5
Tony Capra			Livermore	California	94550	14	16	5	email	5
Angela Butherus			Livermore	California	94551	14	16	5	email	5
Sandra Hosier			Livermore	California	94550	14	16	5	email	5
Natalie Robinson			Livermore	California	94550	14	16	5	email	5
Michelle White			Livermore	California	94550	14	16	5	email	5
Michelle White			Livermore	California	94550	14	16	5	email	5
Robin Struss			Livermore	California	94550	14	16	5	email	5
Robin Struss			Livermore	California	94550	14	16	5	email	5
Corie Menniti			Livermore	California	94550	14	16	5	email	5
Corie Menniti			Livermore	California	94550	14	16	5	email	5
Shelby Mossi			Livermore	California	94550	14	16	5	email	5
Lorenzo Menniti			Livermore	California	94550	14	16	5	email	5
Lorenzo Menniti			Livermore	California	94550	14	16	5	email	5
Anna marie Duran			Livermore	California	94551	14	16	5	email	5
Karen Muser			Livermore	California	94550	14	16	5	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Lisa Molina	[redacted]		Livermore	California	94550	14	16	5	email	5
Brandon Howard			Livermore	California	94550	14	16	5	email	5
David Romero			Livvermore	California	94551	14	16	5	email	5
Andrew Hamel			Livermore	California	94551	14	16	5	email	5
Andrew Hamel			Livermore	California	94551	14	16	5	email	5
Nikol Howard			Livermore	California	94550	14	16	5	email	5
Natalie Bianco			Livermore	California	94550	14	16	5	email	5
Nick Mavrakis			Livermore	California	94550	14	16	5	email	5
Sinder Rios			Livermore	California	94550	14	16	5	email	5
Diana Howard			Livermore	California	94550	14	16	5	email	5
Anthony Arsondi			Livermore	California	94550	14	16	5	email	5
Martha Morales			Livermore	California	94550	14	16	5	email	5
Quincey Tappa			Livermore	California	94551	14	16	5	email	5
Quincey Tappa			Livermore	California	94551	14	16	5	email	5
Richard Howard			Livermore	California	94550	14	16	5	email	5
Amber Sanchez Frick			Livermore	California	94551	14	16	5	email	5
Dillon Wright			Livermore	California	94551	14	16	5	email	5
Alyssa Schlitt			Livermore	California	94550	14	16	5	email	5
Mark Marlett			Livermore	California	94550	14	16	5	email	5
Tammy Earls			Livermore	California	94550	14	16	5	email	5
Mark Marlett			Livermore	California	94550	14	16	5	email	5
Phyllis Sottile			Livermore	California	94550	14	16	5	email	5
Amanda Hamel			Livermore	California	94551	14	16	5	email	5
Ellie Roddewig			LIVERMORE	California	94550	14	16	5	email	5
Alex Izarraraz			Livermore	California	94551	14	16	5	email	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
ALICIA THORPE	[redacted]	[redacted]	Livermore	California	94550	14	16	5	email	5
Ryan Lawson			livermore	California	94551	14	16	5	email	5
Ryan Lawson			livermore	California	94551	14	16	5	email	5
Kendall Lawson			Livermore	California	94551	14	16	5	email	5
Chandra Sheehan			Livermore	California	94550	14	16	5	email	5
Nicole Pilkington			Livermore	California	94551	14	16	5	email	5
Michael McKee			Livermore	California	94550	14	16	5	email	5
Michael McKee			Livermore	California	94550	14	16	5	email	5
Michael McKee			Livermore	California	94550	14	16	5	email	5
Michael McKee			Livermore	California	94550	14	16	5	email	5
Zachary Roth			Livermore	California	94551	14	16	5	email	5
Cathryn Villasenor			Livermore	California	94550	14	16	5	email	5
Cathryn Villasenor			Livermore	California	94550	14	16	5	email	5
Cheryl Lowry			Livermore	California	94551	14	16	5	email	5
Cathryn Villasenor			Livermore	California	94550	14	16	5	email	5
Cathryn Villasenor			Livermore	California	94550	14	16	5	email	5
Teresa Estrada Carter			Livermore	California	94550	14	16	5	email	5
Max Braun			LIVERMORE	California	94550	14	16	5	email	5
Max Braun			LIVERMORE	California	94550	14	16	5	email	5
Deborah Gibson			Livermore	California	94551	14	16	5	email	5
Deborah Gibson			Livermore	California	94551	14	16	5	email	5
Jeff Siragusa			Pleasanton	California	94588	14	16	5	email	5
Christine Hackett			Livermore	California	94550	14	16	5	email	5
Christine Hackett			Livermore	California	94550	14	16	5	email	5
Susan Abughalya			Livermore	California	94551	14	16	5	faceboo	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Jeannie Lewis	[redacted]		Livermore	California	94550	0	0	0	faceboc	5
Tracy Heskett			Livermore	California	94551	14	16	5	faceboc	5
John Franklin			Livermore	California	94551	14	16	5	faceboc	5
Alan Grace			Livermore	California	94551	14	16	5	faceboc	5
Sharon Kowalski			West Sacramen	California	95605	7	4	3	faceboc	5
James Raymer			Modesto	California	95356	5	22	4	faceboc	5
Fabian Moreno			Livermore	California	94550	14	16	5	faceboc	5
James Hooper			Livermore	California	94551	14	16	5	faceboc	5
Gina Tavares			Livermore	California	94550	14	16	5	faceboc	5
Alex Izarraraz			Livermore	California	94551	14	16	5	faceboc	5
Kendall Lawson			Livermore	California	94551	14	16	5	faceboc	5
Zachary Roth			Livermore	California	94551	14	16	5	faceboc	5
Wendy Zendejas			Livermore	California	94550	14	16	5	twitter	5
Deborah Gibson			Livermore	California	94551	0	0	0	twitter	5
Tracy Heskett			Livermore	California	94551	14	16	5	twitter	5
John Bridges			Santa Rosa	California	95401	2	2	2	twitter	5
Louise Gonzales			Livermore	California	94551	14	16	5	twitter	10
Fabian Moreno			Livermore	California	94550	14	16	5	twitter	5
Robert Nunes			Tracy	California	95391	9	13	5	twitter	5
Christine Wagner			Shingle Sorings	California	95682	5	5	4	twitter	10
Stephanie Featherstone			Livermore	California	94551	14	16	5	twitter	5
James Hooper			Livermore	California	94551	14	16	5	twitter	5
Gina Tavares			Livermore	California	94550	14	16	5	twitter	5
Melanie Hendrickson			Livermore	California	94551	14	16	5	twitter	5
Michael McKee			Livermore	California	94550	14	16	5	twitter	5

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Name	Phone	Address1	City	State	Zip	CD	State L	State	Action	Count
Zachary Roth	[redacted]		Livermore	California	94551	14	16	5	twitter	5
Christine Hackett			Livermore	California	94550	14	16	5	twitter	5
ALICIA THORPE			Livermore	California	94550	14	16	5	voiceca	2
Deborah Gibson			Livermore	California	94551	0	0	0	voiceca	3
Tracy Heskett			Livermore	California	94551	14	16	5	voiceca	1
Stephanie Featherstone			Livermore	California	94551	14	16	5	voiceca	1
Ryan Lawson			livermore	California	94551	14	16	5	voiceca	1

July 22,2024

Re: Item 6.2 Isabel Crossing---Environmental Impact Report Addendum Inadequate

Received at the Livermore City Council meeting of:
July 22, 2024

Dear City Council Members:

The Environmental Impact Report Addendum prepared by Rincon Consultants concludes that an Environmental Impact Report Addendum is sufficient for this project. However, this conclusion is contradicted by some of the findings in their report. Further, some of the mitigations proposed would be inadequate to address the environmental impacts of the revised project.

First, air quality impacts are significant and unavoidable. The report does not provide enough information to demonstrate its assumption that toxic air contamination (TAC) exposure can be adequately mitigated with the payment of mitigation fees to BAAQMD. Moreover, data on ROG, nitrogen oxide, CO, and particulate matter that can be inhaled into the lungs-- has not been adequately analyzed. The consultants contend that "reduced office space in the proposed Isabel Crossing will lead to a corresponding decrease in emissions sources
such as vehicle trips" but the consultants do not analyze how residential unit occupants may, in fact, increase the number of vehicle trips as compared to occupants of commercial buildings.

The proposed project should not be approved on unproven assumptions lacking sufficient data. CEQA requires adequate data for the public and decision-making bodies to make informed decisions BEFORE project vesting and developer's agreements.

Second, the Environmental Impact Report Addendum does not provide enough data to determine if state and federally protected wildlife, special species, and habitat corridors will be sufficiently protected.

Has the California Department of Fish and Wildlife and the US Fish and Wildlife Service been contacted to comment on the proposed project of over a thousand housing units and ~~90~~ 70,000 sq.ft of commercial space? If not, why not?

Additionally, the Greenhouse Gas Emissions section does not discuss the impacts from adjacent landfills, a Liquid Natural Gas plant, a waste water facility, and Livermore Airport that all contribute to GHG emissions that are now regulated by new and more stringent standards. Similarly, the impacts of wildfire threats during construction must be further analyzed due to climate change patterns that have created wind velocities in excess of 50 to 60 miles per hour and weeks of excessive heat in the summer.

Noise impacts from the airport do not address the recent addition of flights of small luxury jets that are quieter but not quiet. These residential units will be on the flight plans for arrival at LVK. Noise may not be heard at ground level but the 3 story unit occupants will hear the planes. Were noise studies conducted **on site** for indoor and outdoor noise decibels for arriving aircraft, especially small luxury jets ?

Equally important, the consultants did not address the leaded air pollution from LVK, an airport that still sells leaded aviation fuel. Why was that information not included in health related air and emissions impacts?

Finally, the cumulative impacts from other known approved projects citywide and projects that are in the planning stages have not been analyzed or even mentioned. The cumulative impacts from air

pollution, GHG emissions, transportation, traffic must be further analyzed before approving vesting, developer's waivers, developer's agreements and the CEQA documentation.

This is a huge project. I urge the City Council to postpone making a decision tonight and receive outside council on the adequacy of the Environmental Impact Report Addendum.

Sincerely,

Donna Cabanne
member of the Center for Biological Diversity, the Sierra Club, Lead Free Livermore, Unlead LVK.
45 year resident of Livermore