TOWN OF MORAGA
PLANNING COMMISSION

REGULAR MEETING
TUESDAY, JULY 7, 2026
6:30 PM

TOWN COUNCIL CHAMBER
335 RHEEM BOULEVARD
MORAGA, CA

1. CALL TO ORDER

ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. PUBLIC COMMUNICATION

Time reserved for those in the audience who wish to address the Planning Commission on items which are not on the agenda. The Commission cannot discuss details or vote on items not on the agenda. Note: Public input pertaining to a specific item on the agenda may be made during consideration of that item.

4. ADOPTION OF CONSENT AGENDA

4.A Approval of Planning Commission Meeting Minutes for Tuesday, June 2, 2026
PC Minutes 06.02.26 Draft.pdf

5. ADOPTION OF MEETING AGENDA

6. PUBLIC HEARINGS

6.A Adopt PC Resolution 05-2026, approving Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision (Sub-01-26), and Density Bonus for the development of 49 townhomes, including five moderate-income inclusionary units and associated site improvements, located at 1600, 1620, 1640, and 1660 School Street.
Staff Report
Attachment A Location Maps.pdf
Attachment B Draft Resolution and Mitigation Monitoring and Reporting Plan.pdf
Attachment C Objective Design Standards.pdf
Attachment D Waivers and Concessions.pdf
Attachment E Affordable Housing Plan.pdf
Attachment F Arborist Reports.pdf
Attachment G Geotechnical Reports.pdf
Attachment H Traffic Memo and Studies.pdf
Attachment I - CEQA 15183 Consistency Analysis.pdf
Attachment J Agency Comments.pdf
Attachment K - Public Comment.pdf
Attachment L Project Plans.pdf

Presentation - School Street Townhomes.pdf
Addendum - Item 6 - Public Comment Received.pdf

7. ROUTINE AND OTHER MATTERS

8. REPORTS

9. ADJOURNMENT

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To watch the Planning Commission meeting remotely, please navigate to the Town of Moraga's YouTube channel: https://www.youtube.com/@TownofMoraga335

TOWN OF MORAGA
PLANNING COMMISSION
REGULAR MEETING MINUTES
DRAFT
TUESDAY, JUNE 2, 2026

6:30 P.M.

Town Council Chambers
335 Rheem Boulevard, Moraga, California 94556

1. **CALL TO ORDER AND ROLL CALL:**

   A. Chair Mapel, Vice Chair Bode, Helber, Moore, Polsky, Rane, Weber
   Present: Chair Mapel, Helber, Moore, Polsky, Rane, Weber
   Absent: Vice Chair Bode
   B. Conflict of Interest (if any)
   C. Contact with Applicants

ACTION:
The meeting was called to order by Chair Mapel at 6:30 P.M.

2. **PLEDGE OF ALLEGIANCE**

3. **PUBLIC COMMENTS –** *Time reserved for those in the audience who wish to address the Planning Commission on items which are not on the agenda. The audience should be aware that the Commission cannot discuss details or vote on non-agenda items. Your concerns may be referred to staff or placed on a future agenda.*

4. **ADOPTION OF CONSENT AGENDA**

   A. Approval of Minutes for May 19, 2026, meeting

ACTION:
The consent agenda was adopted and the minutes were approved.
Motion: **Commissioner Polsky** / Second: **Commissioner Moore**
Vote: (6,0)
Absent: Commissioner Bode

5. **ADOPTION OF MEETING AGENDA**

ACTION:
The meeting agenda was adopted.
Motion: **Commissioner Weber** / Second: **Commissioner Rane**
Vote: (6,0)

6. **PUBLIC HEARINGS**

   A. Amendments to Chapter 8.124, Accessory Dwelling Units, of Title 8 (Planning and Zoning) of the Moraga Municipal Code (CEQA: Consistent with Public Resources Code Section 21080.17 and CEQA Guidelines Section 15282(h))

   Supplemental Staff Report

   Staff PowerPoint Presentation

ACTION:
Approved the resolution to recommend that the Town Council adopt an ordinance amending Moraga Municipal Code Chapter 8.124, Accessory Dwelling Units, to update local ADU and JADU regulations for consistency with current State ADU Law, the Moraga 2040 General Plan, and the 2023-2031 Housing Element.
Motion: **Commissioner Weber** / Second: **Commissioner Polsky**
Vote: (4,2) Chair Mapel and Commissioner Rane voted against the motion

7. ROUTINE AND OTHER MATTERS

8. REPORTS

A. Planning Commission

1. Chair Mapel: Reminded everyone that they have 23 minutes to vote in the state election.
2. Commissioner Polsky: Recommended that the Town Square incorporate ideas from the San Luis Obispo Public Market, a public gathering place that includes vendors and food trucks. He requested developers study this idea.
3. Commissioner Polsky: Recommended the Town create a slogan like, “Buy Local Moraga.”
4. Chair Mapel: Visited the Rheem school third graders with a zoning map of Moraga. The kids had a lot of questions and ideas.
5. Commissioner Rane: Appreciation of the Pride Flag ceremony at the Town Hall as a recognition of the LGBTQ community.

B. Staff

9. ADJOURNMENT

ACTION:
The meeting was adjourned at 7:43 P.M.
Motion: **Moore** / Second: **Polsky**
Vote: (6,0)

Respectfully submitted by:

_____
Sonia Urzua, AICP, Planning Director

Approved by the Planning Commission:

_____
Alexis Mapel, Chairperson

DRAFT

Meeting Date: July 7, 2026

TOWN OF MORAGA **STAFF REPORT**

To: **Planning Commission**

From: **Brian Horn, Principal Planner**

Subject: **School Street Townhomes – Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision (Sub-01-26), and Density Bonus for the Development of 49 Townhomes Including Five Moderate Income Inclusionary Units and Associated Site Improvements Located at 1600, 1620, 1640, and 1660 School Street (APN 257-190-049, 050, 051, and 052)**

RECOMMENDATION

Adopt PC Resolution 05-2026, approving Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision (Sub-01-26), and Density Bonus for the development of 49 townhomes, including five moderate-income inclusionary units and associated site improvements, located at 1600, 1620, 1640, and 1660 School Street.

BACKGROUND

Site Description

The project site comprises four separate parcels at 1600, 1620, 1640, and 1660 School Street (APN 257-190-049, 050, 051, and 052), with a combined area of approximately 2.95 acres. Each parcel is currently developed with a single-story office building of approximately 6,396 square feet, and all share a common parking lot and landscaping. The project site is bounded to the east by School Street, to the north by Country Club Drive, to the west by residences within the Moraga Country Club, and to the south by The Saklan School. The western portions of the 1620 and 1660 School Street properties include Laguna Creek and the Lafayette-Moraga Regional Trail. No work is proposed on these portions of the site.

Planning History and Prior Entitlements

The subject site has been designated for mixed-use residential development through a series of General Plan and zoning actions over the past two decades. The site received a Mixed Office/Residential (12–20 du/ac) land use designation with the adoption of the Moraga Center Specific Plan (MCSP) in January 2010. As part of the 2020 MCSP implementing zoning

project, the site was rezoned from Suburban Office to MCSP Mixed Office/Residential (MCSP MU-OR), aligning the zoning with the General Plan designation. The density was subsequently increased to 12–24 dwelling units per acre through 2023 rezonings implementing the 6th Cycle Housing Element. The site is designated as Housing Opportunity Site F-3 in the Town's 2023–2031 6th Cycle Housing Element.

In late 2024, the Town approved DRB 07-22, GR-04-22, and Density Bonus for a 66-unit multifamily residential project on a portion of this same site. That project and the current application are mutually exclusive; only one can be built. Therefore, if this project is approved and constructed, the prior project approvals will no longer be in force and effect.

State Law Framework

California housing law governs the Town's review of this application. The State requires local jurisdictions to update their Housing Elements every eight years and demonstrate how they will accommodate their assigned Regional Housing Needs Allocation (RHNA) across all income levels. The Town of Moraga's most recent Housing Element was adopted by the Town Council on January 25, 2023, and certified by the State Department of Housing and Community Development (HCD) on September 14, 2023. This site is a low- and moderate-income housing site in the certified Housing Element. Jurisdictions with non-compliant Housing Elements face adverse consequences, including ineligibility for state and regional grants, vulnerability to lawsuits and fines, and potential loss of local land-use control.

Two additional state laws govern the Town's scope of review for this project. Senate Bill 330 (the Housing Crisis Act of 2019) restricts a jurisdiction's ability to deny housing development projects that are consistent with applicable zoning and General Plan land use designations, and limits review of a housing development project to a maximum of five public hearings. The Housing Accountability Act (HAA), Government Code Section 65589.5(j), requires that a compliant housing development project not be denied or have its density reduced unless the Town makes written findings, supported by a preponderance of the evidence, that the project would have a specific, quantifiable, direct, and unavoidable adverse impact on public health or safety and that no feasible method exists to mitigate or avoid that impact. Under these laws, the Planning Commission's review is limited to the project's conformance with Objective Development Standards, which, for this project, include the objective design standards of Moraga Municipal Code (MMC) Chapter 8.42 (MCSP Mixed Office/Residential District), MMC Chapter 8.200 (Moraga Center Specific Plan Area Regulations), the Moraga Center Specific Plan Design Guidelines in Chapter 11 of the Town Design Guidelines, and the retaining wall and grading design standards in Chapter 7 of the Town Design Guidelines.

DISCUSSION

The project is a housing development project consisting of attached townhouses that comply with Town regulations and the State Density Bonus Law, as set forth in detail below.

Project Description

The applicant proposes merging four existing parcels into a single parcel through a vesting tentative map; demolishing four existing office buildings and associated improvements; and regrading and preparing the site for construction of a for-sale 49-unit townhome condominium development comprising 10 buildings, each ranging from four to eight units. The buildings will

be three stories, with a maximum building height of 41 feet 8 inches. Townhome units will be three- and four-bedroom plans, ranging from approximately 1,438 to 2,127 square feet. The project includes five three-bedroom moderate-income affordable ownership units (inclusionary units). The inclusionary units are no smaller than 30% of the size of the market rate units.

The buildings feature a Spanish style architecture with stucco siding, manufactured brick accents at the entries, patios and decks with black metal railings and low-profile concrete tile hip roofs. The buildings are white with brown accent colors.

On-site parking includes 98 covered spaces in the attached two-car garages (one per unit) and two guest parking spaces. An additional 11 on-street parking spaces would be provided along School Street and Country Club Drive. The project also includes internal walkways, landscaping, stormwater management facilities, and outdoor common space amenities.

Grading for the project totals approximately 6,600 cubic yards, comprising 750 cubic yards of cut and 5,850 cubic yards of fill. The site is primarily level, but grading is required to prepare it for buildings, access drives, walkways, landscaping, and stormwater facilities. 41 trees would be removed—13 of which are redwoods—all of which appear to have been planted as part of the original office development landscaping. Thirty-eight replacement trees would be planted as part of the project.

A 30-foot setback from the top of the Laguna Creek bank would be established and recorded on the subdivision map; no buildings would be constructed within this setback. A retaining wall no more than 3 feet high is proposed within a limited portion of this setback at the site's northeast corner, adjacent to the Lafayette-Moraga Regional Trail.

Off-site improvements include: construction of a Class I shared pedestrian and bicycle path along Country Club Drive, connecting to the Lafayette-Moraga Regional Trail; removal of landscaping along the Country Club Drive frontage to accommodate additional parking and bioretention areas; revision of trail and drainage easement boundaries to align with the improved trail; and intersection improvements at the Country Club Drive and School Street intersection, including a right-turn lane, curb extensions, a median refuge, and new marked crosswalks to enhance pedestrian and bicycle safety.

The project plans are included as Attachment L.

Moraga General Plan 2040

The project site is designated Moraga Center (MC) under General Plan 2040. The General Plan envisions the Moraga Center area as "a vibrant and walkable mixed-use center, including residential, commercial, and office uses, as well as open space and community facilities." Residential townhouse development is consistent with this land use designation. The maximum residential density within the MC designation is 24 units per acre; the proposed project density is 16.6 units per acre, which is below this maximum.

The following General Plan policies are applicable to and supported by this project:

Policy LU1.1 – Directing Growth: Strategically direct the Town's future growth toward the Moraga Center and Rheem Park commercial districts; support the development of these areas as vibrant, walkable mixed-use centers with housing and commercial development on infill

sites.

Policy LU-4.3 – Higher Density Residential Uses: Plan for a substantial increase in higher-density residential and mixed-use development within the two commercial centers to meet State-mandated housing goals, provide additional customers for local businesses, create housing opportunities for the local workforce, and enhance vibrancy.

Policy LU-4.4 – Residential Densities in Moraga Center and Rheem Park: Allow base densities of up to 24 units per acre in Moraga Center and Rheem Park. On all sites where the maximum density of 24 units per acre is permitted, a minimum density of 12 units per acre shall also apply. All future mixed-use and residential projects in these areas shall comply with the objective design standards adopted as part of the Moraga Municipal Code.

Policy LU-4.6 – Traffic Access and Impacts: Review and evaluate potential traffic impacts when considering residential and mixed-use development in Moraga's commercial centers; ensure that development is designed to provide safe, adequate street capacity while supporting local goals to reduce VMT.

Policy T-2.2 – Transportation and Land Use: Support land-use decisions that reduce the number and length of single-passenger vehicle trips, including locating higher-density housing in the Moraga Center area to make walking, bicycling, and transit more feasible.

Policy CD-4.6 – New Multi-Family Development: Locate new multi-family developments near commercial centers, transit stops, and community facilities; use site design and landscaping to buffer adjacent uses while providing pedestrian and bicycle connections.

Policy CD-4.7 – Multi-Family Design: Ensure that new multi-family development is planned, designed, and constructed to enhance the local area while respecting the scale and quality of its surroundings. Encourage designs that reduce perceived building mass, provide varied rooflines, create articulated facades, use landscaping to soften building edges, and incorporate four-sided architecture.

Policy CD-4.8 – Private and Common Open Space: Require usable private open space in new residential development, and common open space in multi-family projects.

Policy H1.4 – Infill Housing Opportunities: The Town shall continue working with property owners in the Moraga Center to support and proactively encourage the development of housing on vacant and underutilized sites, including the implementation of the MCSP.

Policy H2.1 – Housing Variety: The Town shall ensure that zoning for new residential development provides a wide range of housing types to meet various needs and income levels, including townhomes, "missing middle" housing, and three-bedroom units.

Policy H2.7 – Density Bonus: The Town shall continue to provide density bonuses for affordable housing projects consistent with State law.

Policy H3.1 – Wildfire Prevention and Response: The Town shall make wildfire prevention and safety a priority in the location and design of new housing.

Policy H3.2 – Evacuation Capacity: The Town shall consider the effects of new housing on the ability to safely and efficiently evacuate residents in the event of an emergency.

Policy H3.5 – High-Resource Neighborhoods: The Town shall foster the development of housing, particularly affordable housing, in areas with services, high-quality schools, and other resources.

The project is located within the MCSP area on an underutilized site identified in the 6th Cycle Housing Element as Housing Opportunity Site F-3. The townhomes represent a "missing middle" building type that is compatible in scale with single-family homes in nearby neighborhoods and provide the denser product envisioned for the Moraga Center. The project site is within walking distance of the Moraga Shopping Center, public transit, the Lafayette-Moraga Regional Trail, and the Saklan School and Joaquin Moraga Intermediate School. Pedestrian and bicycle improvements included in the project directly implement the General Plan's transportation and community design policies. The project is consistent with the General Plan 2040.

2023–2031 Housing Element — Housing Opportunity Site and No Net Loss

The Planning Commission will be required to make “No Net Loss” findings as the project will be producing less units than anticipated in the 2023–2031 6th Cycle Housing Element. The subject site is designated as Housing Opportunity Site F-3. The site was estimated to have a theoretical capacity of 69 housing units and a realistic capacity of 56, with 28 units anticipated to be affordable to lower-income households and 28 to be above-moderate-income units.

The proposed project will produce 49 units, which is 7 fewer than the realistic capacity. The project meets the Town's inclusionary housing requirements under MMC Chapter 8.180, which requires that at least ten percent of dwelling units be inclusionary units for moderate-income households. The project's five inclusionary units satisfy this requirement.

Pursuant to Government Code Section 65863, a jurisdiction must maintain adequate housing sites to accommodate its remaining RHNA by income category at all times (No Net Loss). Further, jurisdictions may not reduce, require or permit the reduction of, the residential density for any parcel identified to meet its current share of the regional housing need, or allow development of any parcel at, a lower residential density, unless the jurisdiction makes written findings supported by substantial evidence of both of the following:

1. The reduction is consistent with the adopted general plan, including the Housing Element.

2. 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.

As set forth above, the project is consistent with the General Plan and Housing Element. Further, the remaining sites are adequate to meet Housing Element requirements and to accommodate the Town’s share of the regional housing need. The Town's certified 6th Cycle

Housing Element includes a buffer of 684 dwelling units above the required RHNA of 1,118 units, for a total of 1,802 units. The Town zoned for 615 very low- and low-income units (including a 114-unit buffer), 259 moderate-income units (including a 87-unit buffer) and 928 above moderate units (including a 483-unit buffer). The following projects on housing opportunity sites have been considered by the Town during the 6th Cycle Housing Element period:

- Housing Opportunity Site F-9 (portion): The Rheem Valley Shopping Center redevelopment project (Grocery Outlet and Associated Improvements) that was partially approved. It was anticipated that its construction could result in the theoretical loss of two low-income units from a theoretical capacity of 80 low-income units and 40 above-moderate units.

- Housing Opportunity Site E-4: Park Street Senior Apartments includes 39 low-income units, nine moderate-income units, and one manager's unit. The site's realistic capacity was estimated at 25 low-income units; the approved project exceeds that by 14 low-income units and nine moderate-income units.

- Housing Opportunity Site A-4: Hetfield Estates, a design review for seven homes with ADUs, approved in 2026; theoretical capacity was seven above-moderate-income units.

Although the project will produce 49 units rather than 56, the Town will still maintain adequate Housing Opportunity sites to accommodate its remaining unmet RHNA for each income category. As set forth above, there is a buffer of 114 low-income units, and the Town has already entitled 12 more lower-income units than anticipated in the Sixth Cycle Housing Element, through the approval of Park Street Senior Apartments and the reduction of two units on Housing Opportunity Site F-9. Therefore, there are adequate sites to accommodate the lower-income RHNA. The project would also produce 44 above-moderate-income units, exceeding the 28 above-moderate units anticipated for the site. The No Net Loss standard of Government Code Section 65863 is satisfied.

Moraga Center Specific Plan

The Moraga Center Specific Plan (MCSP) was adopted by the Moraga Town Council on January 27, 2010, and is intended to establish a focused, mixed commercial and residential neighborhood around the existing Moraga Center shopping center, allowing higher-density infill and mixed-use development that is well connected by transit, pedestrian, and bicycle facilities. On November 10, 2020, the Town Council adopted implementing zoning for the MCSP area, creating new zoning districts, including the MCSP Mixed Office/Residential (MCSP MU-OR) district, to implement the MCSP land use designations. All projects within the MCSP area are exempt from the Hillside and Ridgeline code amendments adopted by the Town Council on April 11, 2018.

Moraga Municipal Code (MMC)

The project site is zoned MCSP Mixed Office/Residential (MCSP MU-OR). Under § 8.42.040, this district permits residential development of 12 to 24 dwelling units per acre, with increases allowed under the State Density Bonus Law. The purpose of this district is to support office development combined with medium- or high-density residential development. Townhomes are a permitted use, and the proposed project density of 16.6 units per acre falls within the

permitted range.

Planning Commission Approvals

Design Review (DR-05-25) - Objective Design Standards

Staff has reviewed the project for conformance with MMC §8.42.050 (development standards), MMC § 8.200.050 (Moraga Center design requirements), MMC §8.200.050 (affordable housing standards), the Moraga Center Specific Plan Design Guidelines in Chapter 11 of the Town Design Guidelines, and the retaining wall and grading design guidelines in Chapter 7 of the Town Design Guidelines. The full analysis is provided in Attachment C.

Staff has determined that the project conforms with all applicable objective design standards, except for two: MMC §8.180.070(B)(2), which requires that inclusionary units be comparable to market-rate units in bedroom count; and the building separation standard in MMC §8.42.050. The applicant has requested a concession to the former and a density bonus waiver for the latter. These are discussed later in this staff report.

Under the Housing Accountability Act (HAA), Government Code Section 65589.5(j), if a proposed housing development complies with applicable objective design standards but a local agency proposes to deny the project or reduce its density, the agency must make written findings, supported by substantial evidence, showing that:

1. The development would have a specific, adverse impact on public health or safety unless disapproved or approved at a lower density; and

2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact other than disapproval or approval at a lower density.

Staff does not believe these findings can be made. Accordingly, because the required HAA findings for denial or reduced density are not supported, staff recommends that the Town proceed with the project in accordance with the applicable objective standards and state law requirements. The proposed project approval resolution includes findings for approval of the design review.

Density Bonus — Concessions and Waivers

The 2.95-acre project site has a maximum base density of 70 units (24 units per acre). The project is proposed at 16.6 units per acre, within the permitted density range of 12–24 du/ac. The project includes five deed-restricted inclusionary units for moderate-income households. Although no density bonus units are requested, providing five moderate-income units qualifies the project for a 5% State Density Bonus under Government Code Section 65915, plus an additional 5% under the Town's local supplemental density bonus for projects meeting the Town's on-site inclusionary housing requirement, for a total potential density bonus of 10%.

Because the project provides five moderate-income units, it qualifies for one concession under Government Code Section 65915(d) and for an unlimited number of waivers under Section 65915(e).

Concession: A concession is a modification of a development standard that reduces the cost of providing affordable housing. The applicant has requested a concession for MMC §8.180.070(B)(2), which requires that inclusionary units be comparable to market-rate units in bedroom count. The project comprises 25 three-bedroom units and 24 four-bedroom units. All five proposed moderate-income units are three-bedroom, whereas a comparable mix would require three three-bedroom and two four-bedroom affordable units. The applicant's concession request letter (Attachment D) documents that providing only three-bedroom moderate-income units achieves a cost reduction of approximately $362,300. The Town may deny this concession only upon written findings, based on substantial evidence, that (A) the concession does not result in identifiable and actual cost reductions consistent with Government Code §65915(k); (B) the concession would have a specific adverse impact on public health and safety or on a listed historical property with no feasible method to mitigate or avoid the impact; or (C) the concession would be contrary to State or Federal law. Staff does not believe any of these findings can be made.

Waiver: A waiver is a modification of a development standard that would otherwise physically preclude construction of the project at its permitted density. The applicant requests a waiver of MMC §8.42.050(A) - Minimum Building Separation - which requires a minimum separation of 35 feet between three-story buildings on a single lot. Except for Building 10, all other buildings are below this standard. The non-compliant building separations are:

- Building 7 (41' 8" tall): 15' 3" separation from Building 6; 32' separation from Buildings 8 and 9
- Building 5 (39' 11" tall): 16' separation from Building 2; 32' separation from Building 6
- Building 1 (41' tall): 32' separation from Building 2
- Building 3 (39' 11" tall): 12' separation from Building 4
- Building 8 (39' 11" tall): 10' separation from Building 9

The applicant's waiver request (Attachment D) states that "strict application of the required building separation would physically preclude the Project from achieving the permitted residential density and unit configuration enabled by the Density Bonus, due to the site's width, infill context, and required building envelope. The proposed building separation maintains adequate light, air, and privacy consistent with multifamily urban development patterns, while allowing the Project to realize the full density permitted under State law." The Town may not apply any development standard that would physically preclude construction of the Project at its permitted density. The Town may deny a waiver only upon finding a specific adverse impact on public health and safety, the physical environment, or a listed historical resource that cannot be feasibly mitigated. Staff believes that no such finding can be made.

Affordable Housing Plan

MMC §8.180 requires the submission of an affordable housing plan detailing how the requirements of MMC §8.180.050(B) will be implemented, subject to Planning Commission approval. The applicant has submitted an affordable housing plan (Attachment E) that addresses all required elements, including:

1. Location, tenure (ownership), and size of market-rate and inclusionary units
2. Calculations used to determine the number of inclusionary units
3. Floor plan or site plan depicting the location of inclusionary units

4. Affordability level for each inclusionary unit
5. Term of affordability
6. Phasing plan for inclusionary units
7. Description and details of requested density bonus, incentives, waivers, and exemptions
8. Process by which eligibility of qualified households will be reviewed and selected
9. Annual reporting schedule
10. Additional information as requested by the Planning Director

The applicant will be required to implement its Affordable Housing Plan, as set forth in Condition of Approval 10 of the draft resolution (Attachment B).

Grading (GR-01-26)

Design Review Board approval is required for grading of 200 cubic yards or greater. The project proposes approximately 6,600 cubic yards of grading, comprising 750 cubic yards of cut and 5,850 cubic yards of fill. The project site is primarily level. The purpose of the grading is to prepare the site for new buildings, access roads, sidewalks, landscaping, and stormwater facilities, resulting in minor grade changes. Overall, the site will remain level. The grading is consistent with the Town's design guidelines in that it will generally maintain the site's existing level topography, will not produce sharp, unnatural angles, and will not create slopes steeper than 3:1 (horizontal to vertical) (Design Guideline ID10.6).

A Geotechnical Investigation report for the previous 66-unit apartment project was prepared by Rockridge Geotechnical and dated February 16, 2024. It provided recommendations for grading and development of the site. The report was peer reviewed for the Town by Atlas Technical Consultants, who concurred with the report's assessments. The applicant submitted a memo from Rockridge Geotechnical dated May 21, 2026, confirming that the recommendations of its February 16, 2024, report are applicable to the townhome project (Attachment G). The project's conditions of approval require that the report's recommendations and the peer review be followed during project development. As set forth in the proposed resolution, based on staff's review, the findings for approval of the grading can be made.

Subdivision (Condominiums) (Sub-01-26)

The project includes a subdivision map that creates individual condominium interests for the 49 townhomes, comprising 44 market-rate units and five moderate-income units. The subdivision does not create separate lots but establishes condominium airspace units consistent with the Subdivision Map Act. The Final Map will be required to show the common area parcel, all necessary easements, including roadways, utilities, a trail easement, and creek structure setbacks, as well as maintenance responsibilities. It will be subject to review and approval by the Town's Public Works department prior to recordation. Based on staff's review, as set forth in the proposed resolution, the findings for approval of the subdivision can be made.

Other Project Elements

Parking

MMC §8.76.100(A) requires two covered off-street parking spaces per unit. Each townhome

has an attached two-car garage, providing 98 covered spaces in total. MMC §8.76.100(N) requires one guest parking space per four units, for a total of 13 guest spaces; guest parking may include available curb parking along the property's frontage. The project provides 2 on-site guest spaces and 14 on-street guest spaces (11 on School Street, 3 on Country Club Drive), for a total of 114 parking spaces, exceeding the 111 required.

Landscaping

The project includes new landscaping for the entire site. MMC §8.200.050(A)(25) requires that drought-tolerant and deer-resistant plant materials, consistent with the Town's design guidelines, be incorporated into each development's overall landscape design. The majority of the proposed trees, shrubs, groundcovers, and grasses, as shown on sheet L-2 of the project plans (Attachment L), are species listed in Appendix B - Planting Palettes of the Town Design Guidelines. Initial plantings include 38 trees at 15-gallon size and shrubs, groundcovers, and grasses in 1- to 5-gallon sizes. The plantings will be spaced to achieve full property coverage at maturity. Along the southern property line adjacent to The Saklan School, proposed plantings include strawberry trees, a flowering plum, and a coast live oak to provide screening. Chinese pistache trees are proposed along the School Street and Country Club Drive frontages. Conditions of approval require that all landscaping be irrigated with an automatic system and permanently maintained, with a landscape maintenance bond secured for one year.

Tree Removal

The project proposes removing 41 trees from the site to develop the townhomes and associated improvements. The trees proposed for removal were planted as part of the landscaping for the existing office buildings and are not natural tree groupings. The trees proposed for removal include 13 redwood trees, five of which are located along the western property line adjacent to the neighboring Saklan School and provide screening between the properties. Bob Peralta of Arbor Consulting prepared two arborist reports, one dated February 11, 2023, and a second dated June 26, 2024 (Attachment F). These reports were prepared as part of the previous apartment project but apply to this project as well. The purpose of the second report was to provide further details regarding the recommendation to remove the five redwood trees along the project property lines shared with The Saklan School. The report noted that the trees' extensive root systems, which extend beyond the tree canopies, have formed a root mass that has reached the foundations of buildings on the subject property and The Saklan School property. There is also an existing underground storm drain running beneath the trees, and if repair is ever required, it could necessitate removing some of the trees. Additionally, the project plans propose installing new storm drainpipes at this location. Given that the trees would be located between a school and potentially residential buildings, as the trees continue to grow, the risk that they could be a liability to people and property increases. Therefore, the arborist recommends removing the trees now as part of the project. Under MMC §12.12.110 and 120, approval of the project would include the removal of the trees; thus, no additional tree removal permits are required.

Creek Structure Setbacks

MMC §8.200.100 requires that structures within the MCSP area comply with Contra Costa County Code §914-14.012 ("Structure setback lines for unimproved earth channels") for creek structure setbacks. The project plans (Sheet TM 3.1, Attachment L) show the 30-foot creek

structure setback and include cross-sections that illustrate the calculation methodology at various points. All buildings, driveways, and parking areas have been designed outside the setback. Features permitted within the setback—including fencing, landscaping, sidewalks, and trails—have been placed accordingly.

The project includes a retaining wall no more than 3 feet high within a limited area of the creek setback, running along the east side of the Lafayette-Moraga Trail behind Building 10 and the play structure. Under MMC §8.200.100(D), an exemption from the creek structure setback may be granted under unusual circumstances upon production of satisfactory evidence that no adverse biological impact will occur and that soil stability can be ensured. The Regional Water Quality Control Board commented that all developed structures should be adequately setback from the creek to allow for lateral creek migration over the long term (Attachment K); the site plan was subsequently revised to remove driveways and bioretention facilities from the creek setback. The applicant submitted a letter from Rockridge Geotechnical (Attachment G) confirming that the retaining wall within the creek setback would not adversely affect the stability of the creek. A Rincon Consultants biologist confirmed that development east of the Lafayette-Moraga Regional Trail would not affect sensitive biological resources or riparian habitat. Standard NPDES erosion-and-sediment controls will be required during construction. Based on this analysis, the Public Works Director has determined that the retaining wall is acceptable within the creek setback area.

Lafayette-Moraga Regional Trail Easement

A portion of the Lafayette-Moraga Trail runs along the western edge of the property and the eastern bank of Laguna Creek. The Town owns the trail easement, but the East Bay Regional Parks District (EBRPD) operates and maintains the trail under a license agreement with the Town. The project does not propose any work on or modifications to the trail. However, survey work has shown that the recorded Lafayette-Moraga Trail easement is out of alignment with the physical trail in several places. As part of this project, the applicant proposes to re-record this portion of the trail easement in the Final Subdivision Map to align it with the physical trail. EBRPD has requested that the trail easement be at least 7 feet from the centerline of the existing trail, for a total width of 14 feet (Attachment J). The revised easement alignment will be reflected on the Final Map, subject to review by EBRPD and the Town. This has been included as a condition of approval for the project.

Community Notification

On June 26, 2026, notices for the project were mailed to 153 property owners within a 600-foot radius of the Project site, also included were all property owners of homes south of the site that have access through School Street and De la Cruz Way. Email notification was to an email list of interested parties maintained for the previous application at this site and notice of the project was also posted electronically on the Town's website, Instagram, Facebook and Nextdoor. Two notices were also posted at the site on project information signs placed on the property be the applicant and notices were posted in three public locations, 329 Rheem Boulevard (Town Offices), 2100 Donald Drive (Hacienda de las Flores) and 1500 St. Mary's Road (Moraga Library).

Attachment K to the staff report includes public comments that have been received prior to the publication of this staff report.

CEQA COMPLIANCE

The School Street Townhome Project is consistent with community planning and zoning as defined in the California Environmental Quality Act (CEQA) Guidelines, Section 15183, and does not require additional CEQA review because it is covered by the Comprehensive Advanced Planning Initiative (CAPI). The CAPI Programmatic EIR includes Mitigation Measures that would apply to this project, as identified in the School Street Townhomes Project CAPI Programmatic EIR Consistency Analysis (Attachment C).

Air Quality

Potential air quality impacts from the project would primarily stem from emissions generated during construction and grading activities to develop the site. The CAPI EIR determined that requiring projects to implement the latest Air District Basic Construction Mitigation Measures would reduce construction emissions to less than significant levels. These include:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. 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.
6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

In accordance with CAPI EIR Mitigation Measure AQ-1, which requires implementation to the extent feasible, the project would incorporate construction equipment that meets CARB Tier 4 emissions standards, as such equipment is commercially available for the project and is proposed by the applicant. As determined in the CAPI EIR, implementing CAPI EIR Mitigation Measure AQ-1, including the use of construction equipment that meets CARB Tier 4 emissions standards, would result in a less-than-significant impact from construction toxic air contaminants (TACs). In addition, a detailed Health Risk Assessment (HRA) for the project would not be required, as the use of CARB Tier 4 construction equipment greatly reduces TAC emissions. HRAs have shown that the use of Tier 4 Final equipment substantially reduces a project's emissions of diesel particulate matter to where a typical project, such as the proposed project, would not exceed cancer risk thresholds (i.e., 10 in one million cancer risk and a hazard index of 1.0).

Biological Resources

A Rincon Consultants biologist conducted a reconnaissance-level survey of the site on March 24, 2026, as part of a Biological Resources Screening and Assessment required by Mitigation Measure (MM) BIO-1 of the CAPI EIR. The existing biological resources within a 50-foot buffer around the project site were examined to determine whether the project "has the potential to impact any special-status plant or wildlife species, nesting birds, wildlife movement, jurisdictional waters, sensitive plant communities, critical habitats, and other biological resources judged to be sensitive by local and state, and/or federal agencies."

The assessment concludes that "with the incorporation of the CAPI EIR Mitigation Measures BIO-1 – Required California Red-Legged Frog (CRLF) Avoidance and Minimization, BIO-2, and BIO-3, the project would have less-than-significant impacts on biological resources, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to biological resources. This issue does not require further study in an EIR."

The results of the Biological Resources Screening and Assessment are incorporated into the Biological Resources section of the 15183 CEQA Checklist prepared for this project. The full mitigation measure language is included in Attachment I.

While there are no identified direct impacts to Laguna Creek, the above mitigation measures are necessary to address the removal of vegetation, trees, structures, and man-made features, as well as other nesting bird habitat, and, due to the project's proximity to Laguna Creek, to minimize disturbance to wildlife movement and indirect impacts to sensitive plant communities within the Laguna Creek riparian corridor. Additionally, to ensure consistency with General Plan 2040 policies OS2.1 - Protection of Wildlife Areas and OS2.2 - Preservation of Riparian Environments, and in accordance with CAPI EIR Mitigation Measure BIO-1, which requires additional measures if a project would have the potential to affect special-status species, wildlife exclusion fencing or silt fencing will be required, as permitted under Mitigation Measure BIO-1, to protect CRLF and CRLF habitat through implementation of the following CRLF avoidance and minimization measures pursuant to CAPI EIR Mitigation Measure BIO-1. It should be noted that the nearest known occurrence of CRLF is approximately 1.25 miles north of the Project site. While CRLF is federally listed as a threatened species, the Project site is not located in a Critical Habitat unit for CRLF.

Noise

The primary potential noise impacts associated with this project are construction noise. Construction noise from the proposed project would be generated by heavy-duty diesel construction equipment used for demolition, site preparation, grading, building construction, and paving. As part of preparing the CEQA 15183 Consistency Checklist, an estimate of anticipated construction noise was developed using the Federal Highway Administration's Roadway Construction Noise Model (RCNM), which "predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas."

Using RCNM, construction noise levels were estimated at noise-sensitive receptors, such as schools and residences near the project site. Based on the model, construction noise levels were determined to be 84 dBA Leq (8-hour) at The Saklan School property. Therefore, to comply with CAPI EIR Mitigation Measure NOI-1, temporary noise barriers at least 12 feet high would be required along the southern boundary of the project site to block the line of sight between the construction equipment and The Saklan School. The construction site is sufficiently far from other sensitive receptors that no additional measures from the CAPI EIR are required. With the incorporation of temporary noise barriers from CAPI EIR Mitigation Measure NOI-1, the project would have less-than-significant impacts related to construction noise, which is less than the significant and unavoidable finding identified for construction noise in the CAPI EIR.

Transportation and Traffic

Staff reviewed the project's transportation effects using the August 2024 Traffic Impact Study prepared by TJKM and the June 2026 supplemental transportation memorandum prepared by Sandis (Attachment H) for the revised 49-unit townhome project. The memorandum updated traffic data, evaluated the revised site plan and trip generation, reviewed school-related traffic conditions, and confirmed whether the prior traffic conclusions and recommendations remain applicable.

Under CEQA, transportation impacts are evaluated primarily using VMT. The project site is in a transportation analysis zone where home-based VMT is at least 15 percent below the countywide average. Therefore, the project is presumed to have a less-than-significant VMT impact and is consistent with the transportation analysis in the CAPI EIR. Although Level of Service (LOS) is no longer the primary CEQA transportation metric, staff also reviewed local circulation for non-CEQA purposes. Traffic data were collected in April 2026, including Average Daily Traffic volumes, speed data, and multimodal turning movement counts at the study intersections. The data collection captured traffic conditions during both the morning school drop-off and afternoon school pick-up periods near Saklan School (counts were collected between 12 am and 11 pm).

The supplemental transportation analysis found that the revised 49-unit townhome project would generate only minor changes in peak-hour vehicle trips compared to the previously analyzed 66-unit project. The afternoon school pick-up period was reviewed; however, the AM peak hour was determined to be the controlling period for intersection operations because it reflected the more critical operating conditions near the project driveways. Based on that analysis, the intersections studied are expected to continue operating at acceptable levels with the project.

Staff also reviewed site access and internal circulation. The project would provide access from School Street and Country Club Drive. The internal drive aisles and access layout have been reviewed for passenger vehicles, emergency access, and solid waste service. The Moraga-Orinda Fire District has preliminarily reviewed the plans for emergency access.

The traffic review also considered nearby school operations, including Saklan School. Existing school drop-off and pick-up activity creates localized activity along School Street during school arrival and dismissal periods. However, based on the traffic analysis and field observations, the project is not expected to generate sufficient school-related traffic to substantially affect existing school circulation conditions. Construction-phase traffic control and school

coordination will be required through conditions of approval and encroachment permit review.

Based on the transportation review, the project is not expected to result in a significant transportation impact. The project will be required to construct or fund the following transportation, frontage, and access improvements:

- Right-turn lane for eastbound traffic at Country Club Drive and School Street.
- Curb extension improvements at the Country Club Drive/School Street intersection.
- Pedestrian refuge improvements.
- Marked crosswalk improvements.
- Red curb near the School Street driveway, as needed for sight distance and access.
- Pedestrian/bicycle path connection along Country Club Drive to the Lafayette-Moraga Regional Trail.
- Construction traffic control and school coordination during work affecting School Street or Country Club Drive.

Final design of these improvements will be reviewed and approved by the Town Engineer prior to issuance of applicable permits.

Emergency Evacuation

The Town currently has an approved Emergency Operations Plan in place. The Moraga Police Department coordinates emergency evacuations within the Town. The Town has been divided into 23 separate evacuation zones which allow the Police to notify specific neighborhoods during evacuation events to better manage traffic during these events. The Police Department website encourages residents to register for Nixle and Contra Costa County Community Warning Systems.

In addition, residents are encouraged to become familiar with the Moraga-Orinda Fire District's (MOFD) multiple resources on preventative measures, as well as what to do in an emergency. Moraga Police and MOFD have held community meetings, evacuation drills, workshops, and presentations to raise awareness on emergency preparedness and evacuations.

Information about the Town's Emergency Operations Plan, including the 23-zone evacuation plan mapping, can be found on the Moraga Police Department website: https://www.moraga.ca.us/255/Emergency-Operations-Plan.

Each response to an emergency will be unique to the specific circumstances of the incident. In some emergencies, residents will be instructed to evacuate via specific routes. In some cases, residents will be instructed to "shelter in place." In other cases, residents may be instructed to obtain shelter at a specific location. Other evacuation instructions may also be provided. No two emergencies are exactly the same.

Chapter 6 of the Town's 2023 – 2031 Housing Element contains the following goal to address this issue:

"Goal 3: Ensure Access to Opportunity and Safety--Ensure that all Moraga residents, regardless of income, have access to high-quality housing, excellent services, and safe neighborhoods without risk of displacement. This includes sustained efforts to address wildfire

hazards and maintain high levels of emergency preparedness and response."

The overall approach to evacuation is both short term and long term, and largely dependent on local resources. The Town listened carefully to residents and has worked collaboratively and across multiple jurisdictions to address the challenges.

In addition, the Town actively works with the Contra Costa Transportation Authority (CCTA) on Smart Signals projects to add efficiency and capacity to the existing roadway network. Moraga will also be participating in the Countywide Emergency Evacuation Plan, led by CCTA and funded by an outside grant, to study and model evacuation scenarios.

Other regional and local evacuation regulations adhered to include:

- The Moraga-Orinda Wildfire Action Plan, which is an annex of the Contra Costa County Wildfire Protection Plan. The purpose of this plan is to reduce hazard through increased information and education about wildfires, hazardous fuels reduction, actions to reduce structure ignitability, and other recommendations to assist emergency preparedness and fire suppression efforts.

- Contra Costa County Local Hazard Mitigation Plan (LHMP), which includes specific actions designed to protect people and community assets from losses caused by hazards that pose the greatest risk, including wildfire. The Town is included as a municipal planning partner, and the County-wide LHMP, an "annex" of the Town, specifically addresses hazards in Moraga.

- Contra Costa County Emergency Operations Plan, which provides a basis for coordinated response before, during, and after an emergency.

- Moraga-Orinda Fire District regulations, which include the State Fire Code with amendments to address the local conditions

Wildfire

The CAPI EIR includes a full analysis of wildfire-related impacts in Section 4.17, titled "Wildfire." This section begins on page 4.17-1 and provides a detailed examination of potential wildfire risks associated with the proposed developments that would result from implementing the CAPI, including the Project.

The CAPI EIR included three mitigation measures related to wildfire and determined that, despite these measures, impacts related to wildfire evacuation remained significant and unavoidable (SU). As required by CEQA, the Town Council adopted a "Statement of Overriding Considerations" and determined that the benefits of housing and compliance with State law outweighed the impacts of the rezoning.

The mitigation measures from the CAPI EIR, including those designed to address SU impacts, must be applied where relevant. Based on the 15183 CEQA checklist, three wildfire mitigation measures from the CAPI EIR could apply to this project; WFR-1 Develop Wildfire Assessment Plan and Guidelines, WFR-2 Construction Wildfire Risk Reduction, and WFR-3 Project Design Wildfire Risk Reduction. The project has been reviewed by MOFD as part of the technical review process (Attachment J). The project is not located in a Very High or High Fire Severity

Zone and will meet all California Fire Code requirements, including local amendments adopted by MOFD. Further, as part of the Building Permit process, the project will be required to meet all current life and safety building code standards. MOFD has determined that the School Street Townhouse project is below the thresholds outlined in the fire code for projects that would require a wildfire assessment plan, now renamed a Fire Protection Plan. As a result, the Wildfire Assessment Plan under WFR-1 was not necessary.

The impacts of the rezoning that allowed the project have already been studied and analyzed under CEQA. In addition, the project will not result in any new significant impacts or exacerbate previously identified impacts. Among other things discussed in the Consistency Analysis, the project will not result in new or exacerbated impacts for the following reasons:

- Limited contribution to impacts:

The project represents approximately 3% of the total housing growth analyzed under the CAPI EIR. Therefore, the project's associated traffic or evacuation impacts will be minimal in the context of the broader Housing Element and would not exacerbate wildfire impacts in the project area, beyond those previously analyzed. The broader impacts identified in the Draft EIR, such as traffic congestion and evacuation challenges, are programmatic issues attributed to cumulative growth, and are not attributed to one specific project.
The specific contribution of this project to potentially adverse effects would be negligible and remain within the scope of impacts analyzed in the CAPI EIR. Because this project is outside of a Very High Fire Hazard Severity Zone (VHFHSZ) and is compliant with fire safety regulations, it does not independently introduce significant impacts that would preclude its qualification for an exemption under CEQA Guidelines Section 15183. The proposed project would be consistent with the Housing Element and the mitigations identified in the CAPI EIR and qualifies for the streamlined review.

- Project location:

Unlike other sites considered in the CAPI EIR, the project site is not within or near a designated VHFHSZ. It is classified as "Urban Unzoned" and “Moderate” on the southern 1/3 portion of the site, it is located more than 800 feet from the nearest VHFHSZ. This significantly reduces direct wildfire risk to project residents and the surrounding area, and, therefore, project implementation would not exacerbate fire risk within the project area.

- Compliance with adopted safety standards:

The project will adhere to California Building Code and Moraga-Orinda Fire District requirements, which include fire-resistant construction and safety measures, further ensuring that fire risks are minimized.

Based on project specific technical analysis, the project would not result in any new environmental impacts, or exacerbate any previously identified environmental impacts, as outlined in the Comprehensive Advanced Planning Initiative Environmental Impact Report (EIR) (SCH # 2022020106).

ALTERNATIVES

1. Adopt the Resolution with modifications; or
2. Do not adopt the Resolution and provide direction to staff

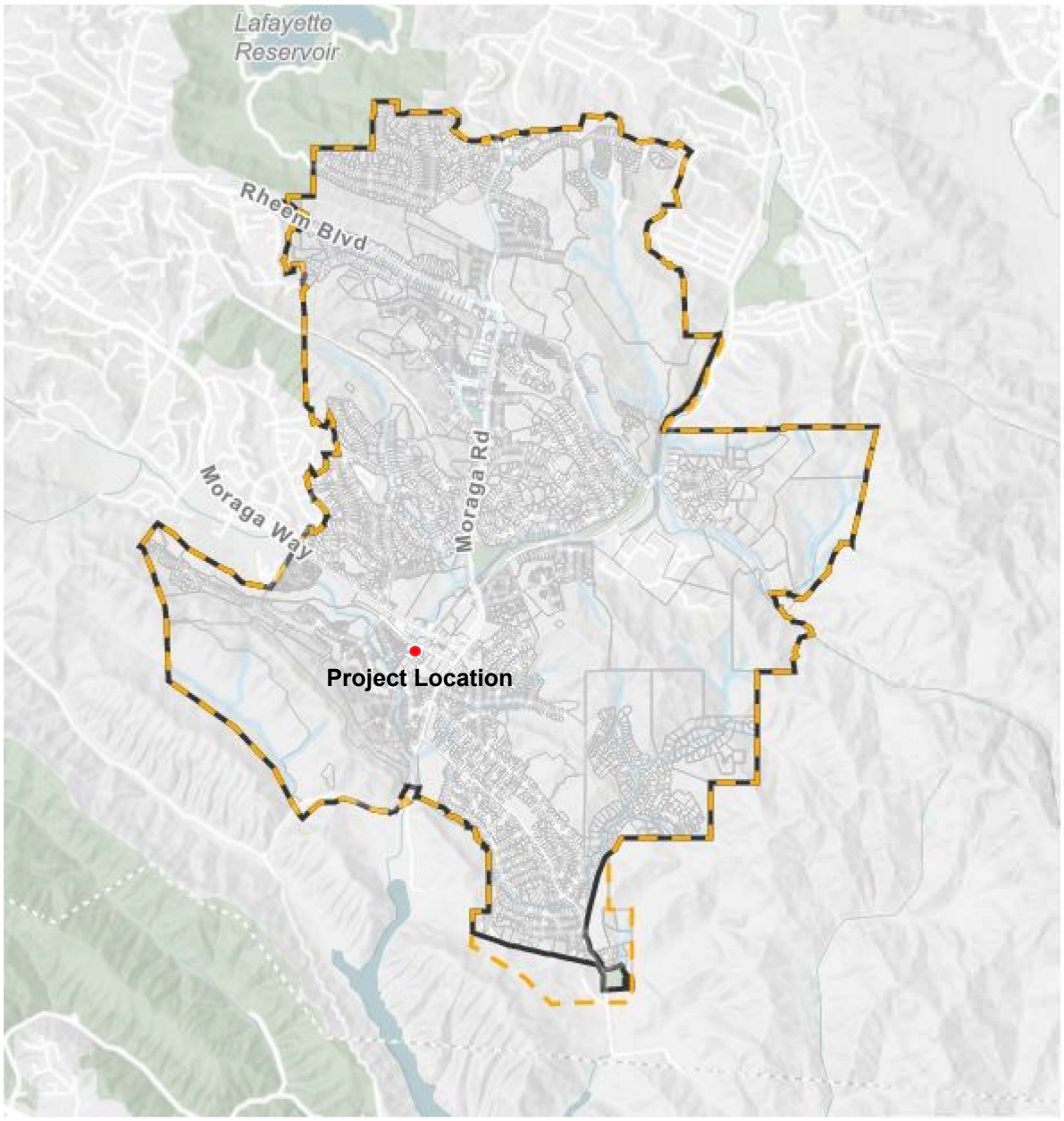
NEXT STEPS

If the resolution is approved, the project applicant may then prepare and submit construction-level plans to the Town and other regulating agencies for review, to obtain permits and begin work on the site.

ATTACHMENTS

Attachment A Location Maps.pdf
Attachment B Draft Resolution and Mitigation Monitoring and Reporting Plan.pdf
Attachment C Objective Design Standards.pdf
Attachment D Waivers and Concessions.pdf
Attachment E Affordable Housing Plan.pdf
Attachment F Arborist Reports.pdf
Attachment G Geotechnical Reports.pdf
Attachment H Traffic Memo and Studies.pdf
Attachment I - CEQA 15183 Consistency Analysis.pdf
Attachment J Agency Comments.pdf
Attachment K - Public Comment.pdf
Attachment L Project Plans.pdf
Presentation - School Street Townhomes.pdf
Addendum - Item 6 - Public Comment Received.pdf

Project Location Map



Aerial Vicinity Map with Project Boundaries

TOWN OF MORAGA
PLANNING COMMISSION

RESOLUTION NO. XX-XXXX

Approving the School Street Townhomes Project – Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision (Sub-01-26) and Density Bonus for the Development of 49 Townhomes Including Five Moderate Income Inclusionary Units and Associated Site Improvements Located at 1600, 1620, 1640 and 1660 School Street (APN 257-190-049, 050, 051 and 052)

WHEREAS, on September 11, 2025, Outdo Country Club Drive, LLC ("the applicant") submitted an SB 330 preliminary application, for a 49-unit townhouse condominium development with four below market rent moderate income units on a 2.95 gross-acre site located at 1600, 1620, 1640 and 1660 School Street; and

WHEREAS, on November 10, 2025, the applicant submitted a Design Review Board application for the project; and

WHEREAS, on January 20, 2026, and February 9, 2026, Grading and Subdivision applications were submitted along with updated plans, which included increasing the number of below market rate moderate income units from four to five; and

WHEREAS, with the inclusion of five inclusionary units, the project qualifies for one concession and unlimited waivers under State Density Bonus Law ("SDBL"); and

WHEREAS, the application includes a request for one concession from MMC §8.180.070.B.2, which requires that inclusionary units be comparable to market-rate units in bedroom count. The project includes 25 three-bedroom units and 24 four-bedroom units; all five proposed moderate-income units are three-bedroom, whereas a comparable mix would require three three-bedroom and two four-bedroom affordable units. The applicant's concession request documents that providing only three-bedroom moderate-income units achieves a cost reduction of approximately $362,300; and

WHEREAS, the application includes a request for one waiver from MMC §8.42.050.A, Minimum Building Separation, which requires a minimum 35-foot separation between three-story buildings on a single lot. Except for Building 10, none of the proposed buildings meet this standard*;* and

WHEREAS, at least 10 days prior to the July 7, 2026, public hearing date for the project, notices were mailed to 153 property owners within a 600-foot radius of the Project site, also included were all property owners of homes south of the site that have access through School Street and De la Cruz Way. Email notification was to an email list of interested parties maintained for the previous application at this site and notice of the

project was also posted electronically on the Town's website, Instagram, Facebook and Nextdoor. Two notices were also posted at the site on project information signs placed on the property be the applicant and notices were posted in three public locations, 329 Rheem Boulevard (Town Offices), 2100 Donald Drive (Hacienda de las Flores) and 1500 St. Mary's Road (Moraga Library); and

WHEREAS, the Planning Commission held a public hearing acting as both the Planning Commission and the Design Review Board for this application on July 7, 2026, and at that public hearing, at which time it considered all oral and documentary evidence presented, and incorporated all testimony and documents into the record by reference and opened and closed the public hearing for public comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the Town of Moraga hereby makes the following findings and determinations pertaining to the project based on the oral and written staff reports, oral and written comments, and all attachments to and documents incorporated in the staff report and this resolution:

SECTION 1: RECITALS. The foregoing recitals are true and correct and incorporated into the findings and determinations set forth in this Resolution.

SECTION 2: CALIFORNIA ENVIRONMENTAL QUALITY ACT

The Planning Commission hereby finds that the Project is consistent with the Comprehensive Advanced Planning Initiative as analyzed in the Programmatic EIR (State Clearinghouse No. 2022020106), certified by Town Council on January 25, 2023 ("CAPI EIR"), as described in further detail in the School Street Townhomes Comprehensive Advanced Planning Initiative Program Environmental Impact Report Consistency Analysis (CEQA Guidelines 15183), dated June, 2026, incorporated herein by reference, ("Consistency Analysis"). The Project is therefore exempt from further environmental review. As set forth in the Consistency Analysis, the Project will have to comply with the mitigation measures set forth in the Mitigation and Monitoring Program ("MMRP"), incorporated herein by reference.

The Planning Commission hereby makes the following findings as to compliance with CEQA Guidelines section 15183:

1. **The Project entitlements would be consistent with the land uses, densities, and other zoning and development standards which were analyzed in the CAPI EIR.**

   The Project site is located within the Moraga Center Specific Plan (MCSP) area and is zoned MCSP Mixed Office/Residential (MCSP MU-OR). The base residential density for this property is 12-24 dwelling units per acre and residential developments, such as townhomes, within this zoning district are permitted uses. The Project is being developed at a residential density of 16.6 dwelling units per acre, which is within the Moraga Center general plan density range. The property is a housing opportunity site F3 as identified in the Town's

certified 2023-2031 Sixth Cycle Housing Element, as shown in Appendix B, page B-13. The project is consistent with the objective development standards for the property, except for the standards in MMC §8.180.070.B.2, and MMC §8.42.050.A, and based on SDBL, the project is allowed one concession and one waiver, which the applicant has requested for relief from these standards. While the Regional Housing Needs Allocation assigned to the Town was 1,118 units for the 2023-2031 6th cycle Housing Element, the certified EIR considered the potential development of 1,802 units during the planning period of the 2023-2031 6th cycle Housing Element with a buffer of units. The 49 units proposed by this project represent approximately 3% of the overall units considered.

2. **There are no environmental effects that are peculiar to the project or the parcel on which the project would be located**

Pursuant to CEQA Guidelines Section 15183(b)(1), based on the Consistency Analysis, there are no impacts peculiar to the proposed project or project site would occur.

3. **There are no new environmental effects that were not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan with which the project is consistent**

As discussed in the Consistency Analysis, there are no new environmental effects that were not analyzed in the CAPI EIR. General Plan implementation programs and mitigation measures identified in the CAPI EIR that would be applicable to the project are associated with air quality (MM AQ-1), biological (MM BIO-1, BIO-2, and BIO-3), cultural resources (IP CR-D) geology and soils (IP PAL-A) noise (MM NOI-1, and NOI-3), tribal and cultural resources (IP TCR-A and TCR-B) and wildfire (MM WFR-2 and WFR-3). Overall, the project is within the scope of the range of projects anticipated by the CAPI EIR, therefore no significant new effects would occur.

4. **There are no new environmental effects that are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action**

Pursuant to CEQA Guidelines Section 15183(b)(3) and as set forth in the Consistency Analysis, the proposed Project would not increase significant off-site or cumulative impacts. The Project is a residential project that would be developed on a Housing Opportunity site identified in the 6th Cycle Housing Element consistent with and anticipated by the CAPI EIR., and would be developed consistent with the zoning, general plan designation, with development concessions and waivers allowed under SDBL. The appropriate mitigation measures identified in the Consistency Analysis would be implemented during project development, and the Project would not result in more severe impacts for any environmental resource category than those analyzed in the certified EIR.

5. **There are no new environmental effects that are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.**

   Pursuant to CEQA Guidelines Section 15183(b)(4) and as set forth in the Consistency Analysis, there are no environmental effects that are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

   The EIR was certified on January 25, 2023. No other updated planning documents provided substantial new information which was not known at the time the EIR was certified. A biological assessment, geotechnical reports, arborist report and traffic studies were prepared for the project, and no significant effects were identified in these studies. Since no substantial new information not known at the time of the certified EIR is available, no updated analyses or other studies are required for the Project site. Furthermore, the appropriate mitigation measures included in the MMRP would be implemented during project development.

SECTION 3: DESIGN REVIEW FINDINGS. The Planning Commission acting as the Design Review Board hereby finds that the project complies with Moraga Municipal Code §8.72.080(B) for projects in land use districts other than single-family residential as set forth below:

1. **The structure conforms with good taste, good design and in general contributes to the character and image of the Town as a place of beauty, spaciousness, balance, taste, fitness, broad vistas, and high quality** because the project has been found consistent with objective development standards applicable to the project, except for standards in MMC §8.180.070.B.2, and MMC §8.42.050.A, for which the applicant has requested State Density Bonus Law concessions and waivers. Overall, the proposed townhomes would be well articulated with varied massing, materials and cohesive colors that create architectural variation and attractive features on all elevations of the buildings. The exterior building materials consist of stucco, manufactured brick veneer, metal railings and concrete tile roofs. The buildings will be white with brown and black accent colors for trims, fascia and doors. The materials are high quality and consistent with those that are encouraged by the Moraga Center Design Guidelines.

2. **The structure will be protected against exterior and interior noise, vibrations and other factors which may tend to make the environment less desirable** because the proposed project is a residential use is not expected to generate noise more than any other residential uses within the Town. Air conditioning and other mechanical equipment that may generate noise will be placed on the ground adjacent to the buildings and will be required to be screened by low walls or

landscaping that will help to dampen noise that they may generate. Furthermore, condition of approval requires that any mechanical equipment which would be a source of structural vibration or structure-borne noise in excess of adopted town ordinance standards be shock mounted with inertia blocks or bases or vibration isolators. The building will be constructed to current California Building Codes, which require that interior noise levels attributed to exterior noise sources shall not exceed 45dB in any habitable room.

3. **The exterior design and appearance of the structure is not of inferior quality as to cause the nature of the neighborhood to materially depreciate in appearance and value** because as proposed the townhomes are consistent with the Moraga Center Design Requirements of MMC.200.050 (Objective Design Standards) and the Town of Moraga Design Guidelines. The townhomes would be well articulated with varied massing, materials and colors that provide architectural variation and attractive elevations in line with current practice. The development of the site will replace under-utilized office buildings with a well-designed townhouse development constructed with high quality materials and new landscaping which is anticipated to enhance the appearance of the property. The project includes frontage improvements including new crosswalks at Country Club Drive and School Street, and reconstructing and upgrading the sidewalks along Country Club Drive and along School Street which will enhance the pedestrian experience and be a benefit to the surrounding neighborhood.

4. **The structure is in harmony with proposed developments on land in the general area** because the project is consistent with the MCSP Mixed Office/Residential Zoning District, Moraga Center General Plan and the Sixth cycle Housing Element. The project is consistent with the Moraga Center Design Requirements of MMC.200.050 (Objective Design Standards) and the Town of Moraga Design Guidelines, with permitted concessions and waivers. To the west of the project site is an approximately 80-foot-wide riparian canopy associated with Laguna Creek. Beyond the creek, is the Moraga Country Club existing single family and townhome development. The nearest residence is more than 100 feet away from the townhomes, these residences are not located within the MCSP area. The development to the north and east are two story office buildings which are separated from the project site by Country Club Drive and School Street. To the south of the project site is a private school, which is the closest land use to the proposed project. 41 trees would be removed from the property for development of the project, that while many of them are currently healthy, they would conflict with the redevelopment of the site. These would be replaced with 38 new trees planted throughout the property. The properties that are to the north, east and south of the project site are all zoned MCSP Mixed Office/Residential which are subject to the same development standards as the project site and could be redeveloped in the future similarly to the proposed project.

SECTION 4: GRADING APPROVAL FINDINGS. Pursuant to MMC Section 14.12.030(A), the Planning Commission, acting as the Design Review Board, hereby

finds that the proposed grading, which exceeds 200 cubic yards on slopes less than 20 percent, is:

1. **Consistent with the town design guidelines** because the proposed grading does not require any exceptions to the Town's Design Guidelines. The project site is substantially level, the purpose of the grading is to prepare the project site for new residential improvements which will closely maintain the existing level grade of the site.

2. **Does not result in any slope of twenty (20) percent or more** because the project site is level and no slopes of twenty (20) percent of more will be created as a result of the grading. The project site is not within a Hillside area.

3. **Consistent with the regulations and restrictions of Chapter 14.12 of the Moraga Municipal Code and does not require a modification** because the grading permit has been considered by the Design Review Board at noticed public hearings. The request does not require modifications and as specified, the required findings can be made, as documented in Findings 1 through 6, herein.

4. **Not detrimental to public safety** because the project site is substantially level, and the purpose of the grading is to prepare the project site for the proposed residential development. The grading complies with the Town Design Guidelines, does not require a modification from the grading ordinance and will not be on or create slopes that are 20% or greater. The grading work will be conducted in accordance with the Geotechnical Investigation report prepared by Rockridge Geotechnical dated February 16, 2024, and the plans and work will be reviewed and inspected by Contra Costa County Conservation and Development grading inspectors.

5. **Not detrimental to stormwater runoff** because the proposed development must be completed in compliance with the requirements of the Regional Water Quality Control Board C.3 Guidelines. A stormwater control plan will be required to be submitted to the Department of Public Works for review and approval prior to development of the property. Improvements to on-site storm drain facilities will be installed as part of the site improvements and in conjunction with the proposed residential development, including construction of stormwater control facilities and infrastructure that has been determined by the Town's Public Works Department to be adequate to address any on-site drainage issues. The project will participate in the Contra Costa County Regional Alternative Compliance System to implement post construction stormwater treatment off-site.

6. **Not inconsistent with the general plan** because the project site is substantially level. The purpose of the grading is to prepare the project site for new residential improvements which will closely maintain the existing level grade of the site. The proposed grading does not require an exception to the Town's design guidelines pertaining to grading and will not be on or create slopes of 20% or greater.

SECTION 5: VESTING TENTATIVE SUBDIVISION CONDOMINIUM MAP FINDINGS.

The Planning Commission of the Town of Moraga makes the following findings to approve a Vesting Tentative Subdivision Map in accordance with Section 66474 of the State Subdivision Map Act:

1. **The proposed map is consistent with the General Plan, Zoning Ordinance and Moraga Center Specific Plan Area:** The Project site is located within the MCSP area and is zoned MCSP MU-OR. The new common area parcel created by the map will meet the minimum lot standard of 10,000 square feet, minimum lot width of 30 feet and minimum lot depth of 100 feet required in the MCSP MU-OR zoning district. The base residential density for this property is 12-24 dwelling units per acre, the condominium map will be at a residential density of 16.6 dwelling units per acre, which is within the Moraga Center general plan density range for this site. Development of the project site is consistent with General Plan Policies LU-1.1, LU-4.3, LU-4.3, which direct high density multi-family developments into the Moraga Center area. The map includes the dedication of internal streets to provide access to the townhomes, a creek structure setback easement, and realignment to the Lafayette- Moraga Regional Trail easement to be centered on the existing trail.

2. **The design and improvement of the proposed subdivision, as conditioned, is consistent with the General Plan:** The proposed subdivision improvements are consistent with the general plan as noted above. The development of the subdivision includes pedestrian safety improvements to the intersection of Country Club Drive and School Street, widening of the School Street sidewalk along the front of the property to eight feet in width, and improving the sidewalk along Country Club Drive toa Class 1 bike path. The internal street design has been reviewed by the Moraga Orinda Fire District and Moraga Public Works Department. The project includes ample landscaping throughout the site and stormwater will be managed in accordance with C.3 requirements along with the Contra Costa County Regional Alternative Compliance System

3. **The site is physically suitable for the type of development:** The project site is generally level. All utilities are available that are needed to serve the project. The area of proposed development does not contain any sensitive features, natural hazards, or substantial physical constraints to the type of residential development that is proposed. The western portion of the site includes Laguna Creek and the Lafayette- Moraga Regional Trail. No development is proposed on the western portion of the site, and a creek structure setback easement and realigned trail easement to correspond with the existing trail will be recorded on the Final Map.

4. **The site is physically suitable for the proposed density of development.** The subject property is identified in the Moraga Center Specific Plan as a suitable site for office or residential development, at a density of between 12 and 24 dwelling units per acre. The proposed development can all be accommodated on the

previously developed portion of the site, with riparian areas to remain protected within a recorded creek structure setback.

5. **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.** The project site is generally level and is developed with four single-story office buildings, surface parking and landscaping. The western portion of the site includes Laguna Creek and its associated riparian habitat, no improvements are proposed within the riparian area, which is west of the Lafayette Moraga Regional Trail. The project was reviewed by a biologist who determined that with incorporation of the CAPI EIR mitigation measures BIO-1, BIO-2, and BIO-3, which includes California red-legged frog avoidance, the project would have less-than-significant impacts on biological resources.

6. **The design of the subdivision or type of improvements is not likely to cause serious public health issues.** The design of the subdivision, and the required subdivision improvements, which include the private internal roadways, stormwater facilities and pedestrian improvements at the intersection of School Street and Country Club Drive intersection and property frontage would be constructed in accordance with Town standards and are not expected to create serious public health issues. MOFD has completed a review of the proposed subdivision and did not identify any issues of concern regarding fire safety and access. Conditions of approval require that the property owner record private road and stormwater drainage maintenance agreements and construct all pedestrian facilities to Public Works standards and the standards of the Americans with Disabilities Act.

7. **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 because prior to this project no such easements existed.** The Lafayette – Moraga Regional Trail easement runs in a north/south direction through the western portion of the property adjacent to Laguna Creek. However, portions of the improved trail are out of alignment with the trail easement, with some portions of the trail outside of the trail easement and portions of the trail easement on areas of the property with no trail. The applicant is proposing to rerecord the trail easement as part of the Final Map so that it aligns with the existing trail, which will maintain the public access at large through the site.

SECTION 6: DENSITY BONUS FINDINGS. Pursuant to MMC Section 8.172.060.E, the Planning Commission, acting as the Design Review Board, hereby makes the following findings to grant a density bonus pursuant to State Density Bonus law.

1. **The project is a housing development that qualifies for a density bonus and meets all applicable eligibility requirements.** The Project is a residential townhouse development on an approximately 2.95-acre property. The project proposes 49 dwelling units, which per the Town's Affordable Housing Ordinance

(MMC Chapter 8.180), requires five inclusionary units affordable to moderate income households be provided, which have been proposed as part of the project. The five inclusionary units will remain affordable for moderate-income households for 45 years. The property does not contain any existing rental units, nor were there any rental units vacated or demolished on the property in a five-year period preceding the application.

2. **The housing development has provided sufficient affordable units or otherwise meets all eligibility requirements.** The project is proposing 49 base units, which includes five moderate income affordable units (10% of the base number) which is consistent with the Town's Affordable Housing Ordinance (MMC Chapter 8.180), the Town's Development Policy for Eligible Projects Providing On-Site Affordable Housing Units (TC Resolution 96-2022) and State Density Bonus law. The density of the proposed project will be 16.6 dwelling units per acre, which is within the 12-24 dwelling unit per acre density of this site. The property does not contain any existing rental units, nor were there any rental units vacated or demolished on the property in a five-year period preceding the application.

3. **The housing development meets all eligibility requirements for a concession and the findings for denial set forth in Government Code section 65915 subdivision (d)(1), cannot be met.** One concession has been requested, from MMC §8.180.070.B.2, which requires that inclusionary units be comparable to market-rate units in bedroom count. The project comprises 25 three-bedroom units and 24 four-bedroom units; however, all five proposed moderate-income units are three-bedroom, whereas a comparable mix would require three three-bedroom and two four-bedroom affordable units. In their request the applicant detailed that this request concession would achieve a cost reduction of approximately $362,300.00. The concession will result in identifiable and actual cost reductions consistent with Government Code §65915(k); would not have a specific adverse impact on public health and safety or on a listed historical property with no feasible method to mitigate or avoid the impact; and would not be contrary to State or Federal law.

4. **The housing development meets eligibility criteria for a waiver and the findings for denial set forth in Government Code section 65915 subdivision (e)(1), cannot be met.** One waiver is being requested, from MMC §8.42. 050.A — Minimum Building Separation — which requires a minimum 35-foot separation between three-story buildings on a single lot. Except for Building 10, the other proposed nine buildings do not comply with this requirement and have setbacks from each other of less than 35 feet. All other buildings fall below this standard. I Approval of the waiver is required to construct the proposed project at the density permitted under State law. Further, approval of requested waiver will not have a specific adverse impact upon public health and safety, or the physical environment, or on any real property listed in the California Register of Historical Resources; or be contrary to State or Federal law.

SECTION 7: GOVERNMENT CODE SECTION 65863. The Planning Commission finds as follows with respect to the reduction of number of units beyond those anticipated in the City's Housing Element:

1. **The reduction is consistent with the adopted general plan, including the housing element.** The project site is designated Moraga Center (MC) under General Plan 2040. The General Plan envisions the Moraga Center area as "a vibrant and walkable mixed-use center, including residential, commercial, and office uses, as well as open space and community facilities." Residential townhouse development is consistent with this land use designation. The maximum residential density within the MC designation is 24 units per acre; the proposed project density is 16.6 units per acre, which is within the permitted density range. The subject site is designated as Housing Opportunity Site F-3. The site was estimated to have a theoretical capacity of 69 housing units and a realistic capacity of 56, with 28 units anticipated to be affordable to lower-income households and 28 to be above-moderate-income units.

The proposed project will produce 49 units, which is 7 fewer than the realistic capacity. The project meets the Town's inclusionary housing requirements under MMC Chapter 8.180, which requires that at least ten percent of dwelling units be inclusionary units for moderate-income households. The project's five inclusionary units satisfy this requirement.

2. **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 Town's certified 6th Cycle Housing Element includes a buffer of 684 dwelling units above the required RHNA of 1,118 units, for a total of 1,802 units. The Town zoned for 615 very low- and low-income units (including a 114-unit buffer), 259 moderate-income units (including a 87-unit buffer) and 928 above moderate units (including a 483-unit buffer).

The following projects on housing opportunity sites have been considered by the Town during the 6th Cycle Housing Element period:

- Housing Opportunity Site F-9 (portion): The Rheem Valley Shopping Center redevelopment project (Grocery Outlet and Associated Improvements) that was partially approved. It was anticipated that its construction could result in the theoretical loss of two lower-income units from a theoretical capacity of 80 low-income units and 40 above-moderate units.

- Housing Opportunity Site E-4: Park Street Senior Apartments, which includes 39 low-income units, nine moderate-income units, and one manager's unit. The site's realistic capacity was estimated at 25 low-income units; the approved project exceeds that by 14 low-income units and nine moderate-income units.

- Housing Opportunity Site A-4: Hetfield Estates, design review for seven homes with ADUs, approved in 2026; theoretical capacity was seven above-moderate-income units.

Although the project will produce 49, rather than 56, units, the Town will still maintain adequate Housing Opportunity sites to accommodate its remaining unmet RHNA for each income category. As set forth above, there is a buffer of 114 low-income units, and the Town has already entitled 12 more lower-income units than anticipated in the Sixth Cycle Housing Element with the approval of Park Street Senior Apartments the reduction of two units on Housing Opportunity Site F-9. Therefore, there are adequate sites to accommodate the lower-income RHNA. The project would also produce 44 above moderate-income units, which exceeds the 28 above moderate units anticipated for the site. The No Net Loss standard of Government Code Section 65863 is satisfied.

SECTION 8: APPROVAL. Based on the findings and determinations set forth above, the Planning Commission hereby approves Design Review (DRB-05-25), Grading Permit (GR-01-26), Subdivision (SUB-01-26) and Density Bonus with a concession and waiver, subject to the Conditions of Approval attached hereto as Attachment A.

PASSED AND ADOPTED BY THE PLANNING COMMISSION OF THE TOWN OF MORAGA THIS 7th DAY OF JULY 2026, BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED: ATTEST:

_____ _____

Alexis Maple
Chair

Sonia Urzua, AICP
Planning Director

Attachment A
CONDITIONS OF APPROVAL
Design Review (DR 05-25)
Grading Permit (GR 01-26)
Subdivision (SUB 01-26)
Density Bonus

APNs: 257-190-049, 050, 051 and 052

Project Description:

Merging of four existing parcels into a single parcel through a vesting tentative map; demolish four existing office buildings and associated improvements; and regrade and prepare the site for construction of a for-sale 49-unit townhome condominium development comprised of 10 buildings, ranging in size from four to eight units permit building. The buildings will be three stories with a maximum building height of 41 feet 8 inches. Townhome units are three- and four-bedroom plans, ranging from approximately 1,400 to 2,130 square feet. The project includes five three-bedroom moderate-income affordable ownership units (inclusionary units).

On-site parking consists of 98 covered spaces in the attached two-car garages (one per unit), plus two on-site guest parking spaces. An additional 11 on-street parking spaces would be provided along School Street and Country Club Drive. The project also includes internal walkways, landscaping, stormwater management facilities, and common open-space amenities.

Grading for the project totals approximately 6,600 cubic yards, comprising 750 cubic yards of cut and 5,850 cubic yards of fill. The site is primarily level; grading is required to prepare the site for buildings, access drives, walkways, landscaping, and stormwater facilities. 41 trees would be removed—13 of which are redwoods—all of which appear to have been planted as part of the original office development landscaping. Thirty-eight replacement trees would be replanted as part of the project.

A 30-foot setback from the top of the Laguna Creek bank would be established and recorded on the subdivision map; no buildings would be constructed within this area. A retaining wall not exceeding 3 feet in height is proposed within a limited portion of this setback at the site's northeast corner, adjacent to the existing trail.

Required off-site improvements include: construction of a Class I shared pedestrian and bicycle path along Country Club Drive, connecting to the Lafayette-Moraga Regional Trail; removal of landscaping along the Country Club Drive frontage to accommodate additional parking and bioretention areas; revision of trail and drainage easement boundaries to align with the improved trail; and intersection improvements at the Country Club Drive and School Street intersection, including a right-turn lane, curb extensions, a median

refuge, and new marked crosswalks to improve pedestrian and bicycle safety.

Planning Conditions

1. The plans submitted for final map, grading and construction shall be substantially in accordance with the plans approved by the Planning Commission acting as the Design Review Board on July 7, 2026, Minor revisions to the plans may be approved administratively by the Planning Director, including minor adjustments to building footprints and dimensions. Any significant changes to the plans will require re-submittal to the Design Review Board for approval.

2. These conditions of approval and the Mitigation Monitoring and Reporting Program shall be printed on the first or second sheet of each plan set submitted for a building or grading permit pursuant to this approval, under the title 'Conditions of Approval.' Subsequent sheets may also be used if the first sheet is not of sufficient size to list all the conditions. The sheet(s) containing the conditions shall be the same size as those sheets containing the construction drawings; 8- 1/2" by 11" sheets are not acceptable. The applicant shall provide a written response to each condition and how it is addressed by the applicant.

3. CEQA Compliance. All required mitigation measures identified in the Mitigation Monitoring and Reporting Program (MMRP) EIR, (SCH#2022020106) as specific to this project and included as Attachment 1 of these conditions**,** shall be implemented and monitored in accordance with Town procedures. If a conflict arises between any of these conditions and the mitigation measures identified in the MMRP for the EIR, the more stringent requirement shall apply.

4. Applicant Responsible for Compliance with Conditions. The applicant shall ensure compliance with all of the conditions herein, including submittal to the project planner of required approval signatures at the times specified. Applicant's failure to comply with any condition may result in construction being stopped, issuance of a citation, and/or modification or revocation of the approval.

5. Town staff (including authorized agents) shall have the right to enter the subject property to verify compliance with these conditions. The holder of any permit associated with this project shall make the premises available to Town staff during regular business hours and shall, upon request, make records and documents available to Town staff as necessary to evidence compliance with the terms and conditions of the permit.

6. Where continued project review, including but not limited to, compliance with the conditions of approval or applicant-initiated changes to the project requires staff work, that time shall be billed at the Town's established billing rates. The Town may utilize consultants with the costs paid by the applicant.

7. The applicant shall apply for and pay all appropriate fees for building permits, plan checks, and inspections.

8. All new improvements constructed on the site shall be in compliance with all local State and federal laws, statutes, ordinances, regulations, rules, orders, judgments, decrees, permits, approvals and the like requirements applicable thereto and in force the time thereof ("applicable law"), and as may be legally modified by a development agreement. "Local, state and federal" applicable law shall include without limitation, the applicable laws and regulations of the Town of Moraga; Contra Costa County; Moraga-Orinda Fire District, Bay Area Air Quality Management District, San Francisco Bay Area Regional Water Quality Control Board; California Department of Fish and Wildlife, US Army Corps of Engineers; State of California; and United States of America. The project plans shall clearly delineate the right-of-way (School Street and Country Club Drive) and ensure that all stormwater improvements (excluding landscaping) and retaining walls (including but not limited to) are located on the property (and not in the right-of-way).

9. The applicant shall file for an “Address Application” with the Town of Moraga Planning Department to establish addresses for the new townhomes.

10. The project shall provide five (5) moderate-income below market rate three-bedroom inclusionary dwelling units (“Inclusionary Units”), which are required to comply with the State Density Bonus Law (Government Code Section 65915) and Town of Moraga Chapter 8.180 and Section 8.172.070. Prior to the issuance of a building permit for the first townhome or approval of the final map, whichever occurs first, the applicant shall enter into a recorded Affordable Housing Agreement with the Town, in a form acceptable to the Town, that implements Government Code Section 65915 and Moraga Municipal Code Section 8.180.050.C and 8.172.070. The Affordable Housing Agreement shall include any terms and affordability standards determined by the Town to be necessary to ensure such compliance. The Inclusionary Units shall be designated in the Affordable Housing Agreement with the Town and shall be reasonably dispersed throughout the project; may be up to thirty (30) percent smaller than the market-rate units; and shall be comparable with the design or use of non-Inclusionary Units in terms of appearance, materials and finish quality.

11. The Moraga-Orinda Fire District shall review and approve the construction plans. Verification of MOFD approval shall be submitted to the Town of Moraga Planning Department.

12. A Construction & Demolition Debris Recycling Waste Management Plan Acknowledgement Form shall be submitted to the Planning Department prior to issuance of the grading or building permit for the project.

13. The project shall comply with the Model Water Efficient Landscaping Ordinance Sections 492.6(a)(3)(B) (C), (D), and (G) of the State Model Water Efficient Landscaping Ordinance. The submittal requirements per Model Water Efficient Landscape Ordinance Section 492.3, 492.4, 492.5, 492.6, 492.7, 492.8, 492.9,

492.10, 492.11, and 492.12, due at building permit plan check are:

a. Project information, including: date, project applicant, project address (if available, parcel and/or lot number(s)), total landscape area (square feet), project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed), water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well, checklist of all documents in Landscape Documentation Package, project contacts to include contact information for the project applicant and property owner, applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
b. Water Efficient Landscape Worksheet including: hydrozone information table, water budget calculations, Maximum Applied Water Allowance (MAWA), and Estimated Total Water Use (ETWU)
    i. soil management report;
    ii. landscape design plan;
    iii. irrigation design plan; and
    iv. grading design plan.
    v. Certification of Completion
    vi. Irrigation Scheduling
    vii. Landscape and irrigation maintenance Schedule
    viii. Irrigation audit, irrigation survey, and irrigation water use analysis.

14. External vents, mechanical equipment, gas and electric meters shall be screened from view of adjoining residential uses, public or common sidewalks and pathways, and plazas with fencing or landscaping to the satisfaction of the Town Planning Department.

15. Permanent mechanical equipment such as a motor, compressor, pump or compactor which would be a source of structural vibration or structure-borne noise shall be shock mounted with inertia blocks or bases or vibration isolators, unless it can be shown that it will not be in excess of Town standards.

16. A minimum of two hundred (200) cubic feet of enclosed weather-proof and lockable private storage space in addition to guest, linen, pantry and clothes closets customarily provided shall be provided for each unit.

17. Utility transformers that are outside the public right-of-way should have adequate access provided for proper maintenance. Any above ground installation must include adequate landscape screening to the satisfaction of the Town Planning Department so as not to be viewable from public view.

18. The project shall include parking for at least six bicycles.

19. Any electrical vehicle (EV) charging stations required under the California Building Code shall be designed as follows:
    a. Each EV charging space must include a posted sign and painted curb, or

ground markings, indicating that the space is exclusively for EV charging purposes.

b. EV charging equipment must be located so that pedestrians are not required to cross between the EV charging space and the EV charging equipment. The EV charging equipment may not obstruct any Americans with Disabilities Act-compliant sidewalk, entrance, curb-cut, or ramp, while in use or otherwise.
c. EV charging equipment must be illuminated by lighting to enable the equipment to be used at night.
d. Concrete-filled steel bollards or other similar barriers must be installed between EV charging equipment and an EV charging space if either of the following applies:
    i. The EV charging equipment is located less than twenty-four (24) inches away from the EV charging space that it serves; or
    ii. The EV charging equipment is located twenty-four (24) inches or more away from the EV charging space that it serves and does not include, between the space and the equipment, a curb measuring at least six inches high.

20. For trees that will be preserved, the project shall implement tree protection measures identified in the Arborist Reports prepared by Bob Peralta Arbor Consulting dated February 11, 2023, and June 26, 2024.

21. Any new access gates onto the Lafayette-Moraga Trail shall open inward towards the development and not into the trail where they may conflict with trail users.

22. The project includes realignment of the portion of Lafayette-Moraga Regional Trail easement that crosses the project site east of Laguna Creek, to center it on the existing paved trail, with a minimum easement width of seven (7) feet on either side of the centerline of the existing trail (14 feet total width). The new easement alignment and width shall be subject to review by the Town of Moraga and East Bay Regional Parks District. The new alignment shall be reflected in the final map.

23. If the trail needs to be closed at any time during construction, the applicant shall work with the East Bay Regional Park District to coordinate a detour if possible, and to communicate any detours or closures to the public with at least 30 days' notice. If work or staging will take place within the trail corridor at any time during construction the contractor should obtain an encroachment permit at accesspermit@ebparks.org.

24. The retaining wall proposed east of the Lafayette-Moraga Regional Trail shall not be located within the realigned trail easement and shall be setback at least two feet from the improved asphalt edge of the trail with landscape groundcovers and shrubs consistent with the approved planting pallet planted between the trail and the base of the wall. Plantings within the trail easement shall be reviewed and approved by the East Bay Regional Park District. The existing split rail fence running along the Lafayette Moraga Regional Trail shall be repaired or replaced to

the standards of the East Bay Regional Parks District https://www.ebparks.org/public-info/bids-rfps/district-standard-plans#fences. This fence may be located within the trail easement. The portion of fence fronting the retaining wall shall be removed.

25. The applicant shall submit grading plans for review and approval by the Town Public Works Department and Planning Department prior to submitting them to the Contra Costa County Grading Division. The submittal shall include a certification letter from the project geotechnical engineer confirming they have reviewed the plans, which may include supplemental recommendations, as necessary. The applicant shall obtain and provide a copy of a grading permit issued by the Contra Costa County Grading Division to the Planning Department and Public Works Department prior to commencement of work.

26. The project geotechnical engineer shall review the final foundation design drawings for the building for conformance with the recommendations in the Geotechnical Investigation report prior to release of the building permit. A professional certification letter shall be submitted to the Town confirming their review, which may include supplemental recommendations, as necessary.

General Engineering Requirements

27. The applicant shall comply with the Moraga Municipal Code, the Town's Subdivision Ordinance, applicable Public Works standards, these Engineering/Public Works Conditions of Approval, and all applicable requirements related to grading, drainage, stormwater, frontage improvements, right-of-way work, utilities, and subdivision improvements.

28. Prior to issuance of any grading permit, encroachment permit, building permit, final map approval, or construction authorization, as applicable, the applicant shall submit a written Engineering/Public Works condition compliance matrix identifying how and where each Engineering/Public Works condition is satisfied. The applicant shall pay all applicable Town Engineering/Public Works plan check, inspection, permit, consultant, peer review, and processing fees.

Final Map, Agreements, Easements, and Security/Bond(s)

29. Prior to issuance of the first building permit, the applicant shall obtain approval and recordation of a final map or other subdivision map acceptable to the Town for the approved condominium project. The final map shall be consistent with the approved Vesting Tentative Map, these Conditions of Approval, and all required dedications, easements, access rights, maintenance obligations, and subdivision requirements.

30. Prior to final map approval, the applicant shall submit a complete final map package for Town review, including the final map, current title report, closure calculations, easement documents, legal descriptions and plats, subdivision improvement plans, engineer's estimate, draft CC&Rs, maintenance documents,

and a condition compliance matrix.

31. Prior to final map approval or issuance of the first building permit, whichever occurs first, the applicant shall enter into any required subdivision improvement agreement, inspection agreement, or other agreement required by the Town Engineer or designee to provide for the construction, inspection, completion, maintenance, warranty, and security/bonding of required public and private improvements.
32. The applicant shall provide security/bond(s) in an amount approved by the Town Engineer or designee for required public improvements, frontage improvements, storm drainage improvements, erosion control, and any other improvements required to be guaranteed prior to construction, final map approval, or occupancy. Amounts will be based on estimated construction costs for 100% of the estimated cost.
33. Prior to final map approval, the applicant shall clearly identify all improvements that will be privately owned and maintained, all improvements proposed for public ownership or public use, and all easements or access rights necessary for construction, inspection, maintenance, emergency access, public access, drainage, utilities, stormwater, and long-term operation. The Town will not accept private streets, alleys, utilities, storm drainage facilities, lighting, landscaping, retaining walls, stormwater facilities, or other private project improvements for ownership or maintenance unless expressly approved by the Town Council or Town Engineer or designee in writing.
34. Prior to commencement of any work outside the project property, the applicant shall obtain all required rights of entry, temporary construction easements, permanent easements, permits, or other legal access rights necessary to construct, inspect, maintain, or operate the approved improvements.

Improvement Plans, Frontage Improvements, and Encroachment Permit

35. Prior to issuance of any grading permit, encroachment permit, or building permit for site improvements, the applicant shall submit improvement plans prepared by a registered civil engineer for review and approval by the Town Engineer or designee. The improvement plans shall include, as applicable, grading, drainage, storm drain, frontage improvements, sidewalk, curb and gutter, driveways, ADA facilities, pavement restoration, signing and striping, street lighting, joint trench, utilities, erosion control, traffic control, and construction details.
36. All work within the public right-of-way, including but not limited to frontage improvements, driveways, sidewalk, curb and gutter, curb ramps, pavement cuts, utility work, drainage work, traffic control, signing, striping, lighting, and construction staging, shall require an encroachment permit from the Public Works Department prior to construction.
37. All required improvements along School Street and Country Club Drive shall be shown on the improvement plans and shall be reviewed and approved by the Town Engineer or designee prior to construction. Required improvements may include curb, gutter, sidewalk, driveway approaches, curb ramps, ADA path-of-travel

improvements, pavement restoration, signing and striping, lighting, drainage facilities, frontage landscaping, utility work, and other improvements required by these conditions or by the Town Engineer or designee.

38. Sidewalk, trail, curb ramps, driveways, pedestrian paths, bicycle paths, and accessible routes within the project frontage and public right-of-way shall comply with current Town standards, the Americans with Disabilities Act, California accessibility requirements, and applicable Public Works requirements.
39. The final Country Club Drive frontage design shall be reviewed against the applicable Moraga Center Specific Plan and Town design standards for School Street, including the Lafayette-Moraga Regional Trail standard where applicable. Where the Town determines that the School Street trail standard applies, the frontage shall include a 16-foot trail section consisting of a 6-foot pedestrian path/sidewalk and a 10-foot bicycle path, unless an alternate configuration is approved by the Town Engineer or designee.
40. Any existing cracked, displaced, damaged, or nonconforming curb, gutter, sidewalk, curb ramp, or driveway, along the project frontages that presents a tripping hazard shall be removed and replaced or repaired to the satisfaction of the Town Engineer or designee.
41. After completion of any project utility work, frontage work, pavement cuts, driveway work, and other construction within School Street or Country Club Drive, the applicant shall restore affected pavement areas to the satisfaction of the Town Engineer or designee. Applicant will photograph all existing conditions prior to work commencing and will only be responsible for damage which occurred during construction the Town Engineer will not unreasonably require work to existing damaged roadways not caused by Applicant.

Traffic, Parking, Bicycle, and Pedestrian Improvements

42. Prior to approval of the improvement plans or issuance of an encroachment permit, whichever occurs first, the applicant shall submit final plans for the transportation-related improvements identified in the project traffic analysis and supplemental traffic memorandum, subject to review and approval by the Town Engineer or designee.
43. The final improvement plans shall include the following transportation improvements unless modified or deemed unnecessary by the Town Engineer or designee based on final engineering review:
    a. Bicycle parking in appropriate common areas, visitor areas, or other accessible locations serving residents and guests;
    b. 20 feet of red curb on both sides of the School Street project driveway;
    c. A Class I shared-use facility along Country Club Drive between School Street and the Lafayette/Moraga Regional Trail, designed in accordance with the applicable Town-approved cross-section and Moraga design standards;
    d. Replacement of the existing channelized eastbound right-turn lane and

associated wedge at the Country Club Drive / School Street intersection with an eastbound right-turn lane pocket;

e. A bulb-out at the southwest corner of the Country Club Drive / School Street intersection;

f. An ADA-compliant median pedestrian refuge island for the west leg crosswalk of the Country Club Drive / School Street intersection, including any necessary roadway cross-section revisions; and

g. A high-visibility crosswalk on the south leg of the Country Club Drive / School Street intersection, including dual curb ramps at the proposed southwest corner bulb-out to provide an accessible perpendicular crossing.

44. The applicant shall provide final signing and striping plans for all on-street parking, red curb, crosswalks, stop controls, fire lane markings, bicycle/pedestrian facilities, and other traffic control improvements for review and approval by the Town Engineer or designee.

45. The applicant shall maintain adequate sight distance at all project driveways and intersections, including the School Street driveway, Country Club Drive driveway, internal private street intersections, and pedestrian crossings, in accordance with the Moraga Municipal Code, Town standards, and requirements of the Town Engineer or designee. Landscaping, walls, fences, signs, utility boxes, lighting, and other improvements shall be located and maintained so they do not obstruct required sight distance.

46. Final on-street parking configurations along School Street and Country Club Drive shall be reviewed and approved by the Town Engineer or designee. Parking shall not be permitted where it would conflict with sight distance, fire access, pedestrian crossings, ADA access, driveway operations, or required red curb.

Utilities and Lighting

47. Prior to approval of improvement plans, the applicant shall submit water, sewer, storm drainage, and dry utility plans and studies to the satisfaction of the Town Engineer or designee and applicable utility agencies. The applicant shall provide sanitary sewer, water, storm drainage, electric, gas, communications, and other utility improvements, with corresponding easements, as required by the Town Engineer or designee and applicable agencies.

48. The applicant shall obtain all required approvals, will-serve letters, clearances, or permits from applicable outside agencies, including Central Contra Costa Sanitary District, East Bay Municipal Utility District, Moraga-Orinda Fire District, Pacific Gas and Electric Company, communication providers, and any other utility or regulatory agency with jurisdiction over the project.

49. All new utility distribution facilities serving the project shall be installed underground from the point of connection unless otherwise approved by the Town Engineer or designee. Joint trench plans shall be submitted with the improvement plans and shall identify trench locations, utility sizes, utility structures, service laterals, meters, and utility conflicts. If relocation, protection, extension, or undergrounding of existing utility facilities is required as a result of the project, such

work shall be completed at the applicant's expense.

50. Prior to approval of improvement plans, the applicant shall submit a photometric analysis for the project frontage and public improvements (sidewalk and adjacent roadway travel lane). If the analysis shows inadequate lighting for vehicle, pedestrian, bicycle, or intersection safety, the applicant shall install or upgrade street lighting as required by the Town Engineer or designee and consistent with applicable Town policies and lighting standards (RP-8).
51. Prior to sale of the first unit or issuance of the first Certificate of Occupancy, whichever occurs first, the property shall annex into the Town of Moraga Street Lighting Assessment District AD 1979-1, if required by the Town. Annexation to the lighting district does not provide for Town maintenance of private on-site lighting or private street lighting.

Drainage, Storm Drain, and Hydrology

52. Prior to approval of improvement plans or issuance of a grading permit, whichever occurs first, the applicant shall submit a final drainage plan. report, hydrology and hydraulic calculations, drainage area map, storm drain plans, and supporting technical studies for review and approval by the Town Engineer or designee.
53. The final drainage design shall comply with the Town's Subdivision Ordinance, current Public Works standards, applicable Contra Costa County Flood Control and Water Conservation District criteria, and all other applicable drainage requirements. All stormwater entering or originating on the site shall be collected and conveyed without adverse diversion to an adequate storm drainage facility, natural watercourse, or other approved discharge point.
54. The applicant shall verify the adequacy and condition of connecting drainage facilities that will receive project runoff. If the downstream system is not adequate for the required design storm or is not in acceptable condition to receive project runoff, the applicant shall construct improvements, repairs, replacements, or other measures approved by the Town Engineer or designee.
55. The applicant shall submit a condition assessment, CCTV video, and NASSCO-based evaluation for any existing storm drain pipe, culvert, inlet, outfall, or drainage facility that the project proposes to connect to, modify, rely upon, or discharge through, as required by the Town Engineer or designee. Any damaged, deficient, undersized, or unsuitable facilities shall be repaired, replaced, or upgraded by the applicant to the satisfaction of the Town Engineer or designee, only as it relates to on site drainage connections to public storm drain system.
56. Final drainage plans shall identify and preserve 100-year overland release paths. Overland flow paths shall be designed so that stormwater does not flood structures, garages, basements, underground areas, adjacent properties, public streets, or critical access routes.
57. The applicant shall demonstrate whether detention, peak-flow metering, hydromodification management, or other flow-control measures are required under applicable Town standards, Contra Costa Clean Water Program guidance, the Municipal Regional Stormwater Permit, or other applicable drainage criteria. If

required, the applicant shall design and construct such facilities to the satisfaction of the Town Engineer or designee.

58. Approval of the tentative map or planning entitlement does not constitute final approval of the project's drainage design, detention requirements, hydromodification applicability, downstream adequacy, or storm drain points of connection. Final requirements shall be determined through the Town's review of the final drainage report, stormwater submittals, and improvement plans.

59. Private storm drain facilities shall be privately owned and maintained. Prior to final map approval the applicant shall dedicate or record private storm drain easements, maintenance obligations, and access rights as required by the Town Engineer or designee. Storm drainage shall not be allowed to drain across sidewalks, driveways, curb ramps, pedestrian paths, public streets, private streets, alleys, or accessible routes in a concentrated or unsafe manner.

Stormwater C.3, RAC, and Long-Term Maintenance

60. The project shall comply with the Town's Stormwater Management and Discharge Control Ordinance, the Municipal Regional Stormwater Permit, Contra Costa Clean Water Program C.3 requirements, the Contra Costa Clean Water Program Stormwater C.3 Guidebook, and all applicable Regional Water Quality Control Board requirements.

61. Prior to approval of improvement plans or issuance of a grading permit, whichever occurs first, the applicant shall submit a Stormwater Control Plan and C.3 compliance documentation for review and approval by the Town Engineer or designee. The submittal shall identify impervious area, drainage management areas, site design measures, source-control measures, stormwater treatment requirements, use of Regional Alternative Compliance, any remaining on-site stormwater facilities or obligations, and all long-term maintenance responsibilities.

62. The project shall use the Contra Costa County Regional Alternative Compliance system, the applicable RAC JPA/CFD process, or another Town-approved alternative compliance mechanism to satisfy all or part of the project's C.3 stormwater treatment requirements, subject to approval by the Town Engineer or designee and applicable RAC administrator. Use of RAC or another alternative compliance mechanism shall not waive or reduce the applicant's obligation to comply with applicable drainage, hydromodification, flow-control, flood control, construction-phase stormwater, erosion control, source-control, site-design, private drainage maintenance, or creek protection requirements.

63. If the applicant relies on RAC or another Town-approved alternative compliance mechanism, the applicant shall, prior to final map approval, confirm project eligibility; confirm the required compliance units or equivalent stormwater treatment obligation; execute all required participation, purchase, funding, and maintenance agreements; purchase or otherwise secure the required compliance units; complete annexation into the applicable Community Facilities District or other approved long-term maintenance financing mechanism; and provide written evidence of compliance to the Town Engineer or designee.

64. No private stormwater treatment, detention, or flow-control facility shall be located within the public right-of-way unless specifically approved by the Town Engineer or designee and Town Attorney. Any such approval shall require documentation of public benefit, access rights, maintenance responsibility, liability, and long-term replacement obligations, and shall be reflected in an agreement, easement, or recorded instrument acceptable to the Town.
65. Prior to issuance of the first Certificate of Occupancy, the applicant shall submit and record, as applicable, a Stormwater Operation and Maintenance Plan, stormwater maintenance agreement, deed notification, private drainage maintenance agreement, CC&R provisions, right-of-entry, or other maintenance mechanism required by the Town Engineer or designee for all privately maintained stormwater, drainage, and water quality facilities not maintained through RAC or another approved regional mechanism.
66. Prior to issuance of the first Certificate of Occupancy, all new and existing storm drain inlets, catch basins, or drainage structures within the project site and along the project frontages that receive project runoff shall be marked with “No Dumping - Drains to Creek” or other Town-approved storm drain marker. The project CC&Rs, Stormwater Operation and Maintenance Plan, or other approved maintenance document shall require the HOA or other responsible private entity to maintain the markings in legible condition in perpetuity.

Creek, Easements, and Resource Agency Requirements

67. The final plans shall clearly identify Laguna Creek, top of bank, applicable creek setback limits, existing and proposed easements, public access areas, trail areas, drainage outfalls, and any proposed improvements or construction activities within or near the creek setback. Structures, retaining walls, utilities, storm drain facilities, outfalls, lighting, grading, construction access, landscaping, and other improvements shall be located outside the applicable creek setback unless expressly approved by the Town and supported by all required permits, technical studies, and environmental clearances.
68. Prior to issuance of any grading permit, encroachment permit, or building permit authorizing work in or near Laguna Creek, the applicant shall provide evidence of all required approvals or permits from the Regional Water Quality Control Board, California Department of Fish and Wildlife, U.S. Army Corps of Engineers, or other regulatory agencies with jurisdiction, if such approvals or permits are required.
69. Prior to final map approval , the applicant shall establish, confirm, modify, replace, or record all required trail, public access, storm drain, utility, emergency access, construction access, and maintenance easements to the satisfaction of the Town Engineer or designee and Town Attorney. If any existing public access easement, trail access easement, drainage easement, or utility easement is proposed to be modified, relocated, quitclaimed, or replaced, the applicant shall provide all supporting title documents, legal descriptions, plats, agency approvals, and replacement easement documents for review and approval prior to recordation.

Grading, Geotechnical, Demolition, and Construction Controls

70. Prior to issuance of a County grading permit, the applicant shall submit final grading plans, a design-level geotechnical investigation, and all required geotechnical updates to the Town for review and approval. The grading plans shall be prepared by a registered civil engineer and shall be consistent with the approved project plans, final geotechnical report, drainage report, stormwater requirements, erosion control requirements, and these Conditions of Approval. The applicant shall implement all recommendations of the approved geotechnical investigation and any required supplemental geotechnical reports.

71. Prior to issuance of a County grading permit, the applicant shall provide evidence of all required grading, erosion control, stormwater, SWPPP, NOI, hauling, demolition, and agency permits. If grading or demolition involves hauling on public streets, the applicant shall obtain any required hauling permit and submit a haul route plan, truck trip estimate, schedule, and traffic control plan for review and approval by the Town Engineer or designee.

72. Prior to issuance of a grading permit, demolition permit, encroachment permit, or building permit, as applicable, the applicant shall submit a Construction Management Plan for review and approval by the Public Works Director/Town Engineer or designee. The plan shall include construction staging, construction access, worker parking, truck routes, delivery hours, lane closures, sidewalk closures, pedestrian detours, dust control, street sweeping, public notification, emergency access, school coordination, noise controls, and identification of an on-site construction manager. Construction activities that affect School Street, Country Club Drive, on-street parking, pedestrian access, or truck movements near The Saklan School shall be coordinated and shall avoid school drop-off and pick-up periods unless otherwise approved by the Town Engineer or designee.

73. Prior to commencement of grading, demolition, major site work, or work within the public right-of-way, the applicant shall provide the Town with notice of a pre-construction coordination meeting and shall invite the project contractor, project civil engineer, project geotechnical engineer, construction manager or site superintendent, erosion control/SWPPP representative as applicable, and any outside agencies or affected parties whose facilities, permits, or operations may be affected by the work, including Contra Costa County, Moraga-Orinda Fire District, Central Contra Costa Sanitary District, East Bay Municipal Utility District, utility providers, and The Saklan School, as applicable. Attendance by the Town, County, outside agencies, utilities, or other invited parties is encouraged but not required for the meeting to proceed, provided the applicant has provided reasonable notice and has obtained all required permits, approvals, and clearances. The applicant shall provide the Town with the meeting agenda, invitation list, and meeting notes or action items.

74. At least fourteen calendar days prior to commencement of demolition, grading, major site work, or substantial work within the public right-of-way, the applicant shall provide written construction notice to property owners and occupants within 600 feet of the project site boundary, The Saklan School, and any other nearby property or facility identified by the Town Engineer or designee. The notice shall include the anticipated start date, construction hours, major phases of work, haul

routes if applicable, lane/sidewalk closure information if applicable, and contact information for the applicant's on-site construction manager or other responsible contact person. The notice shall be reviewed and approved by the Town prior to distribution.

75. Prior to commencement of grading, the applicant shall document the existing condition of public streets, sidewalks, curbs, gutters, pavement, drainage facilities, and other public improvements that may be affected by construction. Any damage determined by the Town Engineer or designee to result from project construction shall be repaired by the applicant at the applicant's expense at the last certificate of occupancy.

76. The applicant shall prepare and implement erosion and sediment control plans, construction BMPs, SWPPP documents, and dust control measures as required by the Town, County, Regional Water Quality Control Board, and applicable permits. Erosion control facilities shall be installed, inspected, and maintained before and during the rainy season and after each storm event. Grading operations shall be limited to the dry season unless otherwise approved by the Town Engineer or designee and County grading authority. All disturbed areas shall be stabilized and all erosion control measures shall be operational prior to October 1 or prior to the first forecast rain event, whichever occurs first.

77. Prior to issuance of a grading permit or commencement of site disturbance, whichever occurs first, the applicant shall provide an erosion and sediment control deposit in an amount approved by the Town Engineer or designee. The amount shall be based on the estimated cost to install and maintain the required SWPPP, erosion control, and sediment control measures. The deposit is required due to the proximity of Laguna Creek and shall be available to the Town to correct erosion, sediment, or pollutant discharge issues if the applicant fails to maintain required controls after notice from the Town, or immediately in the event of an emergency or imminent discharge.

78. Construction staging, equipment maintenance, fueling, material storage, concrete washout, stockpiling, and hazardous material storage shall be located outside the creek setback and at least 100 feet from Laguna Creek and any drainage inlet or flow path leading to Laguna Creek, unless a different location is approved by the Town Engineer or designee based on site constraints and approved containment measures. The Construction Management Plan, SWPPP, and erosion control plans shall identify all staging, storage, fueling, maintenance, washout, and spill-response areas and shall include BMPs to prevent sediment, fuel, fluids, concrete washout, or other pollutants from entering Laguna Creek, the public right-of-way, or the storm drain system.

79. The applicant shall comply with applicable demolition requirements for PCBs, mercury, hazardous materials, construction and demolition debris, waste management, and stormwater pollution prevention. Required documentation shall be submitted to the Town prior to demolition or building permit issuance, as applicable.

Final Inspection, Occupancy, As-Builts, and Maintenance

80. Prior to issuance of the first Certificate of Occupancy, the applicant shall complete all required public improvements, frontage improvements, drainage improvements, stormwater improvements, traffic improvements, bicycle/pedestrian improvements, lighting improvements, utility improvements, and other improvements required by these conditions, unless otherwise approved by the Town Engineer or designee through a deferred improvement agreement and security/bond(s).
81. Prior to final occupancy or release of improvement security/bond(s), the applicant shall submit record drawings/as-builts for all public improvements, private streets, private drainage facilities, storm drain facilities, stormwater facilities, frontage improvements, utilities, and other improvements required by the Town Engineer or designee. The project civil engineer shall certify that improvements were constructed in substantial conformance with the approved improvement plans and shall identify any field changes or deviations.
82. Prior to final occupancy or release of grading security/bond(s), the project geotechnical engineer shall submit a final grading completion report certifying that grading, fills, retaining walls, subdrains, drainage improvements, and related improvements were constructed in accordance with the approved grading plans and geotechnical recommendations.
83. Prior to final occupancy, the applicant shall complete a final walk-through with the Town. Any punchlist items identified by the Town shall be completed to the satisfaction of the Town Engineer or designee prior to final acceptance, occupancy release, or security/bond release, as determined by the Town Engineer or designee.
84. The project CC&Rs, maintenance agreements, deed notifications, or other recorded documents shall clearly notify all future owners of the private obligation to maintain private streets, alleys, sidewalks, driveways, lighting, landscaping, retaining walls, drainage facilities, stormwater facilities, storm drain inlets, pipes, access areas, fire access areas, and other private improvements in perpetuity.
85. The HOA or other responsible private entity shall maintain all private improvements in a safe, functional, clean, and code-compliant condition in perpetuity. The Town may require correction of unsafe, failed, obstructed, or poorly maintained private improvements where such conditions affect public safety, public access, drainage, stormwater compliance, emergency access, or adjacent public facilities.
86. This project shall be subject to all Town-wide development impact fees. The fees shall be paid prior to certificate of occupancy/Final being granted, for each unit, and will be calculated from the vested SB330 date of the original application, including automatic annual adjustments based on an independently published cost index that is referenced in the ordinance or resolution establishing the fee or other monetary exaction, consistent with Government Code §65589.5, subd. (o)(2)(A).
87. Landscaping shall be installed per the project plans. A letter shall be submitted by the landscape architect confirming that the landscaping and irrigation has been

installed consistent with the project landscaping plans and that the irrigation has been tested and is operational.

88. All new landscaping and irrigation shall be consistent with the State Model Water Efficient Landscaping Ordinance, and any additional requirements imposed by the State and/or East Bay Municipal Utility District regarding water conservation. The landscape architect shall certify that the landscaping and irrigation comply.

89. All landscaping shall be irrigated with an automatic system and permanently maintained. A landscape maintenance bond shall be posted to secure the replacement of any necessary plant material by the developer for a period of one year.

90. The Planning Department shall conduct a final inspection of the site to verify compliance with the project plans and conditions of approval.

At All Times

91. The applicant shall ensure compliance with all of the conditions herein, including submittal to the project planner of required approval signatures at the times specified. Notice of failure to comply with any condition shall be provided to the applicant by the Town, and a reasonable opportunity to gain compliance provided. Applicant's failure to comply with any condition may result in construction being stopped, issuance of a citation, and/or modification or revocation of the permit.

92. Noise and dust generating construction and grading activities shall take place only between the hours of 8:00 AM and 5:00 PM on weekdays, excluding Town observed holidays. Work may temporarily be permitted outside of these hours for utility work, grading work if deemed necessary by the project geotechnical engineer to address a potentially hazardous and unforeseen condition that requires immediate attention, or other construction activities, on a case-by-case basis, with the approval of the Planning Director.

93. The approved construction and grading are subject to, and shall comply with, all applicable Town Ordinances and laws and regulations of other governmental agencies.

94. All landscaping approved under this permit shall be maintained for the life of the project. The applicant shall record a landscaping maintenance agreement prior to occupancy of the first townhome.,

95. All exterior lighting shall be directed downward and inward towards the property and the lighting shall be 3,000 kelvin or lower. Wherever possible, motion or light-detecting switches that turn off lights when they are not needed shall be used.

96. Mirror glazing is prohibited on the townhome windows.

97. EV charging spaces if required under the California Building Code:

    a. An electric vehicle may occupy an EV charging space only while charging is in progress. Parking in an EV charging space when charging is not in progress is prohibited.

    b. EV charging equipment must be maintained in working order at all times. The name and telephone number of the party responsible for maintaining and repairing the equipment must be posted on the equipment and updated as necessary.

98. This permit and each condition contained herein shall be binding upon the applicant and any transferor, or successor in interest.

99. The applicant and/or property owner agree to defend, indemnify, and hold harmless the Town of Moraga, its agents, officers, council members, employees, boards, commissions, and Council from any and all claims, actions or proceedings brought against any of the foregoing individuals or entities, seeking to attack, set aside, void or annul any approval of the application or related decision, or the processing or adoption of any environmental documents, actions or approvals which relate to the approval. This indemnification shall include, but is not limited to, all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision, whether or not there is concurrent, passive or active negligence on the part of the Town, its agents, officers, council members, employees, boards, commissions, and Council. If for any reason any portion of this indemnification agreement is held to be void or unenforceable by a court of competent jurisdiction, the remainder of the agreement shall remain in full force and effect. The Town of Moraga shall have the right to appear and defend its interest in any litigation arising from the approval of the application or any related decision through its Town Attorney or outside counsel selected by the Town Attorney. The applicant shall be required to reimburse the Town for attorney's fees incurred by the Town in connection with the litigation.

100. The project approval shall be effective for three years from the date of approval by the Planning Commission. If neither a building or grading permit is issued, or Final Map recorded by that date, the approvals become null and void. However, this approval may be renewed by the Planning Director for a maximum period of one (1) year provided the applicant places such a request in writing to the Planning Director with a showing good cause. If the vesting tentative map qualifies for an automatic extension under State Law, the design review and grading permits shall be automatically extended to align with the vesting tentative map extension time.

Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with applicable mitigation measures and implementation programs in the Town of Moraga Comprehensive Advanced Planning Initiative Final Environmental Impact Report (CAPI EIR, SCH #2022020106) during the School Street Townhomes project implementation phase. For each applicable mitigation measure or implementation program, specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

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Mitigation Measure/ Implementation Program	Action Required	Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Air Quality							
AQ-1. Construction Equipment Emission Control Measures							
Based on BAAQMD *CEQA Guidelines* (2017), construction-related TAC and PM impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors. Construction activity from the projects developed under the Housing Element or Bollinger Canyon Rezone that are within 1,000 feet of sensitive receptors; utilize more than three pieces of construction equipment simultaneously onsite; have a duration of construction longer than two months; and exclude Tier 4 Final construction equipment shall be required to prepare an HRA assessment. An HRA shall be conducted prior to the issuance of a permit to construct. The applicant would be required to have it prepared by a third party or by if Town staff would be capable. The HRA would be reviewed by the Town in-house, or a contracted consultant. If the findings of the HRA assessment exceed BAAQMD health risk thresholds, then development projects under the Housing Element or Bollinger Canyon Rezone shall incorporate the following construction equipment emission control measures to the maximum extent feasible: • Implement diesel construction equipment meeting USEPA Tier 4 Final emission standards for off-road heavy-duty diesel engines. If use of USEPA Tier 4 equipment is not feasible, diesel construction equipment meeting Tier 4 Interim or Tier 3 emission standards shall be used. Tier 3 equipment shall use a CARB Level 3 diesel particulate filter. • Perform periodic site inspections during construction to verify compliance of USEPA Tier 4 (Final or Interim) or USEPA Tier 3 equipment. • Use alternative fueled or catalyst equipped diesel construction equipment. • Minimize idling time to five minutes or less. • Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable diesel generator set). • Curtail construction during periods of high-ambient-pollutant concentrations; this may include ceasing of construction activity during the peak-hour vehicular traffic on adjacent roadways. • Implement activity management (e.g., rescheduling activities to reduce short-term impacts).	The Town will require utilization of construction equipment meeting USEPA Tier 4 emission standards.	As part of the Town's development approval and building permit issuance and ongoing throughout construction of development facilitated by the Planning Initiative.	Continuously as needed	Town of Moraga Planning Department; on-site construction manager			
Bay Area Air District Basic Construction Mitigation Measures							
2040 General Plan Policy CON-3.2 (Mitigation of Air Quality Impacts) requires mitigation of air quality impacts for new development projects that is consistent with CEQA and incorporates input from the Air District. The latest Air District Basic Construction Mitigation Measures, which they now refer to as "basic best management practices," are outlined below:[1] 1 All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2 All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3 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. 4 All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. 5 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. 6 All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour. 7 All trucks and equipment, including their tires, shall be washed off prior to leaving the site. 8 Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. 9 Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.	The Town will require implementation of the Bay Area Air District Basic Construction Mitigation Measures.	As part of the Town's development approval and building permit issuance and ongoing throughout construction of development facilitated by the Planning Initiative.	Continuously as needed	Town of Moraga Planning Department; on-site construction manager			

[1] Several of the basic best management practices have been modified since publication of the CAPI EIR. The Bay Area Air District recommends implementing the latest practices, and the latest ones are listed here.

Biological Resources				
BIO-1 Biological Resources Screening and Assessment				
For development projects facilitated by the Housing Element that would require vegetation trimming or removal, prior to consideration of the application, the project applicant shall hire a qualified biologist to perform a preliminary biological resources screening, for the Town's review and approval, to determine whether the project has any potential to impact special status biological resources, inclusive of special status plants and animals, sensitive vegetation communities, jurisdictional waters (including creeks, drainages, streams, ponds, vernal pools, riparian areas and other wetlands), critical habitat, wildlife movement area, or biological resources protected under local or regional ordinances. If it is determined that the project has no potential to impact biological resources, no further action is required under this mitigation measure. If the project would have the potential to impact biological resources, a qualified biologist shall conduct a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 50 feet around the project footprint, as is feasible, and to determine the potential impacts to those resources, as approved by the Town. The project-specific biological analysis shall evaluate the potential for impacts to all biological resources including, but not limited to special status species, nesting birds, wildlife movement, sensitive plant communities, critical habitats, and other resources judged to be sensitive by local, State, and/or federal agencies. If the project would have the potential to impact these resources, additional measures may be required and recommendations developed to enhance wildlife movement (e.g., installation of wildlife friendly fencing), as applicable, to reduce impacts to less than significant levels. Additional measures may also include compensatory mitigation when avoidance of a biological resource is not possible. Pending the results of the project-specific biological analysis, Town review, design alterations, further technical studies (e.g., protocol surveys) and consultations with the USFWS, NMFS, CDFW, and/or other local, State, and federal agencies may be required as determined by the Town.	When grading or vegetation trimming or removal is required, the project applicant shall hire a qualified biologist to perform a preliminary biological resources screening, for the Town's review and approval. The Town may require peer review paid by the applicant. If biological resources impacts are possible, the Town will ensure that a qualified biologist conducts additional analysis to document biological resources. The Town shall ensure additional measures are implemented if the qualified biologist determines the project has the potential to impact the biological resources.	Prior to construction	Once	Town of Moraga Planning Department
CAPI EIR Mitigation Measure BIO-1 – Required CRLF Avoidance and Minimization				
If any life stage of the CRLF (*Rana draytonii*) is detected at any time during construction, work in the immediate vicinity of the observation shall cease, and the qualified biologist shall notify the Town and, if required, the USFWS for further direction before work resumes in the affected area. If the USFWS determines that adverse effects to the CRLF cannot be avoided, the project will not commence until further guidance from the USFWS is provided. The following are avoidance and minimization measures to avoid potential impacts to CRLF. • Prior to the initiation of project activities, a qualified biologist shall conduct an environmental sensitivity training for all construction personnel, which will include a description of the CRLF, its habitat, and specific measures described below to avoid adverse effects to the species during the project, including sensitivity training, species identification, and wildlife exclusion fencing. This training will discuss that work will be stopped in the event a CRLF is identified on-site and will provide the appropriate USFWS contact information. • Prior to construction, wildlife exclusion fencing shall be installed along the work area adjacent to Laguna Creek under the direction of a Town-approved qualified biologist. Exclusionary fencing shall include: 1. A minimum 3-foot tall silt fence or wildlife exclusion fence (such as ERTEC or equivalent) with a climbing lip barrier shall be erected along the edge of the construction area for at least 50 feet past the edge of suitable habitat, to provide a solid barrier against wildlife wandering onto the project site. 2. The exclusion fencing shall be maintained throughout construction to delineate Environmentally Sensitive Areas and provide a barrier to CRLF to prevent any possible movement onto the project site during construction. 3. Work area limits shall be clearly marked for activities outside the fence to ensure no activities affect Laguna Creek or CRLF habitat.	Retain a qualified biologist to conduct environmental sensitivity training for all construction personnel. Prior to constructed, install wildlife exclusion fencing along the work area adjacent to Laguna Creek under direction of a Town-approved qualified biologist.	Prior to construction	Continuously as needed	Town of Moraga Planning Department

BIO-2 Pre-Construction Bird Surveys, Avoidance, and Notification				
For construction activities at development sites under the Housing Element initiated during the bird nesting season (February 1 – September 15) involving removal of vegetation or other nesting bird habitat, including abandoned structures and other man-made features, a qualified biologist hired by the Town shall conduct a pre-construction nesting bird survey no more than five days prior to initiation of vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist, including staging and storage areas. The minimum survey radii surrounding the work area shall be the following: 250 feet for non-raptors and 1,000 feet for raptors. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in California Bay Area communities (i.e., qualified biologist). If construction lapses for seven days or longer, the qualified biologist shall conduct another focused survey before project activities are reinitiated. If nests are found, an avoidance buffer shall be determined by a qualified biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The qualified biologist shall observe the active nest to establish a behavioral baseline of the adults and nestlings, if present. The qualified biologist shall continuously monitor the active nests to detect signs of disturbance and behavioral change as a result of construction impacts, such as noise, vibration, odors, or worker/equipment motion. If signs of disturbance and behavioral changes are observed, the qualified biologist shall cease work causing those changes and may contact CDFW or USFWS for guidance. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified as to the existence of the buffer zone as an “Ecologically Sensitive Area” and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the Town prior to the commencement of construction activities. Future project site plans proposed at development sites shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15 and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.	If a project includes removing vegetation or similar bird habitat, the Town shall ensure that a qualified biologist conducts a bird survey before construction. If birds or their habitat are found, the Town shall ensure that the appropriate avoidance buffer is demarcated. The Town shall confirm that the proper statement acknowledging compliance is completed.	Prior to construction; during construction, if necessary.	Once and as needed during construction	Town of Moraga Planning Department
BIO-3 Roosting Bat Surveys and Avoidance Prior to Removal				
Prior to tree or vacant structure removal, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the Town within 30 days of the survey, after which no further action will be required. If day roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the Town’s approval. Additionally, the qualified biologist shall determine compensatory mitigation for temporary or permanent habitat loss due to tree removal, in conjunction with CDFW. The plan shall incorporate the following guidance as applicable: • When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity (outside the breeding and hibernation periods), including the following: a) Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs. b) Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs. • If a tree/structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist’s guidance, the contractor shall implement measures similar to or better than the following: a) If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure. b) If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31). • Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible	If a tree or vacant structure requires removal, the Town shall ensure that a qualified biologist has conducted a survey to detect active bat roosts. If roosts are present, construction will commence only after the Town approves a roosting bat protection plan or proper bat boxes are installed when large amounts of bats are present. The Town may require peer review paid by the applicant.	Prior to construction	Once	Town of Moraga Planning Department

alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two.

- Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required.

If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.

Cultural Resources				
Implementation Program CR-D: Unanticipated Discovery of Cultural Resources.				
Suspend all earth-disturbing work within 60 feet of identified cultural resources. Retain a qualified cultural resources specialist to design and implement feasible mitigation. Mitigation may include but is not limited to avoidance of discovered cultural resources, archaeological testing to determine California Register of Historical Resources eligibility, consultation with descendant communities, and/or implementation of a treatment plan to offset the loss of the resource.	The Town shall ensure that work is suspended, when required, and a cultural resources specialist designs and implements feasible mitigation.	During construction	As needed during construction	Town of Moraga Planning Department
Geology and Soils				
Implementation Program PAL-A: Paleontological Survey.				
Retain a qualified professional paleontologist to determine the project's potential to significantly impact paleontological resources. Mitigation may be required to reduce impacts to paleontological resources during ground disturbing activities.	The Town shall ensure that a qualified professional paleontologist analyzes paleontological sensitivity and includes mitigation, when required. The Town may require peer review paid by the applicant.	Prior to construction; during construction, if necessary.	Once and as needed during construction	Town of Moraga Planning Department
Noise				
NOI-1 Construction Noise Reduction Measures				
The Town shall include the following measures to minimize exposure to construction noise as standard conditions of approval: 10 **Mufflers**. During excavation and grading construction phases, construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards. 11 **Stationary Equipment**. Stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers. 12 **Equipment Staging Areas**. Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers. 13 **Smart Back-up Alarms**. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction. 14 **Signage**. For the duration of construction, the applicant or contractor shall post a sign in a construction zone that includes contact information for individuals who desire to file a noise complaint. 15 **Temporary Noise Barriers**. Where necessary to meet the FTA criterion of 80 dBA $L_{eq(8\ Hr)}$ for daytime construction affecting residential uses, erect temporary noise barriers at a height of 12 feet minimum to block the line-of-sight between construction equipment and receptors. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. The Town shall confirm that these measures are implemented during construction by monitoring the project at least once per month.	The Town shall ensure that construction noise reduction measures are implemented by the applicant. The Town may employ a 3rd party reviewer to monitor measures paid by the applicant.	During construction	Once per month	Town of Moraga Planning Department

Tribal Cultural Resources				
Implementation Program TCR-A: Suspension of Work Around Tribal Cultural Resources.				
Suspend all earth-disturbing work within 60 feet of identified cultural resources of Native American origin. Retain a qualified cultural resource specialist and consult with an appropriate Native American representative to design and implement feasible mitigation.	The Town shall ensure that work is suspended, when required, and a cultural resources specialist designs and implements feasible mitigation.	During construction	As needed during construction	Town of Moraga Planning Department
Implementation Program TCR-B: Tribal Cultural Resource Treatment Plan.				
Retain a qualified cultural resource specialist, in consultation with appropriate Native American representative, to design a tribal cultural resource treatment plan in the event an unanticipated archaeological resource that may be considered a tribal cultural resource is identified during construction.	The Town shall ensure that a cultural resources specialist designs a tribal cultural resource treatment plan. The Town may require peer review paid by the applicant.	Prior to construction	Once	Town of Moraga Planning Department
Wildfire				
WFR-2 Construction Wildfire Risk reduction				
The Town of Moraga shall require the following measures during project construction: 1 Construction activities with potential to ignite wildfires shall be prohibited during red-flag warnings issued by the National Weather Service for the site. Example activities include welding and grinding outside of enclosed buildings. 2 Portable pumps shall be available onsite during project construction. Portable pumps shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. 3 Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance. At the Town's discretion, additional wildfire risk reduction requirements may be required during construction. The Town shall review and approve the project-specific methods to be employed prior to building permit approval.	The Town shall ensure that construction wildfire risk reduction measures are prepared and implemented.	Prior to building permit approval; during construction	Once; as needed during construction	Town of Moraga Planning Department
WFR-3 Project Design Wildfire Risk Reduction				
Project landscape plans shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species, especially non-native, invasive species.	The Town shall ensure that required landscape plans are prepared. The Town may require peer review paid by the applicant.	Prior to project approval	Once	Town of Moraga Planning Department

Zoning and Moraga Center Objective Design Standards
Analysis for the School Street Townhome Project

Note: A shaded row with **bolded** text in the table below indicates that a development standard is not being met.

Table 1

MCSP Mixed Office Residential District (MCSP MU-OR)			
Development Standards (MMC §8.42.050)		**Proposed**	**Complies**
Minimum Lot Area	10,000 square feet	2.95 acres	Yes
Minimum Lot Width	30 feet	Approximately 365 feet (lot depth divided by lot size)	Yes
Min Lot Frontage	100 feet	437.36 feet along School Street and 362.96 feet along Country Club Drive	Yes
Min. Site Depth	30 feet	Approximately 352 feet at center of lot, from School Street P/L.	Yes
Min. Front Yard Setback	0 feet	10 feet to School Street 10 feet to Country Club Drive	Yes
Min. Side Yard Setback	0 feet	10 feet	Yes
Min. Rear Yard Setback	0 feet	Approximately 66 feet.	Yes
Maximum Building Height	45 feet	41' 8"	Yes
Min Building Separation	25 feet between 2-stories 35 feet between 3-stories (Where two different building heights are adjacent, taller building controls separation.)	Note: Building separations are not repeated. **Listed and measured from tallest buildings first. Separations of 35' or more are not listed** Building 7 = 41' 8" in height – 15' 3" separation from Building 6, -32' separation from Building 8 -32' separation from Building 9 and Building 1 = 41' in height – 32' separation from building 2 – Building 5 = 39' 11" in height – 16' separation from Building 2,	**No, does not meet development standard – Density Bonus Waiver requested.**

MCSP Mixed Office Residential District (MCSP MU-OR)			
Development Standards (MMC §8.42.050)		**Proposed**	**Complies**
		-32' separation from Building 6. Building 3= 39' 11" in height - 12' separation from Building 4. Building 8= 39' 11" in height – 10' separation from building 9.	
Maximum floor areas ratio (FAR) (applies only to non-residential uses of development)	0.85	0.19 (24,921 of parking garages).	Yes
Lot Coverage	60%	42.01%	Yes
Max Stories	3	3	Yes

Table 2

Affordable Housing			
Standard (MMC §8.180.070)		**Proposed**	**Complies**
Term of Affordability	45 Years	45 Years	Yes
Inclusionary unit dispersal	Inclusionary units should be reasonably dispersed throughout the entirety of the residential development	There are two units in building 1, two units in building 10 and one unit in building 7.	Yes
Bedroom count	Inclusionary units should be comparable in terms of bedroom count to the market-rate units	All of the proposed units are three bedrooms.	**No – Does not meet standard. A concession has been requested.**
Inclusionary unit size	On-site for-sale units may be up to thirty (30) percent smaller than the market-rate units in the residential development	The market rate three-bedroom units are 1,881 sqft in size. 30% of 1,881 = 564.3. or 1,881 – 564.3 = 1,316.70 sqft. The inclusionary units comply, as they are 1,438 sqft in size.	Yes
Exterior design	The exterior design and character of the inclusionary units shall be substantially consistent with that of the	The exteriors of the inclusionary and market rate units are consistent, as	Yes

Affordable Housing			
Standard (MMC §8.180.070)		**Proposed**	**Complies**
	market-rate units in the residential development.	shown on the architectural elevations..	
Interior Finishes.	Inclusionary units may have different interior finishes than market rate units so long as the interior finishes are durable, of good quality and consistent with current state building code standards for new housing.	Interior finishes are not yet proposed; this is a condition of approval.	Yes
Access to amenities	The inclusionary units must have access to all amenities available to the market-rate units.	Inclusionary units will have access to the same amenities as the market rate units	Yes

Moraga Center Objective Design Standards: The intent of the objective design standards listed below is to provide certainty of review and to retain local control in an objective manner. The design standards were crafted to implement the community's vision for the Moraga Center as a focal point and pedestrian-oriented activity center with higher density housing and commercial and office uses.

NOTE: The **bolded** text in the analysis column of the following table indicates features of the project that may not comply with the Moraga Center Design Requirements. Some projects may not be subject to all the development and design standards based on the size and/or location of the project. In these cases, the N/A will be indicated in the Complies column. Additionally, Design Standards from Chapter 11 of the Moraga Design Guidelines, "Moraga Center Specific Plan Design Guidelines" for Mixed Office/Residential site design and architecture are included in this table, many of these are not objective or use the term "should" instead of "shall." These will be answered in the complies column with a YES.

Table 3

Moraga Center Design Requirements	Analysis	Complies
MMC §8.200.050		
1.All development in the Moraga Center Specific Plan area shall be subject to design review as set forth in Articles 2 and 3 of Chapter 8.72	The project design is being considered by the Planning Commission.	Yes
2. All improvements shall comply with all applicable easements, codes and requirements in effect at the time the development application is deemed or determined complete, or such other time required by state law, including, but not limited to access and utility easements, fire, building, and health and safety codes, and local, state and federal laws.	The standard conditions of approval for the project require the project to follow all local, state and federal laws. Permits shall be obtained from the Contra Costa County Building Inspection Division and Moraga Orinda Fire District prior to building construction.	Yes
3. No improvement shall be constructed or installed within an area of riparian vegetation that is protected by any state or federal agency.	No improvements are proposed within the Laguna Creek riparian vegetation west of the Lafayette – Moraga Regional Trail.	Yes

Moraga Center Design Requirements	Analysis	Complies
4. The required parking for each residential dwelling unit may be either tandem or nontandem. Parking not associated with a particular residential dwelling unit shall be nontandem.	Tandem parking is proposed for the five inclusionary units. All remaining parking is nontandem.	Yes
5. All exterior lighting shall be directed downward or inward toward the property.	This is a standard condition of approval. Lighting is proposed to be dark sky compliant (plan sheet A 31)	Yes
6. Any blank wall that is without windows and is more than thirty (30) feet long or three hundred fifty (350) square feet in area, whichever is less, shall have landscaping installed and maintained along the wall which reaches a minimum height of four feet within three years	The buildings are well articulated with windows, varying building forms, and other architectural elements, with balconies on the front elevations.	Yes
7. All landscaping shall be irrigated with an automatic system and permanently maintained. A landscape maintenance bond shall be posted to secure the replacement of any necessary plant material by the developer for a period of one year.	Sheet L-2 of the project plans includes a note that a fully automatic, hydro zoned irrigation system designed compliant with the Tow of Moraga Model Water Efficient Landscape Ordinance (MWELO) requirements will be provided at building permit review. This is a condition of approval for the project.	Yes
8. Permanent trash and recycling equipment shall be located in enclosures on the property. The colors, materials and design of the trash and recycling enclosures shall match the building design	Trash and recycling equipment enclosures are located within each of the units garages.	Yes
9. The utilities for the project shall be located underground.	This is a condition of approval for the project.	Yes
10. Development fronting along a major scenic corridor as defined in Chapter 8.132.020 shall have building setbacks from the scenic corridor that are landscaped and varied in order to avoid creation of a walled effect and that are a minimum of forty (40) feet deep, with an additional stepback for elements above the first floor of at least eight feet.	School Street and Country Club Drive are not Town designated scenic corridors. This standard is not applicable.	N/A
11. All required parking shall be provided onsite or on streets immediately adjacent to the development.	111 parking spaces are required for the project. Two parking spaces are required for each unit, which totals 98 parking spaces and one guest parking space is required for every four units, for a total of 13 parking spaces. Each unit has two garage parking spaces for a total of 98 parking spaces. There are two on-site guest spaces, comprised of an ADA space and EV charging space. Street frontage parking includes 11 parking spaces on School Street and three parking spaces on Country Club Drive, for a total of 114 parking spaces.	Yes
12. All existing trees shall be identified on the plans submitted by a licensed arborist, including the condition, size and species of the trees. Plans shall include measures to protect trees in good condition identified on the plans for preservation or mitigation measures, including, but not limited to replacement. Placement of temporary construction fencing around the drip line of such trees shall be a condition.	An arborist report prepared by Bob Peralta Arbor Consulting dated February 11, 2023, was submitted that assessed the trees on-site. Tree protection measures identified in the report will be implemented as a condition of approval to protect the trees designated for preservation. The project proposes the removal of 41 trees with 38 trees proposed to be planted. Sheet L-1 of the plans note that additional trees may be planted on the	Yes

Moraga Center Design Requirements	Analysis	Complies
	Saklan School property in coordination with the school .	
13. Sidewalks and pathways proposed to provide pedestrian access to residential districts shall be a minimum of six feet in width	The sidewalk along School Street will be widened to 8 feet in width. The project has also been conditioned to require the construction of a 10' wide Class I bike lane (allows pedestrian use) along the Country Club Drive property frontage from the intersection of Country Club Drive and School Street north to the Lafayette-Moraga Regional Trail entrance along Laguna Creek.	Yes
14. Sidewalks in the MCSP Commercial, MCSP Mixed Use Retail Residential and MCSP Mixed Use Office Residential shall be a minimum of eight feet in width or designed according to the School Street guidelines in the Moraga Design Guidelines.	The sidewalk along School Street will be eight feet in width or designed according to the School Street guidelines in the Moraga Design Guidelines. This is a condition of approval. The Class I bike lane along Country Club Drive will exceed eight feet in width.	Yes
15. External vents and mechanical equipment shall be screened from view from adjoining residential uses, public or common sidewalks and pathways, and plazas.	Screening of these elements is a condition of approval for the project.	Yes
16. Permanent mechanical equipment such as a motor, compressor, pump or compactor which would be a source of structural vibration or structure-borne noise in excess of adopted town ordinance standards shall be shock mounted with inertia blocks or bases or vibration isolators.	This is a condition of approval of the project.	Yes
17. All development must maintain any existing emergency vehicle, motor vehicle, bicycle or pedestrian access to adjoining properties.	There is currently no access between the project site and the neighboring Saklan School property. The Lafayette-Moraga Regional Trail is an easement and will not be altered as part of this project. The internal streets for the project have been designed to meet Moraga Orinda Fire District standards for access. Streets and pathways on the site will provide internal access to the Lafayette-Moraga Regional Trail	Yes
18. In multi-family residential projects, a minimum of two hundred (200) cubic feet of enclosed weather-proof and lockable private storage space in addition to guest, linen, pantry and clothes closets customarily provided shall be provided for each unit other than a dependent senior residential dwelling unit.	There is 200 cubic feet of storage space within the garage of each unit.	Yes
19. In multi-family residential projects, a laundry area consisting of a place for an automatic washing machine and clothes dryer shall be provided in each unit unless common laundry facilities are provided.	Each unit has its own laundry area.	Yes
20. Utility transformers that are outside the public right-of-way should have adequate access provided for proper maintenance. Any above ground installation must include adequate landscape screening so as not to be viewable from the scenic corridor or other prominent public view.	Conditions of approval require that above ground utility installations include pathways for maintenance access and be screened with enhanced landscaping so they are not viewable from public streets and the Lafayette-Moraga Regional Trail.	Yes
21. Benches and seat walls shall be incorporated by project designers, where appropriate, to provide seating areas along pedestrian promenades.	The project includes four outdoor benches between buildings 2 and 5 and 6 and 7	Yes

Moraga Center Design Requirements	Analysis	Complies
22. Developments, with the exception of single-family homes, shall provide bicycle parking areas with bicycle racks at a rate equal to five percent of required off-street vehicle parking spaces, with a minimum parking for at least two bicycles.	111 parking spaces are required for the project. Six bicycle parking spaces are required, and six will be provided located along E Street.	Yes
23. Tree grates, bollards, and other street furniture shall be incorporated, where appropriate, to help articulate street edges and provide a pleasant separation between the automobile realm and the pedestrian realm.	This will be a residential site, with internal streets providing access to parking garages and street parking along School Street and Country Club drive for guests. The site includes a number of pedestrian paths, trees, light bollards, benches, and small flexible lawn area.	Yes
24. Accentuated paving, bollards, special crosswalk lighting, and other features shall be incorporated, where appropriate, to enhance pedestrian safety.	Special enhanced paving is proposed at the pedestrian driveway crossings at School Street and Country Club Drive and internal to the site at the intersections of D and E Streets and B Stret and C Alley.	Yes
25. Drought-tolerant and deer resistant plant materials, consistent with the town's design guidelines shall be incorporated as part of each development's overall landscape design.	The majority of the proposed planting materials are plants from Appendix B of the Town of Moraga Design Guidelines. See landscaping plans, sheet L-2. Additionally, all plants except for one of the bioretention plants are fire resistant.	Yes
26. Where a more intense use (R-20, R-24, MCSP Commercial, Mixed Office-Residential, Mixed Retail-Residential, Rheem Park Mixed Commercial-Residential, and Rheem Park Mixed Office-Residential) abuts a one, two or three dwelling units per acre residential district, screening is required to address privacy and noise impacts, in addition to any other code requirements regarding fences or walls, the screening shall be in a six-foot-wide area with a minimum six-foot high evergreen landscaping or a wall along the property line in the required setback.	This property shares its western property line with residences within the Moraga Country Club, which are more than 100 feet away from the proposed townhomes. There is approximately 80 feet of riparian vegetation between the proposed townhomes and residences that will exceed the screening requirements of this design standard.	Yes
MMC 8.200.100 – Standards near creeks and channel setbacks		
A. Structures adjacent to creeks and drainage channels within the MCSP area (except those in R-20, which shall follow the requirements included in Section 8.34.060 A.) shall be subject to the more restrictive of the setback requirements set forth in Contra Costa County Code 914-14.012 "Structure setback lines for unimproved earth channels," as may be amended from time to time, or the minimum setbacks required by a state or federal regulatory agency	All structures will be located outside of the creek structure setback area, except for a retaining wall which may be permitted under MMC 8.200.100.D, discussed below.	Yes
B. Where existing riparian vegetation extends beyond the limits required, the setback line shall be extended to include such riparian vegetation.	The riparian vegetation does not extend east of the Lafayette Moraga Trail where the project is located. There is no work proposed within the riparian vegetation.	Yes
C. Structures other than buildings that will enable or provide public access to or across a creek may be located within the prescribed setbacks	No buildings or structures to provide public access are proposed.	Yes
D. Exemptions to these required setbacks may be made under unusual circumstances such as geologic, environmental or topographical conditions on a case-by-case basis by the public works director/town engineer in coordination with all responsible regulatory agencies, upon production of satisfactory evidence that no adverse biological impact will occur and that the stability of the	The project includes a retaining wall no more than 3 feet high within a limited area of the creek setback, running along the east side of the Lafayette-Moraga Trail behind Building 10 and the play structure. The applicant submitted a letter from Rockridge Geotechnical confirming that the retaining wall within the creek setback would not adversely affect the stability of the creek. Rincon	Yes

Moraga Center Design Requirements	Analysis	Complies
surrounding soil can be ensured by engineering and geotechnical means reasonably available to the applicant.	Consultants biologist confirmed that development east of the Lafayette-Moraga Regional Trail would not affect sensitive biological resources or riparian habitat. Standard NPDES erosion-and-sediment controls will be required during construction. Based on this analysis, the Public Works Director has determined that the retaining wall is acceptable within the creek setback area.	
Moraga Center Specific Plan Design Guidelines (Chapter 11 of the Moraga Design Guidelines)		
Section 11.5 Mixed Office/Residential	**Section11.5.1.1 Pedestrian Orientation**	
A. Mixed Office/Residential areas should be designed to be both bicycle and pedestrian friendly	The project will improve existing sidewalks fronting on the project site, including a Class 1 bike path along Country Club Drive. There are pedestrian paths throughout the development and bicycle racks for the parking of six bikes.	Yes
B. Pedestrian paths and walks should be lined with trees. Trees should also be used to create separation between pedestrian paths and parking areas.	The parking spaces for all the units are within garages that connect directly with the internal streets. The pedestrian paths are between the buildings internal to the site and trees are proposed along these paths.	Yes
C. Pedestrian scaled lighting fixtures should be provided along internal walkways.	The project includes shielded bollard lights up to 37" in height along the internal walkways of the site.	Yes
D. There should be provision of street furniture including bus shelters, trash receptacles, and bicycle racks.	The project includes three outdoor benches surrounding the play structure, four outdoor benches between buildings 2 and 5 and 6 and 7 and bicycle racks for the parking of six bikes along E Street. As this is a townhome development, there are no trash outdoor trash receptacles. There is no bus service abutting the property, and therefore no bus shelters.	Yes
E. Special paving should be used at key pedestrian and vehicular intersections.	Special enhanced paving is proposed at the pedestrian driveway crossings at School Street and Country Club Drive and internal to the site at the intersections of D and E Streets and B Stret and C Alley.	Yes
F. Loading and service areas should be screened from view and not be visible from public streets.	This is a residential project with no commercial components. The townhomes all have space for trash, recycling and compost within their garages. There are no loading or services areas proposed.	Yes
Architectural enclosures should be designed as integral elements of the building architecture.	All trash and recycling bins will be kept with garages, no architectural enclosures are proposed.	Yes
Section 11.5 Mixed Office/Residential	**Section 11.5.2.1 – Building Design**	
A. A composition of distinct but related forms should be used.	The townhomes elevations are broken up into a variety of forms, with massing breaks, recessed decks, first floor patios with arches and hip and gable roofs. All the townhomes are in a Spanish colonial revival architectural style	Yes
B. Roof heights may vary.	Roof heights vary between 41' 8" to 39' 11".	Yes

Moraga Center Design Requirements	Analysis	Complies
C. Main entries should be easily identifiable	The Townhomes all have front entries facing School Street and Country Club Drive	Yes
D. Flat, unarticulated wall planes should not be used.	The roofs are a mix of gable and hip roofs and roof pitches of 4:12 and 5:12.	Yes
E. Roof design should be integral to the overall building design.	The roofs are concrete tile to match the Spanish colonial revival architectural style of the buildings, with a mix of gable and hip roofs and roof pitches of 4:12 and 5:12.	Yes
F. Rooftop mechanical equipment should be screened from view	No roof mounted equipment is proposed.	Yes
G. Superficial roof forms or roof forms that appear to be tacked on should not be used.	No superficial roof forms are proposed, the roof design compliments the building architecture.	Yes
Section 11.5 Mixed Office/Residential	**Section 11.5.2.2 – Details and Materials**	
A. Use of materials such as stucco, masonry, storefront glazing, and well detailed concrete is encouraged.	The townhomes are sided with stucco and brick veneer.	Yes
B. Accent materials such as brick, stone, tile, glass block, and anodized or patinae metals should be used.	The townhome accent materials include brick veneer, stucco over foam trim and black metal railings on the decks.	Yes
C. Mirror glazing is not allowed.	No mirror glazing is proposed. This is included as a condition of approval.	Yes
Section 11.6.1.1 Lighting – General Considerations		
A. High efficiency fixtures and sophisticated optics are encouraged to direct light where it is needed without creating excessive glare.	Exterior lighting will be provided at building entry points and patios and along pathways within the development. All lighting is dark sky compliant.	Yes
B. Outdoor lighting should be related to the design of the structures and/or landscaping that it serves.	Lighting is provided at entry's, patios and garage areas of the Townhomes and along internal pathways within the development.	Yes
C Lights should be placed where they are needed for specific uses, rather than to a continuous foot-candle requirement, allowing for the appreciation of the dark sky in the residential neighborhoods and reducing the total number of fixtures and energy consumption. Wherever possible fixtures should carry approval of the International Dark Sky Association.	Lights will be provided for building entrances, the outdoor decks and patios of the townhomes and at the garages, and along internal pathways. The proposed lighting is dark sky compliant.	Yes
D. Wherever possible, include motion- or light-detecting switches that will turn off lights when they are not needed.	This will be included as a condition of approval.	Yes
E. Use warm lighting (3,000 kelvin or lower)	Conditions of approval require that exterior lighting be 3,000 kelvin or lower.	Yes
F. Lighting should be shielded to avoid excessive and unnecessary glare.	The proposed exterior lights either have a frosted glass or are directed downward. All proposed lighting is dark sky compliant.	Yes
G. The use of uplights for buildings, trees, or signs is discouraged.	No uplighting is proposed.	Yes
H. All lighting should comply with energy efficiency and other standards under State regulations	Lighting will comply with California Building Code energy efficiency requirements.	Yes
I. Outdoor light fixtures should be designed and mounted so that the source of light has minimal impact off site.	Exterior lights either have a frosted glass or are directed downward. All proposed lighting is dark sky compliant.	Yes
J. Outdoor lighting should be directed inward toward the property and may require additional screening to avoid spillage onto adjacent residential properties.	Exterior lights either have a frosted glass or are directed downward. All proposed lighting is dark sky compliant.	Yes
Section 11.6.3 – Walls and Fencing		

Moraga Center Design Requirements	Analysis	Complies
A. Site walls should be made of materials complementary to the building architecture palette	The proposed smooth stone masonry retaining wall is cream colored with gray cap to match the colors of the proposed buildings. The wall would run along the Lafayette Moraga Regional Trail.	Yes
B. Walls located in visually prominent areas should be decorative and faced with materials that are compatible with the surrounding natural environment and from local sources, whenever possible.	The smooth stone masonry wall is designed to complement the color and materials of the proposed townhomes. The wall will not exceed three feet in height.	Yes
C. Keystone and other interlocking masonry wall systems are encouraged in place of concrete retaining walls.	The proposed retaining wall is smooth stone masonry.	Yes
D. Concrete retaining walls shall be allowed only where necessary for structural and spatial requirements and shall be heavily screened from view with plantings to minimize their visual impact.	No concrete retaining walls are proposed.	Yes
E. Plantings should be utilized to minimize the visual impact of all retaining walls.	The proposed retaining wall along the Lafayette – Moraga Regional trail would be smooth stone masonry to complement the architecture of the townhomes. The retaining wall would be no taller than three feet in height and would have plantings along the base. The conditions of approval require that landscaping be planted at the base of the wall.	Yes
Section 11.6.3.2 - Fencing		
A. Fencing materials and colors should complement adjacent architecture.	The existing 6' high solid wood good neighbor fence on the shared property line with the Saklan School would remain, unless an alternate type of fence is agreed to with the Saklan School	Yes
B. Use of decorative fencing styles such as grape stake, picket, and split rail fences are encouraged in areas of high visual sensitivity.	The existing split rail fence along the Lafayette Moraga Regional trail will remain.	Yes
C. Use of a variety of traditional wood "good neighbor" style fences is allowed.	There is an existing wood good neighbor fence between the subject property and the Saklan School property. This may be reconstructed and/or increased in height as part of the project in coordination with the Saklan School.	Yes
Section 11.7.2 - Residential Landscaping		
A. Neighborhood plantings should have individual expressions of landscape design consistent with the architectural character of the homes.	The project includes landscaping for the entire development with a large percentage of planting selected from Appendix B of the Town Design Guidelines.	Yes
B. Street trees should be placed in landscape strips that separate the roadway from the sidewalk, which should also include drought tolerant shrub and groundcover plantings to encourage sidewalk use.	On School Street, trees will be planted in the front yard areas of the townhomes along the property line, with one tree within an existing landscape strip. Additionally, the project has been conditioned to construct a Class I bicycle facility along Country Club Drive from the existing Lafayette/Moraga Regional Trail to the Country Club Drive and School Street intersection. The existing landscape buffer would be modified to accommodate the Class I bicycle trail and replanted with landscaping, including trees. Trees will also be planted along the property line in the front yard areas of the townhomes.	Yes
C. Residential alleys should be planted with evergreen trees and shrubs to soften and complement the architectural design.	No alleys are proposed. One internal street is labeled as an alley but is the same width as the other streets within the development. All the unpaved areas between the buildings will be landscaped.	Yes
D. At a minimum, planting pockets should occur at each property line along alleys.	There are no alleys proposed. One internal street is labeled as an alley but is the same width as the other streets within the development. The areas between all of the buildings will be landscaped.	Yes
E. Pedestrian walkways that provide garden entries to homes along common paseos should be treated with ornamental trees and flowering shrubs to accentuate their pedestrian significance	The landscape plans include trees and vegetation at the front of the buildings and along the	Yes

Moraga Center Design Requirements	Analysis	Complies
	pedestrian pathways that run through the development.	
ID10 - Grading		
ID10.1 Grading for any purpose may be permitted only in accordance with an approved development plan that is found to be geologically safe and aesthetically pleasing.	A geotechnical was prepared by Rockridge Geotechnical and peer reviewed by Atlas Technical Consultants. The purpose of the grading is for redevelopment of the site which will remain substantially level. The project will be geologically safe and the site will remain substantially level with no retaining walls exceeding three feet in height.	Yes
D10.2 Where the pre-development slope is less than 20% a grading permit may be required. See the Moraga Municipal Code 14.08.010 for details.	The applicant filed a grading permit application with the Town.	Yes
ID10.3 When the pre-development slope is greater than or equal to 20%, development shall be avoided, but may be permitted if supported by site-specific analysis. When grading land with a slope of 20% or more, soil displacement and retaining wall use shall be minimized by using contour grading techniques. In MOSO areas, development shall be prohibited on slopes with an average gradient of 20% or greater. Design shall be consistent with Moraga Municipal Code Title 14.	Predevelopment slopes on the site are not 20% or greater.	Yes
ID10.4 Land with a pre-development average slope of 25% or greater within the development area shall not be graded except as authorized by the Town Council and only where it can be shown that a minimum amount of grading is proposed in the spirit of, and not incompatible with, the intention and purpose of the Moraga General Plan. No new residential structures may be placed on after-graded average slopes of 25% or steeper within the development area except that this provision shall not apply to new residential structures on existing lots that were either legally created after March 1, 1951 or specifically approved by the Town Council after April 15, 2002.	Predevelopment slopes on the site are not 25% or greater.	Yes
ID10.5 Cut slopes should be placed behind buildings or other structures where they will be screened.	The project site is substantially level, with no cut slopes.	Yes
ID10.6 Preserve the natural topography of the land, especially at the horizon: • Round off graded slopes, in a manner that conforms to the natural contours of the land and to the surrounding terrain. Sharp angles produced by earth moving, specifically at the top and toe of graded slopes shall be avoided. • Slopes shall be contour graded to achieve a natural appearance. • Slopes shall be blended with the contours of contiguous properties and create a smooth transition. • Grading shall minimize scars due to cuts, fills, and drainage benches on natural slopes. Neither cuts nor fills shall result in slopes steeper than 3:1 (horizontal to vertical), except where natural slopes are steeper. Where steeper slopes are unavoidable, special mitigation measures shall be incorporated into the design construction and maintenance of the slopes	The property is substantially level, the primary purpose of grading is for the redevelopment of the site for new building pads, streets, landscaping and drainage facilities, there are no cuts or fill that will result in slopes steeper than 3:1.	Yes
ID11 – Retaining Walls		
ID11.1 Retaining walls (excluding foundation retaining walls) and other man-made grading	The proposed retaining wall is not to mitigate a geologic hazard.	Yes

Moraga Center Design Requirements	Analysis	Complies
features may only be used to mitigate geologic hazards when: a. required to decrease the possibility of personal injury or property damage b. designed to blend with the natural terrain and avoid an artificial or structural appearance c. appropriately screened by landscaping d. designed to avoid creating a tunnel effect along roadways and to ensure unrestricted views for vehicular and pedestrian safety e. designed to ensure minimal public and/or private maintenance costs		
ID11.2 Exterior retaining walls shall be limited to five feet in height, unless it is visible from off site, in which case it shall be no higher than three feet. The total height of a retaining wall and fencing on top of the wall shall not exceed eight feet without approval of the Planning Commission acting as the Design Review Board. A guardrail or handrail (provided a solid fence does not support it) may be located on top of the retaining wall.	The retaining wall will be no more than 3 feet in height.	Yes
ID11.3 A retaining wall exceeding 3 feet requires professional engineering, a building permit, and may require a grading permit. Design Review Board approval is required if the retaining wall is visible from off-site.	The retaining wall will not exceed 3 feet in height.	Yes
ID11.4 The horizontal depth of the terraces between stacked retaining walls should be a minimum of twice the height of the larger adjacent wall.	No terraced retaining walls are proposed.	Yes
ID11.5 Retaining walls should be built a minimum of three feet from a property line.	The northernmost three feet of the retaining wall will be within three feet of the property line along Country Club Drive. This portion of wall is approximately one foot in height and considered a di minimis encroachment. Further, the overall retaining wall is less than three feet in height, which is generally exempt from design review.	Yes

1600–1660 School Street, Moraga

Density Bonus Waivers and Concessions

Item	Code Reference	Code Requirement	Proposed	Type	Justification Reference
Building Separation	MMC 8.42.050	Minimum 35-foot building separation	10-foot side-to-side building separation	Waiver	See Justification Section 1
Inclusionary Units Bedroom Mix	MMC 8.180.070.B.2	Inclusionary units should be comparable in bedroom count to market-rate units, excluding ADUs	Inclusionary units will have three bedrooms; market-rate units will have 3 to 4 bedrooms	Concession	See Justification Section 4

Waiver and Concession Justifications

1. Building Separation (MMC 8.42.050) — Waiver

The Project requests a waiver of the minimum building separation standards of MMC 8.42.050 pursuant to the State Density Bonus Law. Strict application of the required building separation would physically preclude the Project from achieving the permitted residential density and unit configuration enabled by the Density Bonus, due to the site's width, infill context, and required building envelope. The proposed building separation maintains adequate light, air, and privacy consistent with multifamily urban development patterns, while allowing the Project to realize the full density permitted under State law.

2. Inclusionary Units Bedroom Mix (MMC 8.180.070.B.2) — Concession

The Applicant proposes to satisfy the project's inclusionary housing requirement by providing 10% or five (5) "For-Sale" affordable units as three-bedroom (3-BR) units, rather than the three (3) three-bedroom (3-BR) and two (2) four-bedroom (4-BR) units requested by the Town. The Applicant is utilizing this statutory tool to deviate from the Town's preferred unit-mix proportionality to ensure the financial and practical feasibility of the affordable housing component.

1. Statutory Basis for Request

Under GC § 65915(k), a concession is defined as a modification of zoning code requirements, development standards, or local policies that result in identifiable and actual cost reductions to provide for affordable housing costs. Per state law, the burden of proof rests on the local jurisdiction to grant the concession unless it can prove with substantial evidence that the cost reduction is unneeded or poses a direct threat to public health and safety.

2. Evidence of Identifiable and Actual Cost Reduction

By swapping the two requested 4-BR units for 3-BR units, the project achieves an immediate, quantifiable cost reduction based on the discrepancy between building sizes and HCD-restricted sales prices.

- Construction Cost Variance: A standard 3-BR unit in this project is 1,438 sq. ft., whereas the 4-BR unit is 2,127 sq. ft.—a difference of 689 sq. ft. per unit. At a conservative hard-cost estimate of $350/sq. ft., forcing two 4-BR units adds $482,300 in excess construction costs ($241,150 per unit) without generating a matching return.

•The Restricted Revenue Gap: Under the HCD Income Limits for Contra Costa County, the maximum affordable sales price for a Moderate-Income household is tightly capped based on Area Median Income (AMI). While a 4-BR unit allows for a slightly larger household size calculation, the allowable increase in the affordable sales price over a 3-BR unit is nominal—typically only yielding an additional $60,000 in revenue per unit ($120,000 total for two units).

•Net Financial Impact: Requiring two 4-BR units forces the Applicant to expend $482,300 on additional construction costs to capture only $120,000 in affordable sales revenue.

By standardizing all five units to the 1,438 sq. ft. 3-BR floor plan, the Applicant achieves a net project cost reduction of approximately $362,300. This represents a clear, "identifiable and actual cost reduction" under state law.

3. Consistency with Public Health and Safety

Per Government Code § 65915(d)(1), a city cannot deny a valid concession unless it makes written findings based on substantial evidence of a specific, adverse impact on public health or safety. The proposed 3-BR units are highly functional, family-sized homes that comply with all California Building Codes and local safety regulations. There is no adverse health or safety impact created by providing 3-BR affordable units in place of 4-BR units.

Conclusion

The Applicant remains fully committed to delivering five high-quality, below-market-rate homes to the Town of Moraga. However, the State Density Bonus Law explicitly protects developers from disproportionate cost burdens associated with local inclusionary mandates. We request that the Town approve this narrow unit-mix concession based on the explicit financial data provided above.

WHA

6101 Bollinger Canyon Road, Suite 210

San Ramon, CA 94583

May 19, 2026

To: Town of Moraga Planning Department

Attn: Brian Horn, Principal Planner

329 Rheem Blvd

Moraga, CA 94556

RE: 1600-1660 School Street project by OUTDO COUNTRY CLUB, LLC- Request for Concession/Incentive of Inclusionary Unit Mix Modification

To the Planning Department Staff,

This letter constitutes a formal request for a **Concession/Incentive** pursuant to the **California State Density Bonus Law (Government Code § 65915)**. The Applicant proposes to satisfy the project's inclusionary housing requirement by providing 10% or five (5) "For-Sale" affordable units as **three-bedroom (3-BR) units**, rather than the three (3) three-bedroom (3-BR) and two (2) four-bedroom (4-BR) units requested by the Town. The Applicant is utilizing this statutory tool to deviate from the Town's preferred unit-mix proportionality to ensure the financial and practical feasibility of the affordable housing component.

1. Statutory Basis for Request

Under **GC § 65915(k)**, a concession is defined as a modification of zoning code requirements, development standards, or local policies that result in **identifiable and actual cost reductions** to provide for affordable housing costs. Per state law, the burden of proof rests on the local jurisdiction to grant the concession unless it can prove with substantial evidence that the cost reduction is unneeded or poses a direct threat to public health and safety.

2. Evidence of Identifiable and Actual Cost Reduction

By swapping the two requested 4-BR units for 3-BR units, the project achieves an immediate, quantifiable cost reduction based on the discrepancy between building sizes and HCD-restricted sales prices.

- **Construction Cost Variance:** A standard 3-BR unit in this project is **1,438 sq. ft.**, whereas the 4-BR unit is **2,127 sq. ft.**—a difference of **689 sq. ft. per unit**. At a conservative hard-cost estimate of $350/sq. ft., forcing two 4-BR units adds **$482,300** in excess construction costs ($241,150 per unit) without generating a matching return.
- **The Restricted Revenue Gap:** Under the **HCD Income Limits for Contra Costa County**, the maximum affordable sales price for a Moderate-Income household is tightly capped based on Area Median Income (AMI). While a 4-BR unit allows for a slightly larger household size calculation, the allowable increase in the affordable sales price over a 3-BR unit is nominal—typically only yielding an additional **$60,000** in revenue per unit ($120,000 total for two units).
- **Net Financial Impact:** Requiring two 4-BR units forces the Applicant to expend **$482,300** on additional construction costs to capture only **$120,000** in affordable sales revenue.

By standardizing all five units to the 1,438 sq. ft. 3-BR floor plan, the Applicant achieves a net project cost reduction of approximately **$362,300**. This represents a clear, "identifiable and actual cost reduction" under state law.

3. Consistency with Public Health and Safety

Per Government Code § 65915(d)(1), a city cannot deny a valid concession unless it makes written findings based on substantial evidence of a specific, adverse impact on public health or safety. The proposed 3-BR units are highly functional, family-sized homes that comply with all California Building Codes and local safety regulations. There is no adverse health or safety impact created by providing 3-BR affordable units in place of 4-BR units.

Conclusion

The Applicant remains fully committed to delivering five high-quality, below-market-rate homes to the Town of Moraga. However, the State Density Bonus Law explicitly protects developers from disproportionate cost burdens associated with local inclusionary mandates. We request that the Town approve this narrow unit-mix concession based on the explicit financial data provided above.

Sincerely,

Robert Lee

Senior Principal

Cc: **Nikhil Gera** – nikhil@gera.in

Jeff Stone – jbstone@diamondconstruction.com

1600 School Street

Affordable Housing Plan

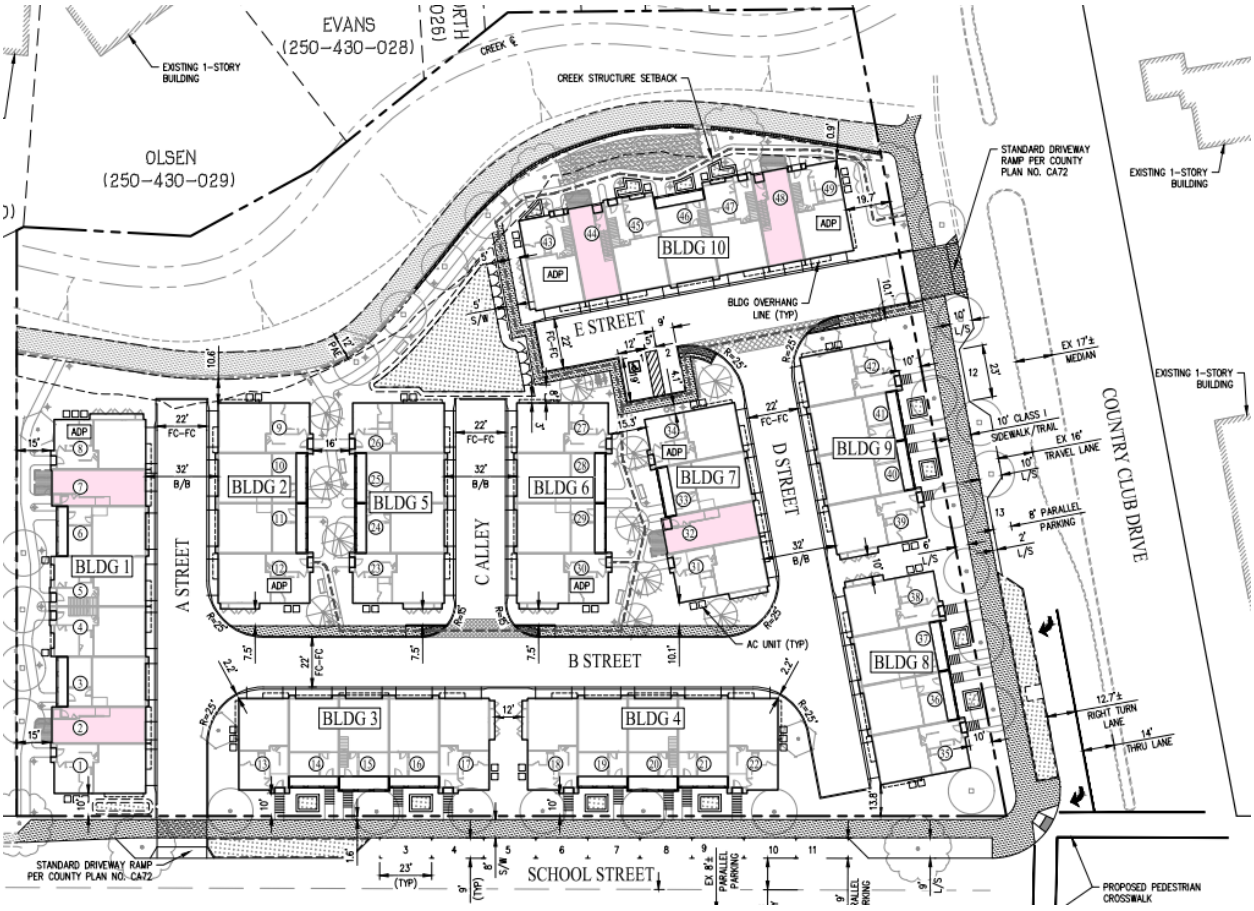
May 19, 2026

In order to demonstrate consistency with MMC Chapter 8.180, Affordable Housing, ownership is submitting an affordable housing plan which provides the information requested by the planning department on the following pages.

Item A: Location of Units

The below market-rate units shall be for-sale. For their location please see the following site plan, below market-rate units in pink. Size of the units are 1438 sqft.

The market-rate units shall be for-sale. For their location please see the below site plan, the market-rate units are those that are not highlited. Sizes are 1,881 sqft, 2,075 sqft, and 2,127 sqft.



Item B: Overall Floor Plans

Floor plans showing the location of each individual inclusionary unit can be seen above.

Item D: Affordability Level
Per inclusionary housing ordinance, as For-Sale units the affordability level of each unit will be restricted to Moderate Income, 120% of Contra Costa County AMI.

Item E: Term of Affordability
Per inclusionary housing ordinance, as For-Sale units affordability will be restricted for 45 years.

Item F: Phasing
No phasing is planned for the project. As such a phasing plan within this document has been omitted.

Item G: Density Bonuses and Waivers
The project is using a State Density Bonus Law and the Town of Moraga's inclusionary housing ordinance.

The project is requesting the below waivers.

Building Separation (MMC 8.42.050) — Waiver Request
The Project requests a waiver of the minimum building separation standards of MMC 8.42.050 pursuant to the State Density Bonus Law. Strict application of the required building separation would physically preclude the Project from achieving the permitted residential density and unit configuration enabled by the Density Bonus, due to the site's width, infill context, and required building envelope. The proposed building separation maintains adequate light, air, and privacy consistent with multifamily urban development patterns, while allowing the Project to realize the full density permitted under State law.

Inclusionary Units Bedroom Mix (MMC 8.180.070.B.2) — Concession

The Applicant proposes to satisfy the project's inclusionary housing requirement by providing 10% or five (5) "For-Sale" affordable units as three-bedroom (3-BR) units, rather than the three (3) three-bedroom (3-BR) and two (2) four-bedroom (4-BR) units requested by the Town. The Applicant is utilizing this statutory tool to deviate from the Town's preferred unit-mix proportionality to ensure the financial and practical feasibility of the affordable housing component.

1. Statutory Basis for Request

Under GC § 65915(k), a concession is defined as a modification of zoning code requirements, development standards, or local policies that result in identifiable and actual cost reductions to provide for affordable housing costs. Per state law, the burden of proof rests on the local jurisdiction to grant the concession unless it can prove with substantial evidence that the cost reduction is unneeded or poses a direct threat to public health and safety.

2. Evidence of Identifiable and Actual Cost Reduction

By swapping the two requested 4-BR units for 3-BR units, the project achieves an immediate, quantifiable cost reduction based on the discrepancy between building sizes and HCD-restricted sales prices.

•Construction Cost Variance: A standard 3-BR unit in this project is 1,438 sq. ft., whereas the 4-BR unit is 2,127 sq. ft.—a difference of 689 sq. ft. per unit. At a conservative hard-cost estimate of $350/sq. ft., forcing two 4-BR units adds $482,300 in excess construction costs ($241,150 per unit) without generating a matching return.

•The Restricted Revenue Gap: Under the HCD Income Limits for Contra Costa County, the maximum affordable sales price for a Moderate-Income household is tightly capped based on Area Median Income (AMI). While a 4-BR unit allows for a slightly larger household size calculation, the allowable increase in the affordable sales price over a 3-BR unit is nominal—typically only yielding an additional $60,000 in revenue per unit ($120,000 total for two units).

•Net Financial Impact: Requiring two 4-BR units forces the Applicant to expend $482,300 on additional construction costs to capture only $120,000 in affordable sales revenue.

By standardizing all five units to the 1,438 sq. ft. 3-BR floor plan, the Applicant achieves a net project cost reduction of approximately $362,300. This represents a clear, "identifiable and actual cost reduction" under state law.

3. Consistency with Public Health and Safety

Per Government Code § 65915(d)(1), a city cannot deny a valid concession unless it makes written findings based on substantial evidence of a specific, adverse impact on public health or safety. The proposed 3-BR units are highly functional, family-sized homes that comply with all California Building Codes and local safety regulations. There is no adverse health or safety impact created by providing 3-BR affordable units in place of 4-BR units.

Conclusion

The Applicant remains fully committed to delivering five high-quality, below-market-rate homes to the Town of Moraga. However, the State Density Bonus Law explicitly protects developers from disproportionate cost burdens associated with local inclusionary mandates. We request that the Town approve this narrow unit-mix concession based on the explicit financial data provided above.

Item H: Eligibility

The Applicant will work with Town Staff to establish a process to determine eligibility for prospective purchasers, which will be documented in the Affordable Housing Agreement that will be executed with the town.

Item I: Reporting Schedule

The Applicant / Owner will work with the Town Staff on a process to establish a

reporting schedule, which will be documented in the Affordable Housing Agreement that will be executed with the town.

Item J: Additional Information
Please see the included Density Calculation Letter, Waivers and Concessions document, and plan set for additional information.

Tree Evaluation

Prepared For:

Jeff Stone

Partner

Diamond Construction Inc.

P.O. Box 477

Lafayette, CA 94549

Prepared By:

Bob Peralta

Bob Peralta Arbor Consulting

American Society of Consulting Arborists

237 Berna Avenue

Napa, California 94559

(925) 525- 3795

February 11, 2023

Dear Jeff,

Thank you for asking me to provide a Consulting Arborist Report for your Proposed new Project located at 1600 School Street in Moraga, California. I visited the site on February 10, 2023, to review the Combined Topographic Survey Map for 1600, 1620, 1640, and 1660 School Street - provided to you by DeBolt Civil Engineering. The map is I reviewed is dated 07/06/2022– Job No: 22231.

The purpose of my site visit is to evaluate the species, size, location, health, and recommendations. I reviewed a total of 42 trees on the property – (13) Redwood Trees, (8) Crapemyrtle Trees, (8) Honey Locust Trees, (2) Red Maple Trees, (2) Sycamore Trees, (2) Mexican Fan Palms, (2) Japanese Maple Trees, (2) California Juniper Trees, (1) White Alder Tree, (1) Cherry Tree, (1) Cottonwood Tree,

There are 10 different species of trees throughout the property that were all planted trees when the property was developed. The redwoods throughout the property are doing well, unfortunately the redwoods trees near the buildings have grown too large for the area they were planted in. These trees after 45 plus years of growing between buildings will need more open space to grow to stay healthy – these are tree tags (16,18,19,20, 28, 29, 30, and 31). The Honey locust, Alder, cherry tree and Cottonwood are in poor health and are recommended to be removed. The crape myrtle trees are mostly planted as an accent tree to the entrances and are doing well. The two sycamore trees are planted in a very confined growing space and have lifted the walkway, Tree tag 8 is leaning and only has half a canopy due to the sycamore tree growing next to this tree. Over time these trees will continue to damage the walkway. The two Red Maple trees growing along the sidewalk - Tree Tags 1 and 2, have both had their roots cut during sidewalk replacement. Over time these trees will continue to damage the sidewalks. The Juniper and Japanese maples have adapted to growing in a confined growing space. The California Juniper trees have deadwood due to the recent dry summers we have experienced and show signs of decline.

Trees being preserved will need to follow the guidelines listed below.

I have attached maps that show the general location of each tree and a picture of each tree with diameter (dbh), size and health.

Please review the health rating below and tree protection measures.

Listed below Is the Inventory and Health of each Protected tree.

Tree Inventory and Health

Note: Trees are measured using the DBH method – circumference, measured at 4.3 above the ground.

Tag #	Species	Dbh.	Health
1	Red Maple	20.1"	Poor
2.	Red Maple	14.3"	Poor
3.	Honey Locust	12.5"	Poor
4.	Crapemyrtle	4.2"	Fair
5.	Crapemyrtle	5.2"	Fair
6.	Crapemyrtle	6.1"	Fair
7.	Sycamore Tree	15"	Fair
8.	Sycamore Tree	10.7	Fair
9.	Crapemyrtle	3"	Fair
10.	Mexican Fan Palm	20"	Fair
11.	Redwood Tree	44.8"	Very Good
12.	Redwood Tree	38.6	Very Good
13.	Redwood Tree	38.2"	Very Good
14.	Redwood Tree	39.2"	Very Good
15.	Redwood Tree	49.7""	Very Good
16.	Redwood Tree	48"	Very Good
17.	Honey Locust	9.5"	Poor
18.	Redwood Tree	50.8"	Very Good
19.	Redwood Tree	44.2"	Very Good
20.	Redwood Tree	47.5"	Very Good
21.	Honey Locust	10"	Poor
22.	Honey Locust	8.5"	Poor
23.	Honey Locust	7"	Poor
24.	Crapemyrtle	5.4"	Fair
25.	Crapemyrtle	5.4"	Fair
26.	Crapemyrtle	3"	Fair
27.	Crapemyrtle	4.2"	Fair
28.	Redwood Tree	38.5"	Very Good
29.	Redwood Tree	42.3"	Very Good
30.	Redwood Tree	18.5"	Very Good
31.	Redwood Tree	19.5"	Very Good
32.	Japanese Maple Multi-Trunk	8/10/9/8	Good
33.	Japanese Maple Multi-Trunk	5/6/6/5/7/6	Good
34.	California Juniper	39"	Fair
35.	Honey Locust	5.8"	Dead
36.	White Alder	25"	Critical
37.	Honey Locust	11.3"	Poor
38.	Cherry Tree	12/15"	Critical
39.	Mexican Fan Palm	19.7"	Fair
40.	Cottonwood Tree	42"	Poor
41.	California Juniper	12/16/10"	Fair
42.	Honey Locust	3.3	Poor

The health and structure of the trees were assessed visually from the ground level. No drilling, root excavation, or ariel inspections were performed. Internal or non-detectable defects may exist and could lead to part of whole tree failures. Due to the dynamic nature of trees and their environment, it is not possible for Arborists to guarantee that trees will not fail in the future.

Any future construction activity will need to follow the outlined tree protection guidelines below. The preservation of these trees will follow the tree protection guidelines outlined below.

Recommended Tree Protection Guidelines:

All contractors including demolition, grading, and underground contractors, sub-contractors, construction superintendent and other pertinent personnel should be required to review these guidelines with the Project Arborist (PA) prior to beginning work on site. The Tree Protection Zone (TPZ) identifies will be installed 2' outside of the drip-line in a half circle on all sides of the proposed home - by installing 4' high orange protective fencing around the entire drip-line of the tree and roots from disturbance.

The installation will be installed by the Project Arborist (Bob Peralta) and any work within the erected TPZ will need permission from the PA before being moved.

The following signs will be posted on 8.5x11 inches and installed on all the fences – the sign will read:

This is a Tree Protection Zone
Movement of this fence requires the prior authorization of the Project Arborist & Owner

(List Contact Information)

Activities prohibited within the TPZ include:

- Storage or parking vehicles, building materials, refuse, excavated spoils, or dumping of paint or poisonous materials on or around trees and roots. Poisonous materials include, but are not limited to, paint, petroleum products, concrete or stucco mix dirty water or any other material which may be deleterious to tree health.

- The use of tree trunks as winch support, anchorage, as a temporary power pole, signpost or any other similar function.

- Cutting of roots by utility trenching, foundation digging, placement of curbs, trenches and other miscellaneous excavation without prior approval of the PA.

- Soil disturbance or grade/drainage changes.

- Materials must not be stored, stockpiled, dumped, even temporarily, inside the TPZ of protected trees.

Activities permitted within the TPZ include or recommended by the PA

- Irrigation, aeration, or other beneficial practices that have been specifically approved for use within the TPZ.

- Mulch if needed and or fertilization as recommended by monthly site visits by the PA.

- Each site visit will require a report recommending tree healthcare supplements, recommended watering as needed during peak summer months and reduction into Fall and Winter.

Please give me a call if you have any questions.

Sincerely,

Bob Peralta

Bob Peralta
Certified Arborist WE-7150A
ASCA Consulting Arborist #505

Attachments: Maps and Pictures

arbornote

Diamond Construction Moraga

Legend (42)

- Coast Redwood (13)
- Honey Locust (8)
- Crapemyrtle (8)
- Red Maple (2)
- Mexican Fan Palm (2)
- Japanese Maple (2)
- California Junip... (2)
- American Sycamor... (2)
- White Alder (1)
- Cottonwood Speci... (1)
- Akebono Yoshino ... (1)

arbornote

Diamond Construction Moraga

Legend (42)

- Coast Redwood (9)
- Honey Locust (2)
- Crapemyrtle (4)
- Red Maple (2)
- Mexican Fan Palm (1)
- Japanese Maple (0)
- California Junip... (0)
- American Sycamor... (2)
- White Alder (0)
- Cottonwood Speci... (0)
- Akebono Yoshino ... (0)

#	Species		Health	Objective
1	*Acer rubrum* Red Maple	20.1 31'-45'	40% - Poor	
2	*Acer rubrum* Red Maple	14.3 31'-45'	40% - Poor	
3	*Gleditsia triacanthos* Honey Locust	12.5 46'-60'	40% - Poor	
4	*Lagerstroemia indica* Crapemyrtle	4.2 31'-45'	60% - Fair	
5	*Lagerstroemia indica* Crapemyrtle	5.2 31'-45'	60% - Fair	
6	*Lagerstroemia indica* Crapemyrtle	6.1 31'-45'	60% - Fair	
7	*Platanus occidentalis* American Sycamore	15" 46'-60'	60% - Fair	
8	*Platanus occidentalis* American Sycamore	10.7 46'-60'	60% - Fair	
9	*Lagerstroemia indica* Crapemyrtle	3" 31'-45'	60% - Fair	
10	*Washingtonia robusta* Mexican Fan Palm	20" 46'-60'	60% - Fair	
11	*Sequoia sempervir…* Coast Redwood	44.8 60'	90% - Very Good	
12	*Sequoia sempervir…* Coast Redwood	38.6 60'	90% - Very Good	
13	*Sequoia sempervir…* Coast Redwood	38.2 60'	90% - Very Good	
14	*Sequoia sempervir…* Coast Redwood	39.2 60'	90% - Very Good	
15	*Sequoia sempervir…* Coast Redwood	49.7 60'	90% - Very Good	
16	*Sequoia sempervir…* Coast Redwood	48" 60'	90% - Very Good	
17	*Gleditsia triacanthos* Honey Locust	9.5 16'-30'	40% - Poor	
18	*Sequoia sempervir…* Coast Redwood	50.8 60'	90% - Very Good	
19	*Sequoia sempervir…* Coast Redwood	44.2 60'	90% - Very Good	
20	*Sequoia sempervir…* Coast Redwood	47.5 60'	90% - Very Good	

arbornote

Diamond Construction Moraga

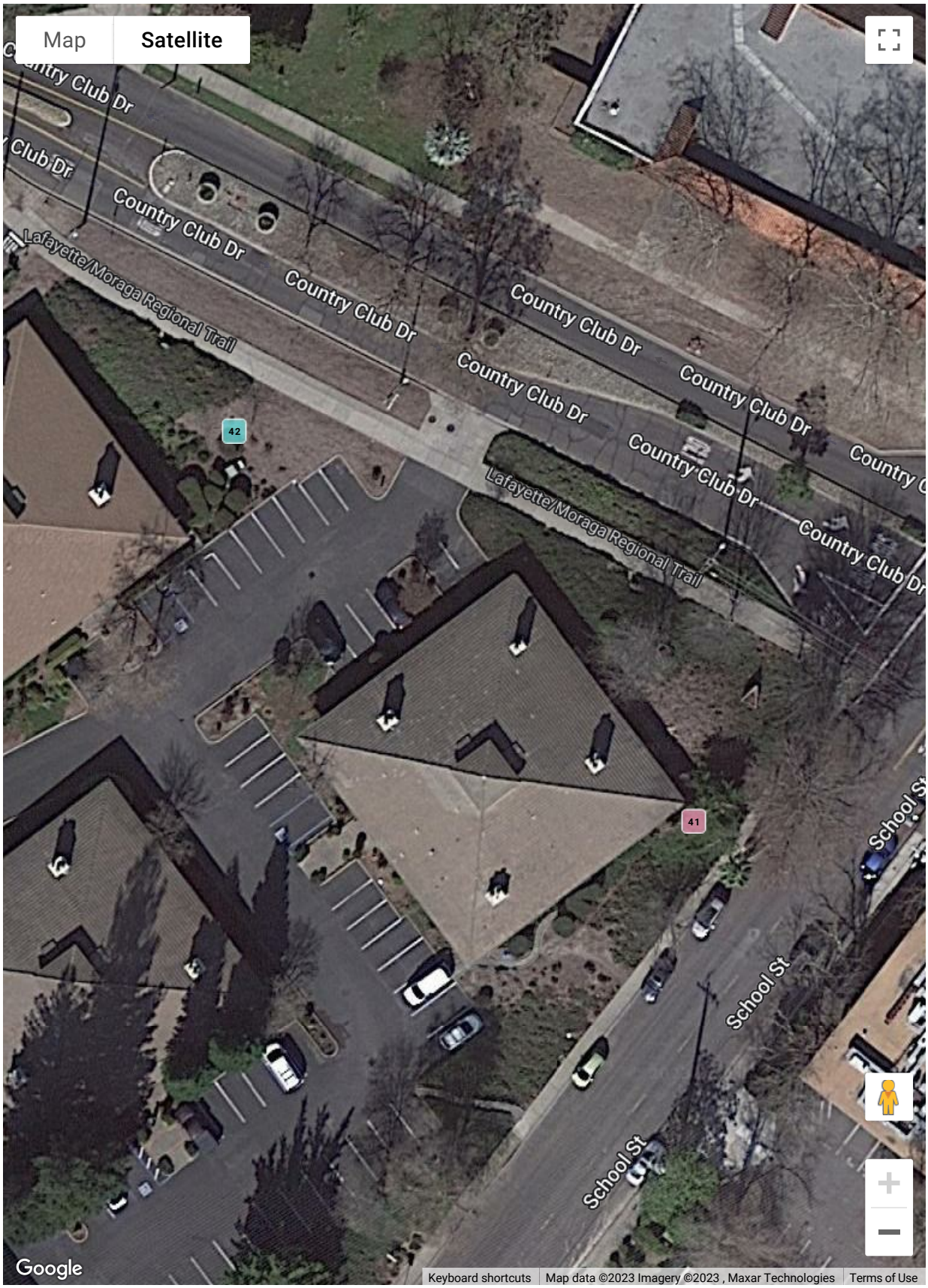
Legend (42)

- Coast Redwood (4)
- Honey Locust (5)
- Crapemyrtle (4)
- Red Maple (0)
- Mexican Fan Palm (1)
- Japanese Maple (2)
- California Junip... (1)
- American Sycamor... (0)
- White Alder (1)
- Cottonwood Speci... (1)
- Akebono Yoshino ... (1)

#	Species		Health	Objective
21	*Gleditsia triacanthos* Honey Locust	10" 16'-30'	40% - Poor	
22	*Gleditsia triacanthos* Honey Locust	8.5 16'-30'	40% - Poor	
23	*Gleditsia triacanthos* Honey Locust	7" 16'-30'	40% - Poor	
24	*Lagerstroemia indica* Crapemyrtle	5.4 31'-45'	60% - Fair	
25	*Lagerstroemia indica* Crapemyrtle	5.4 31'-45'	60% - Fair	
26	*Lagerstroemia indica* Crapemyrtle	3" 31'-45'	60% - Fair	
27	*Lagerstroemia indica* Crapemyrtle	4.2 31'-45'	60% - Fair	
28	*Sequoia sempervir…* Coast Redwood	38.5 60'	90% - Very Good	
29	*Sequoia sempervir…* Coast Redwood	42.3 60'	90% - Very Good	
30	*Sequoia sempervir…* Coast Redwood	18.5 60'	90% - Very Good	
31	*Sequoia sempervir…* Coast Redwood	19.5 60'	90% - Very Good	
32	*Acer palmatum* Japanese Maple	8/10/9/8 16'-30'	80% - Good	
33	*Acer palmatum* Japanese Maple	5/6/6/5/7/6 16'-30'	80% - Good	
34	*Juniperus californica* California Juniper	39" 46'-60'	60% - Fair	
35	*Gleditsia triacanthos* Honey Locust	5.8 16'-30'	0% - Dead	
36	*Alnus rhombifolia* White Alder	25" 46'-60'	40% - Poor	
37	*Gleditsia triacanthos* Honey Locust	11.3 16'-30'	40% - Poor	
38	*Prunus x yedoensis…* Akebono Yoshino Ch…	12/15 31'-45'	20% - Critical	
39	*Washingtonia robusta* Mexican Fan Palm	19.7 80	60% - Fair	
40	*Cottonwood spp.* Cottonwood Species	42" 46'-60'	40% - Poor	

arbornote

Diamond Construction Moraga



Legend (42)

- Coast Redwood (0)
- Honey Locust (1)
- Crapemyrtle (0)
- Red Maple (0)
- Mexican Fan Palm (0)
- Japanese Maple (0)
- California Junip... (1)
- American Sycamor... (0)
- White Alder (0)
- Cottonwood Speci... (0)
- Akebono Yoshino ... (0)

#	Species		Health	Objective
41	*Juniperus californica* California Juniper	12/16/10 46'-60'	60% - Fair	
42	*Gleditsia triacanthos* Honey Locust	3.3 16'-30'	40% - Poor	

arbornote

Diamond Construction Moraga

February 10, 2023

Acer rubrum ID# 1
Red Maple
Height: 31'-45' DBH: 20.1
Health: 40% - Poor

February 10, 2023

Acer rubrum ID# 1
Red Maple
Height: 31'-45' DBH: 20.1
Health: 40% - Poor

February 10, 2023

Acer rubrum ID# 1
Red Maple
Height: 31'-45' DBH: 20.1
Health: 40% - Poor

arbornote

Diamond Construction Moraga

February 10, 2023

Acer rubrum ID# 1
Red Maple
Height: 31'-45' DBH: 20.1
Health: 40% - Poor

February 10, 2023

Acer rubrum ID# 2
Red Maple
Height: 31'-45' DBH: 14.3
Health: 40% - Poor

February 10, 2023

Acer rubrum ID# 2
Red Maple
Height: 31'-45' DBH: 14.3
Health: 40% - Poor

arbornote

Diamond Construction Moraga

February 10, 2023

Acer rubrum ID# 2
Red Maple
Height: 31'-45' DBH: 14.3
Health: 40% - Poor

February 10, 2023

Gleditsia triacanthos ID# 3
Honey Locust
Height: 46'-60' DBH: 12.5
Health: 40% - Poor

February 10, 2023

Gleditsia triacanthos ID# 3
Honey Locust
Height: 46'-60' DBH: 12.5
Health: 40% - Poor

arbornote

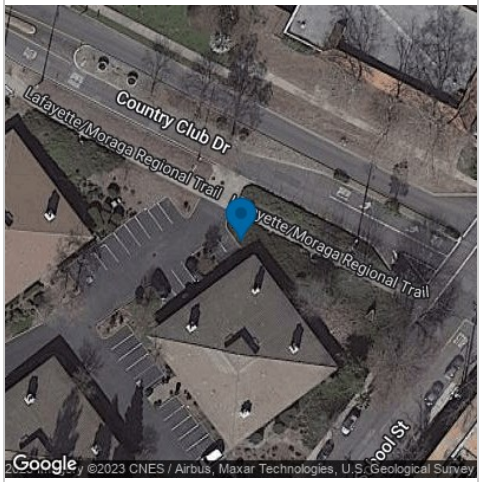
Diamond Construction Moraga

February 10, 2023

Gleditsia triacanthos ID# 3
Honey Locust
Height: 46'-60' DBH: 12.5
Health: 40% - Poor

February 10, 2023

Lagerstroemia indica ID# 4
Crapemyrtle
Height: 31'-45' DBH: 4.2
Health: 60% - Fair



February 10, 2023

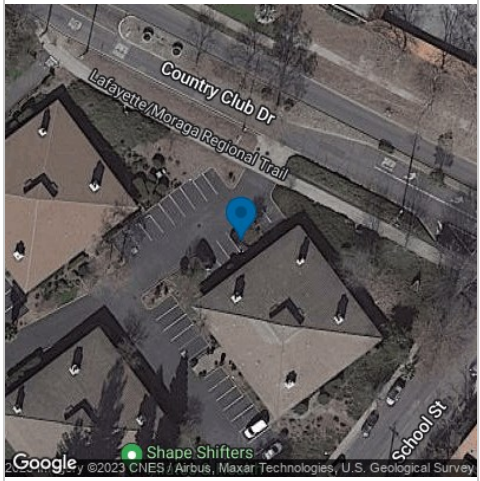
Lagerstroemia indica ID# 4
Crapemyrtle
Height: 31'-45' DBH: 4.2
Health: 60% - Fair

arbornote

Diamond Construction Moraga

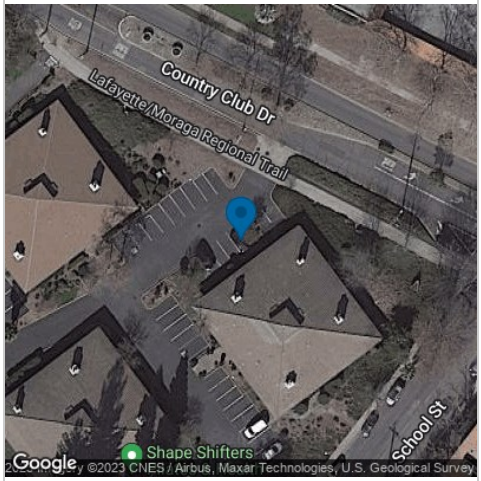
February 10, 2023

Lagerstroemia indica ID# 5
Crapemyrtle
Height: 31'-45' DBH: 5.2
Health: 60% - Fair



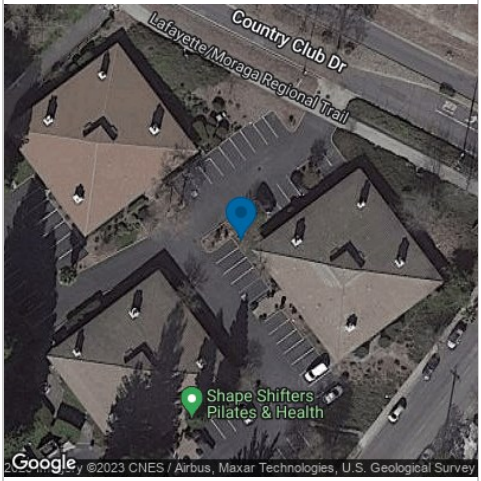
February 10, 2023

Lagerstroemia indica ID# 5
Crapemyrtle
Height: 31'-45' DBH: 5.2
Health: 60% - Fair



February 10, 2023

Lagerstroemia indica ID# 6
Crapemyrtle
Height: 31'-45' DBH: 6.1
Health: 60% - Fair



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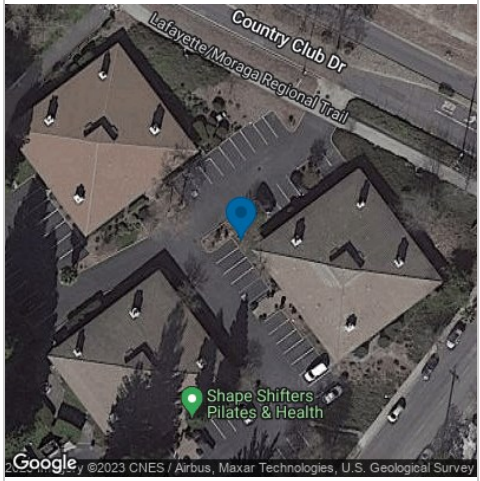
Diamond Construction Moraga

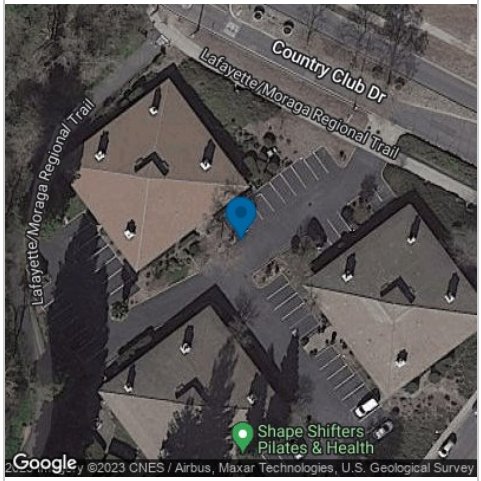
February 10, 2023

Lagerstroemia indica ID# 6
Crapemyrtle
Height: 31'-45' DBH: 6.1
Health: 60% - Fair



February 10, 2023

Platanus occidentalis ID# 7
American Sycamore
Height: 46'-60' DBH: 15"
Health: 60% - Fair



February 10, 2023

Platanus occidentalis ID# 7
American Sycamore
Height: 46'-60' DBH: 15"
Health: 60% - Fair

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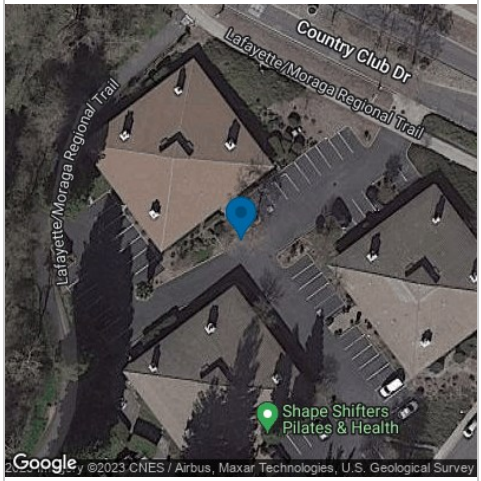
February 10, 2023

Platanus occidentalis ID# 7
American Sycamore
Height: 46'-60' DBH: 15"
Health: 60% - Fair

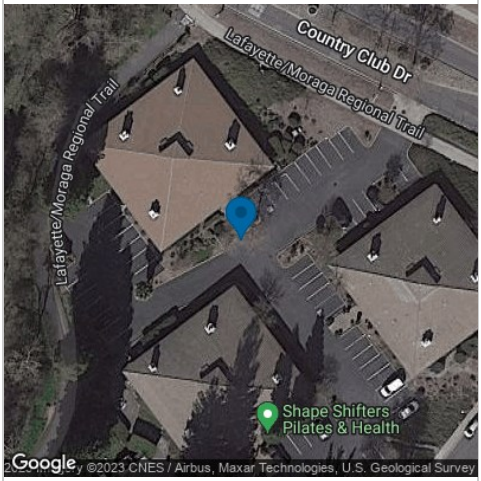
February 10, 2023

Platanus occidentalis ID# 8
American Sycamore
Height: 46'-60' DBH: 10.7
Health: 60% - Fair



February 10, 2023

Platanus occidentalis ID# 8
American Sycamore
Height: 46'-60' DBH: 10.7
Health: 60% - Fair

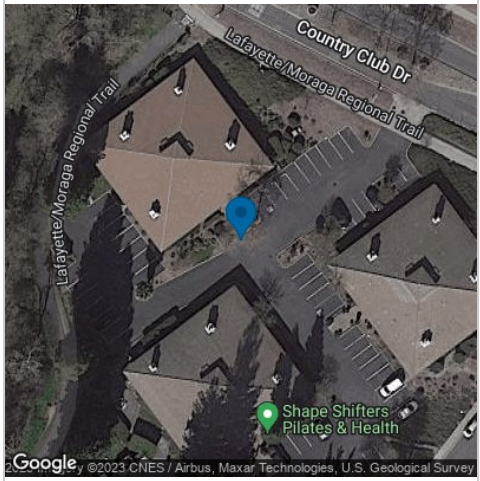


arbornote

Diamond Construction Moraga

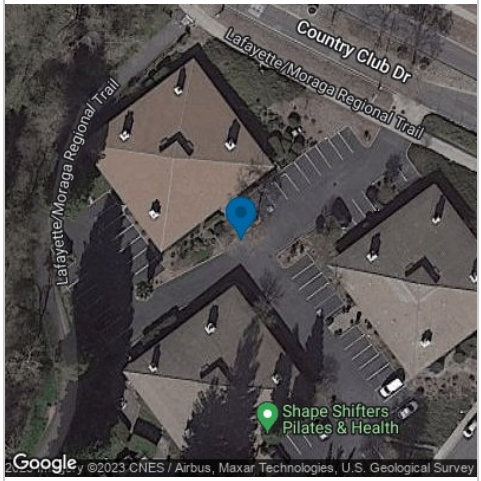
February 10, 2023

Platanus occidentalis ID# 8
American Sycamore
Height: 46'-60' DBH: 10.7
Health: 60% - Fair



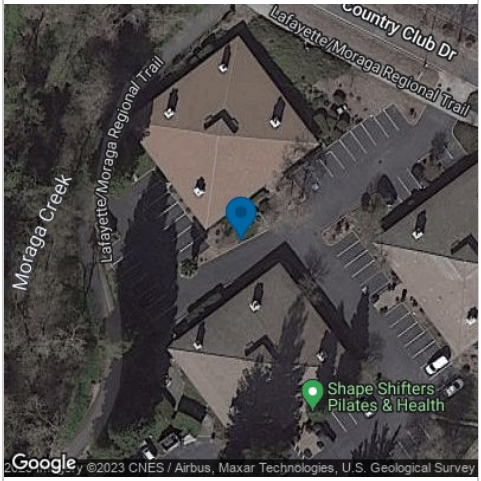
February 10, 2023

Platanus occidentalis ID# 8
American Sycamore
Height: 46'-60' DBH: 10.7
Health: 60% - Fair



February 10, 2023

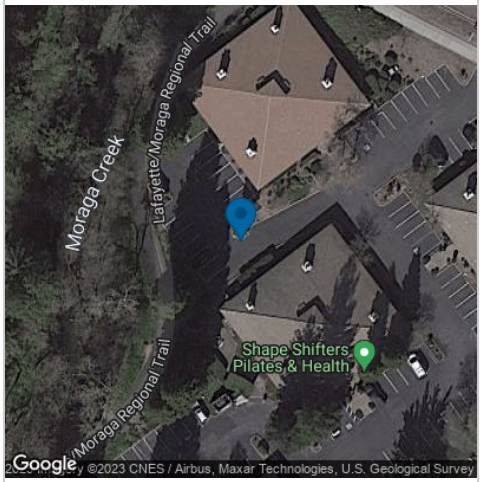
Lagerstroemia indica ID# 9
Crapemyrtle
Height: 31'-45' DBH: 3"
Health: 60% - Fair



Diamond Construction Moraga

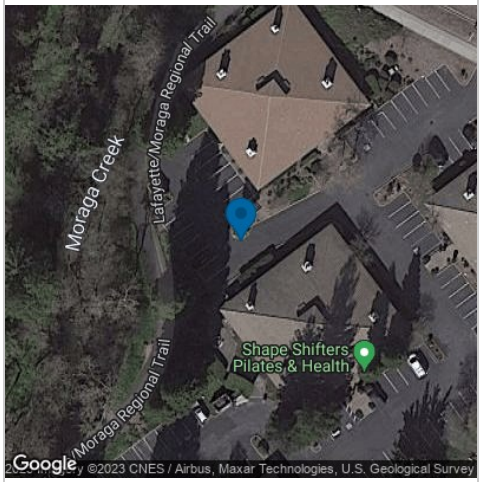
February 10, 2023

Washingtonia robusta ID# 10
Mexican Fan Palm
Height: 46'-60' DBH: 20"
Health: 60% - Fair



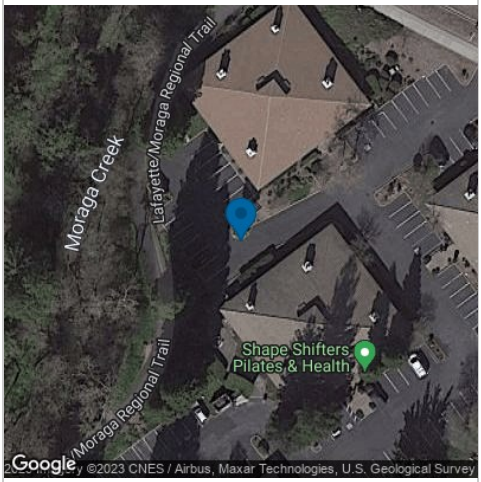
February 10, 2023

Washingtonia robusta ID# 10
Mexican Fan Palm
Height: 46'-60' DBH: 20"
Health: 60% - Fair



February 10, 2023

Washingtonia robusta ID# 10
Mexican Fan Palm
Height: 46'-60' DBH: 20"
Health: 60% - Fair

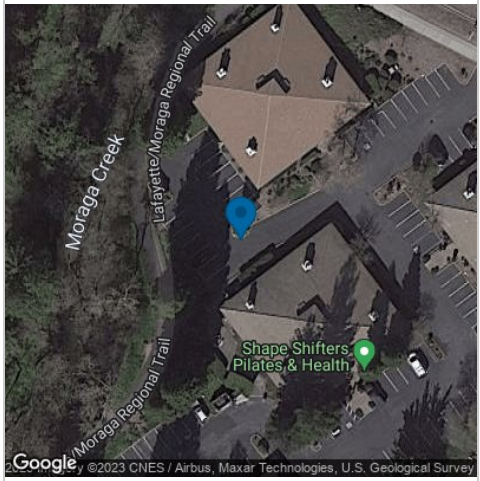


arbornote

Diamond Construction Moraga

February 10, 2023

Washingtonia robusta ID# 10
Mexican Fan Palm
Height: 46'-60' DBH: 20"
Health: 60% - Fair



February 10, 2023

Sequoia sempervirens ID# 11
Coast Redwood
Height: 60' DBH: 44.8
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 11
Coast Redwood
Height: 60' DBH: 44.8
Health: 90% - Very Good

arbornote

Diamond Construction Moraga

February 10, 2023

Sequoia sempervirens ID# 11
Coast Redwood
Height: 60' DBH: 44.8
Health: 90% - Very Good

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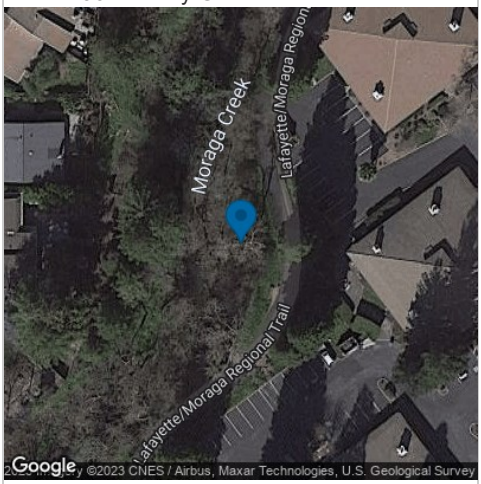
Sequoia sempervirens ID# 11
Coast Redwood
Height: 60' DBH: 44.8
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 12
Coast Redwood
Height: 60' DBH: 38.6
Health: 90% - Very Good

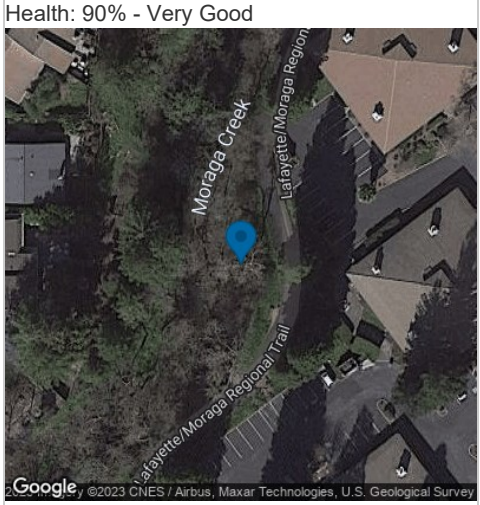


arbornote

Diamond Construction Moraga

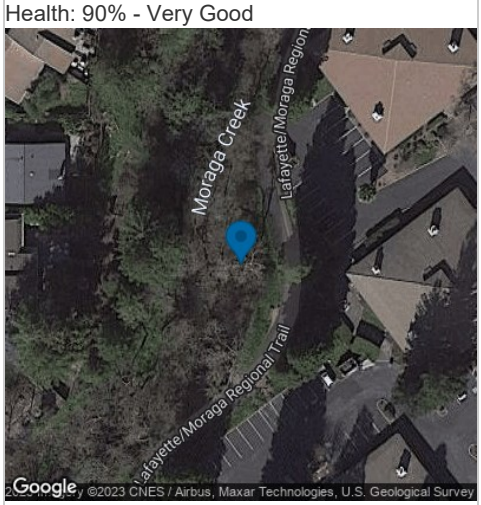
February 10, 2023

Sequoia sempervirens ID# 12
Coast Redwood
Height: 60' DBH: 38.6
Health: 90% - Very Good



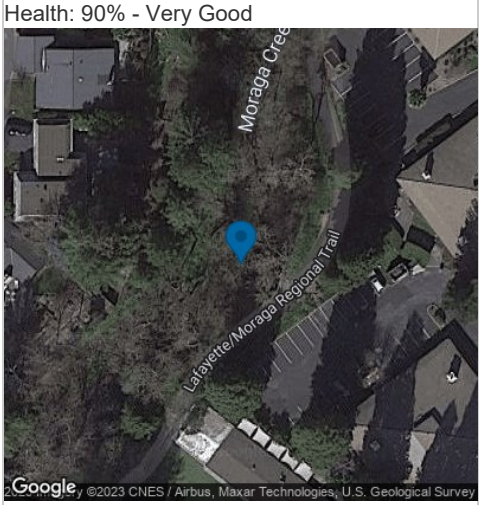
February 10, 2023

Sequoia sempervirens ID# 12
Coast Redwood
Height: 60' DBH: 38.6
Health: 90% - Very Good



February 10, 2023

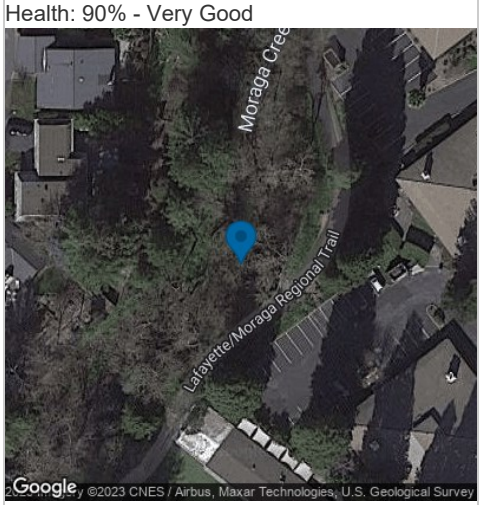
Sequoia sempervirens ID# 13
Coast Redwood
Height: 60' DBH: 38.2
Health: 90% - Very Good

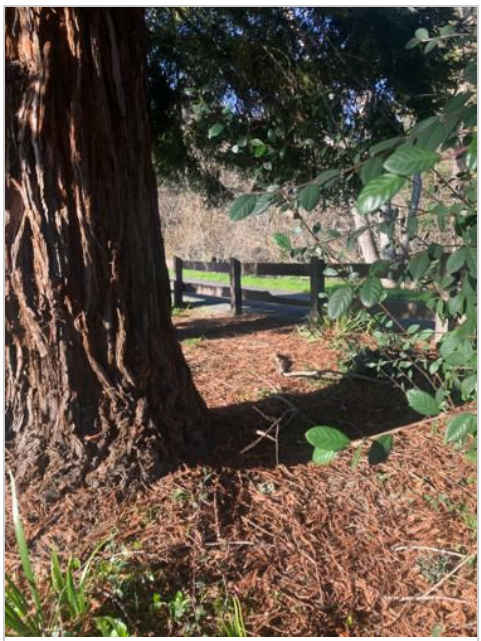


Diamond Construction Moraga

February 10, 2023

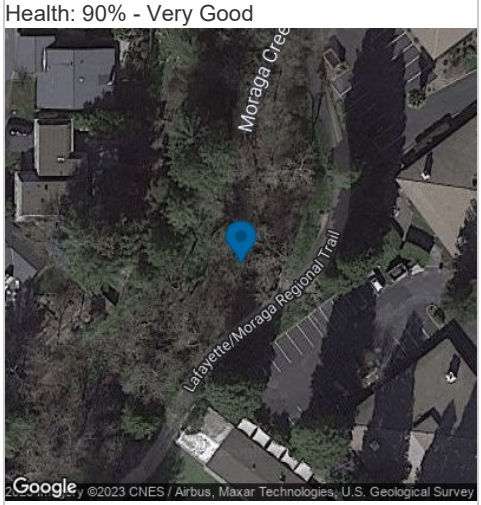
Sequoia sempervirens ID# 13
Coast Redwood
Height: 60' DBH: 38.2
Health: 90% - Very Good





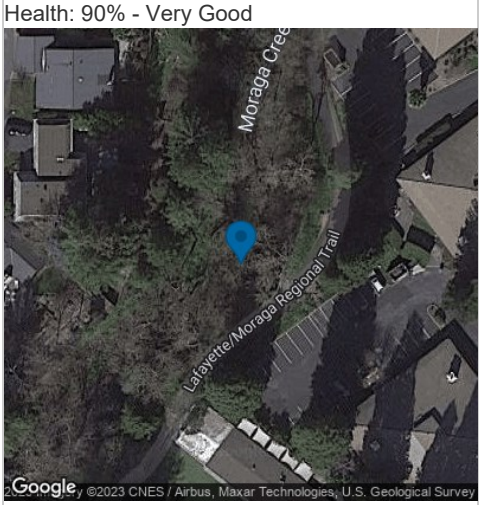
February 10, 2023

Sequoia sempervirens ID# 13
Coast Redwood
Height: 60' DBH: 38.2
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 13
Coast Redwood
Height: 60' DBH: 38.2
Health: 90% - Very Good

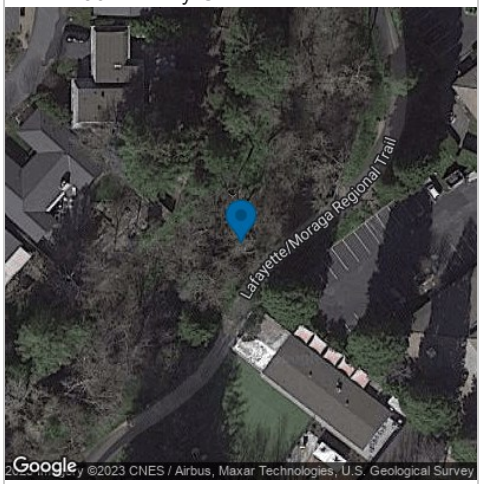


arbornote

Diamond Construction Moraga

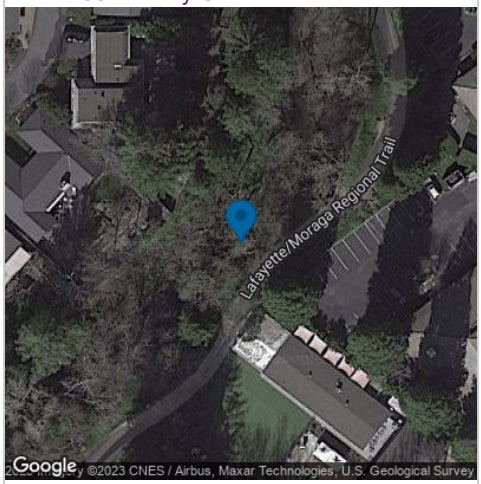
February 10, 2023

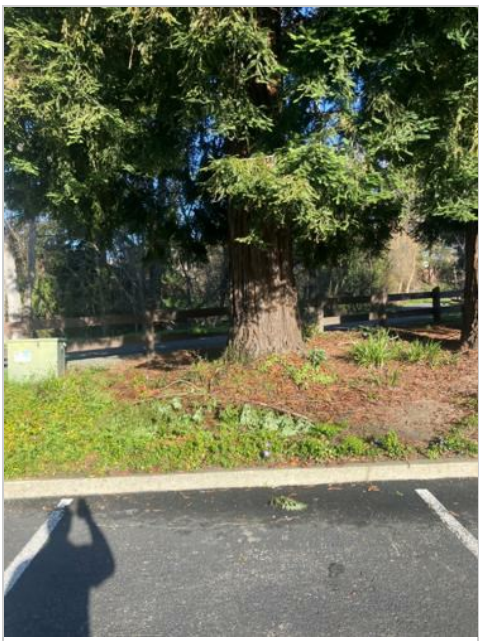
Sequoia sempervirens ID# 14
Coast Redwood
Height: 60' DBH: 39.2
Health: 90% - Very Good



February 10, 2023

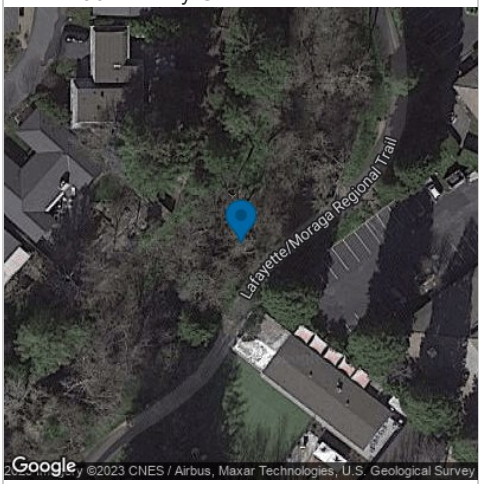
Sequoia sempervirens ID# 14
Coast Redwood
Height: 60' DBH: 39.2
Health: 90% - Very Good





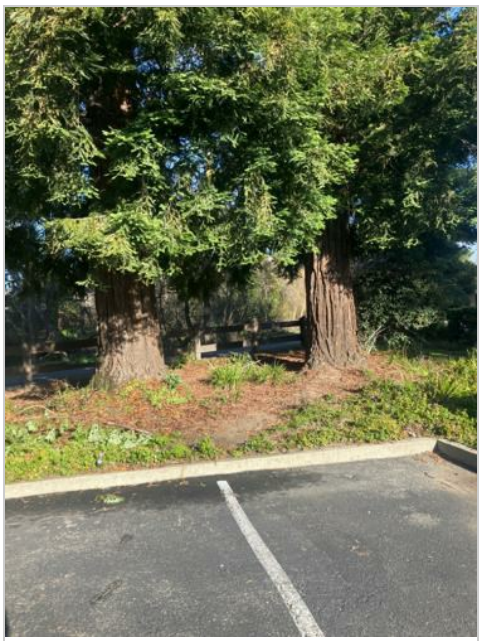
February 10, 2023

Sequoia sempervirens ID# 14
Coast Redwood
Height: 60' DBH: 39.2
Health: 90% - Very Good



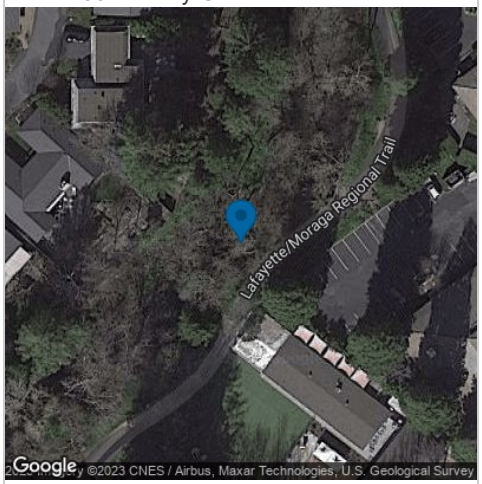
arbornote

Diamond Construction Moraga



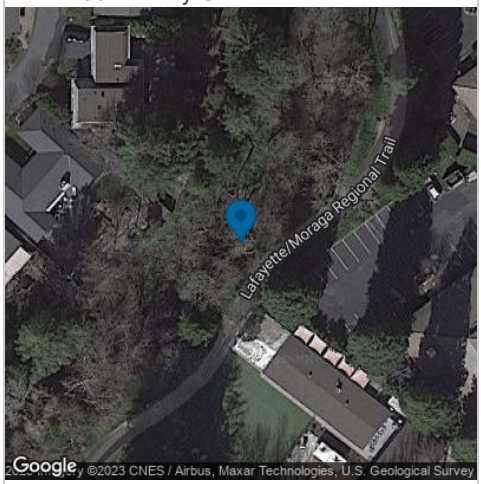
February 10, 2023

Sequoia sempervirens ID# 14
Coast Redwood
Height: 60' DBH: 39.2
Health: 90% - Very Good



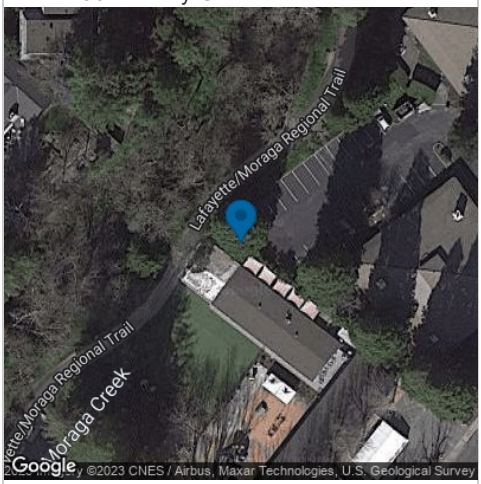
February 10, 2023

Sequoia sempervirens ID# 14
Coast Redwood
Height: 60' DBH: 39.2
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good

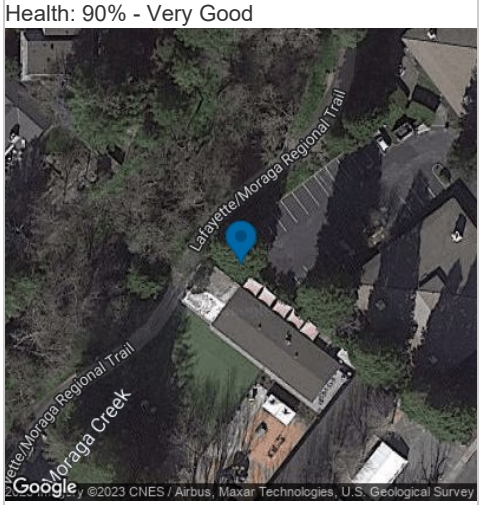


arbornote

Diamond Construction Moraga

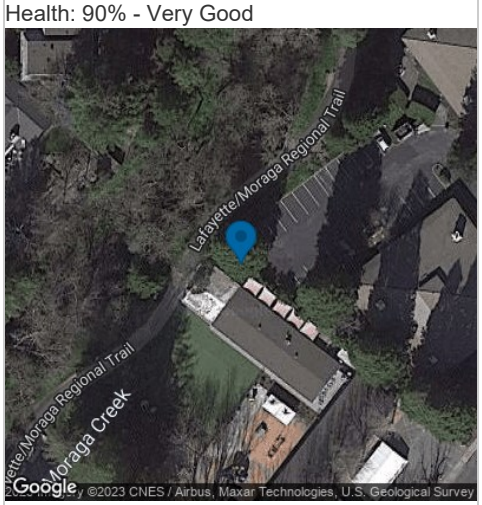
February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good



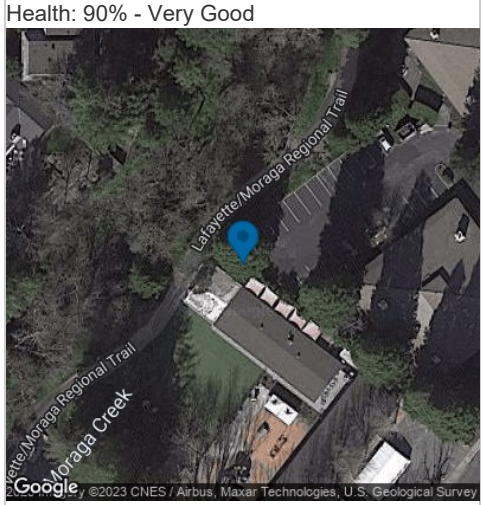
February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good



arbornote

Diamond Construction Moraga

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Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac

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Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac

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Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac

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Gleditsia triacanthos ID# 17
Honey Locust
Height: 16'-30' DBH: 9.5
Health: 40% - Poor

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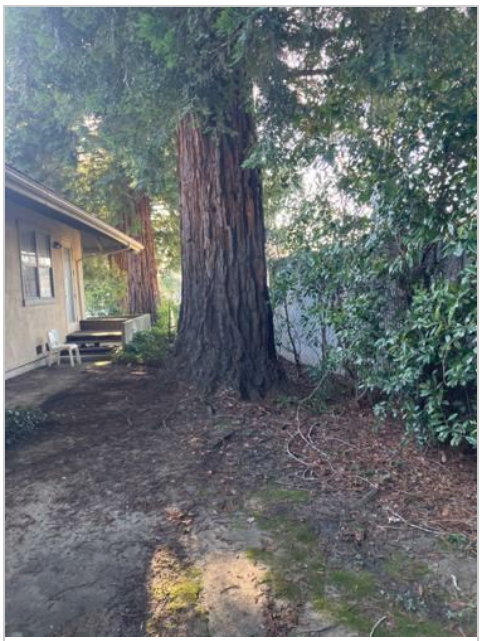
Gleditsia triacanthos ID# 17
Honey Locust
Height: 16'-30' DBH: 9.5
Health: 40% - Poor

February 10, 2023

Gleditsia triacanthos ID# 17
Honey Locust
Height: 16'-30' DBH: 9.5
Health: 40% - Poor

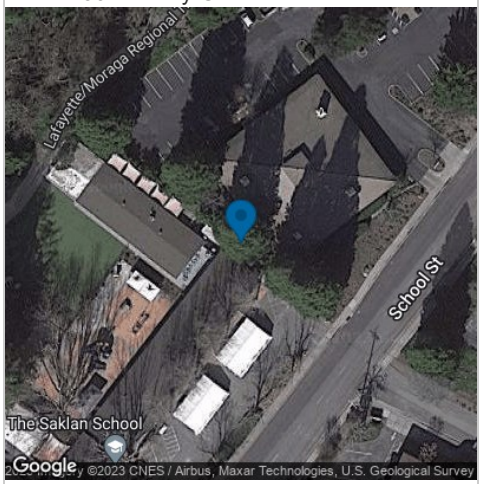
arbornote

Diamond Construction Moraga



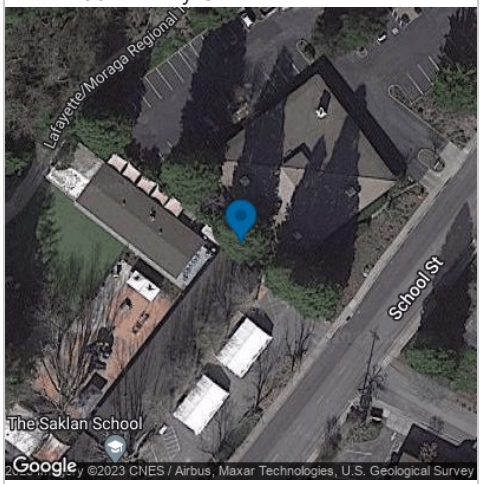
February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good



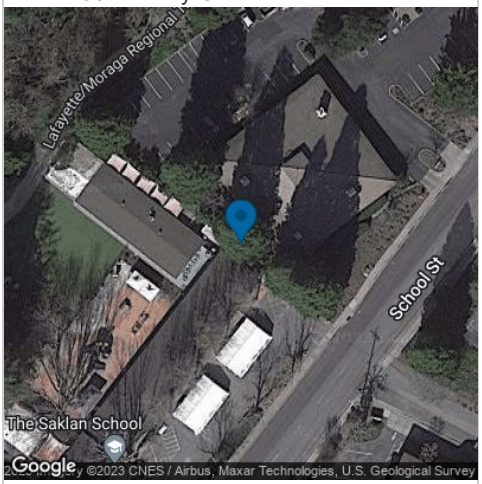
February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good



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February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good

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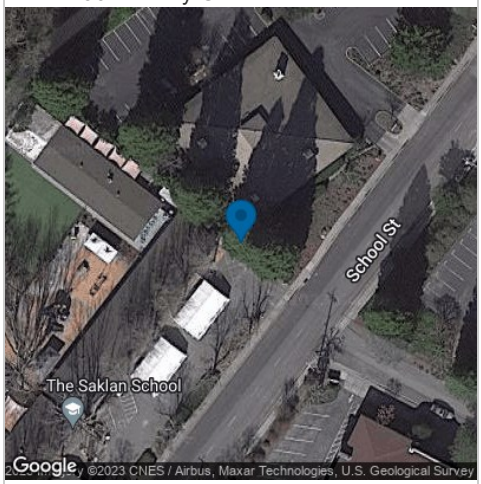
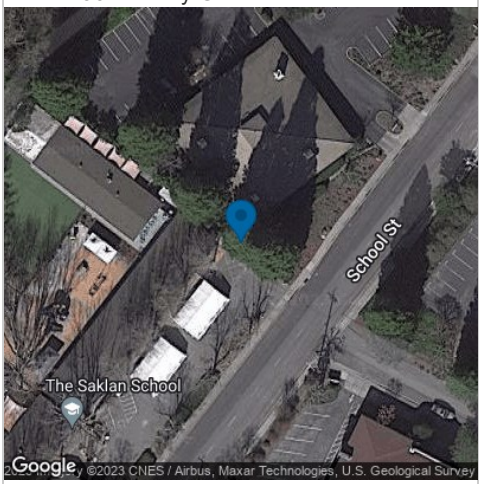
Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good



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Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good

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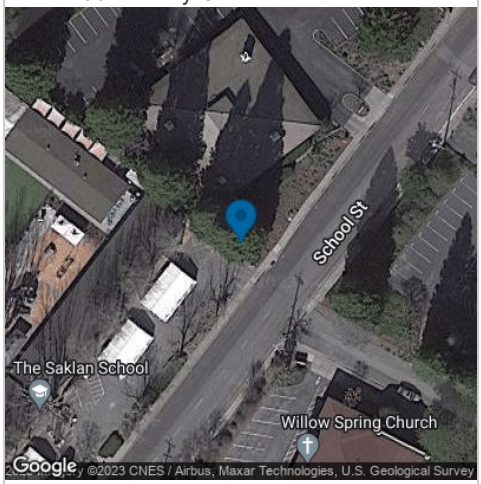
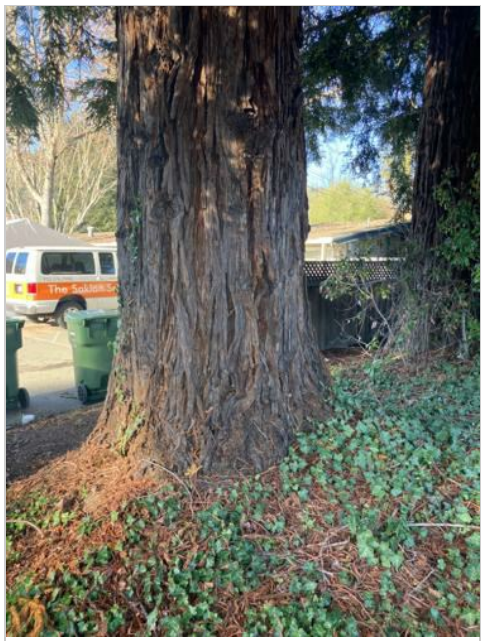
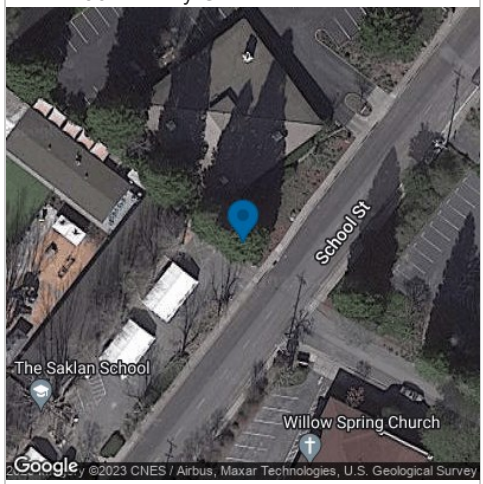
Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good





February 10, 2023

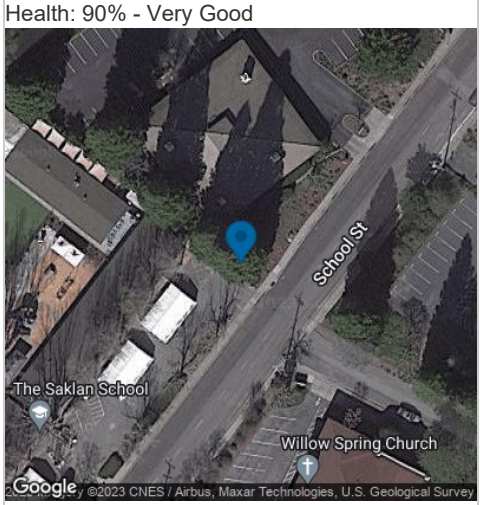
Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good



Diamond Construction Moraga

February 10, 2023

Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good



February 10, 2023

Gleditsia triacanthos ID# 21
Honey Locust
Height: 16'-30' DBH: 10"
Health: 40% - Poor

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Gleditsia triacanthos ID# 21
Honey Locust
Height: 16'-30' DBH: 10"
Health: 40% - Poor

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Gleditsia triacanthos ID# 22
Honey Locust
Height: 16'-30' DBH: 8.5
Health: 40% - Poor

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Gleditsia triacanthos ID# 22
Honey Locust
Height: 16'-30' DBH: 8.5
Health: 40% - Poor

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Gleditsia triacanthos ID# 23
Honey Locust
Height: 16'-30' DBH: 7"
Health: 40% - Poor

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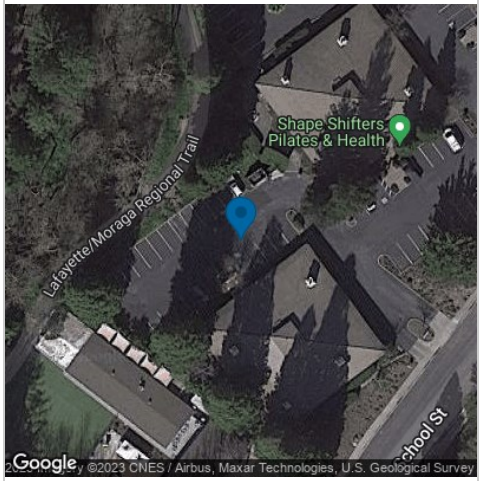
Gleditsia triacanthos ID# 23
Honey Locust
Height: 16'-30' DBH: 7"
Health: 40% - Poor

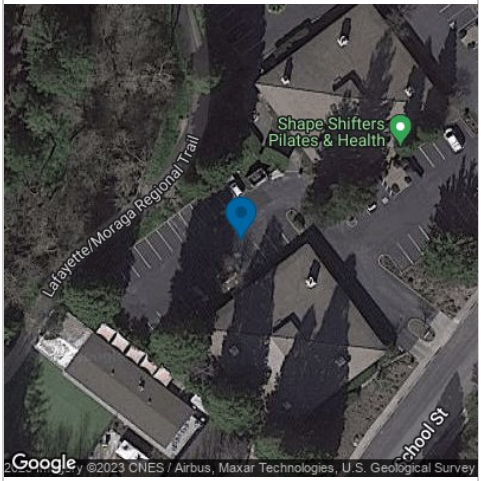
February 10, 2023

Lagerstroemia indica ID# 24
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair



February 10, 2023

Lagerstroemia indica ID# 24
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair



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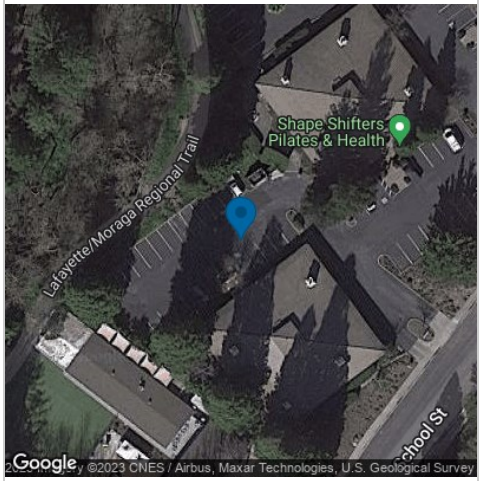
Diamond Construction Moraga

February 10, 2023

Lagerstroemia indica ID# 24
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair



February 10, 2023

Lagerstroemia indica ID# 25
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair

February 10, 2023

Lagerstroemia indica ID# 25
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair

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Lagerstroemia indica ID# 25
Crapemyrtle
Height: 31'-45' DBH: 5.4
Health: 60% - Fair

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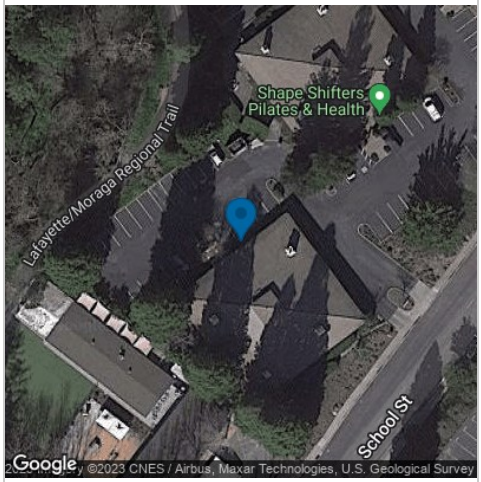
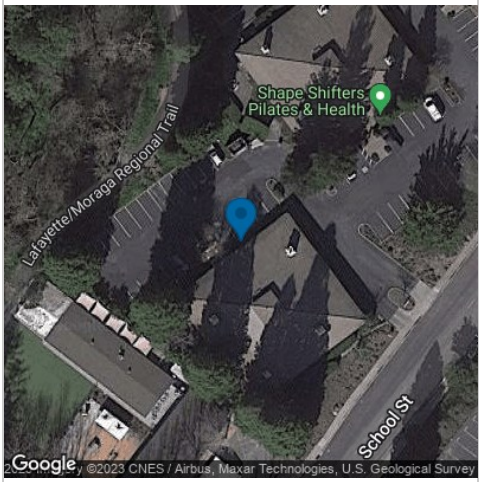
Lagerstroemia indica ID# 26
Crapemyrtle
Height: 31'-45' DBH: 3"
Health: 60% - Fair

February 10, 2023

Lagerstroemia indica ID# 26
Crapemyrtle
Height: 31'-45' DBH: 3"
Health: 60% - Fair





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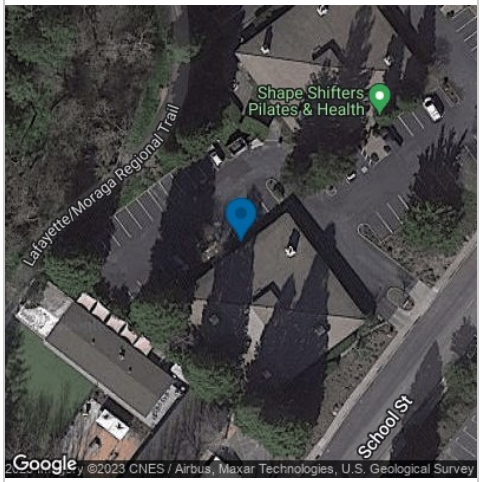
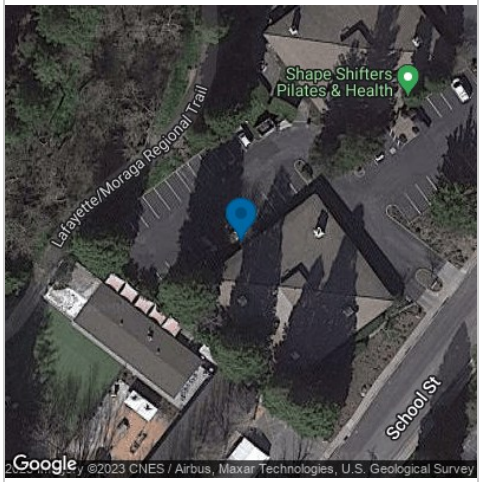
February 10, 2023

Lagerstroemia indica ID# 26
Crapemyrtle
Height: 31'-45' DBH: 3"
Health: 60% - Fair



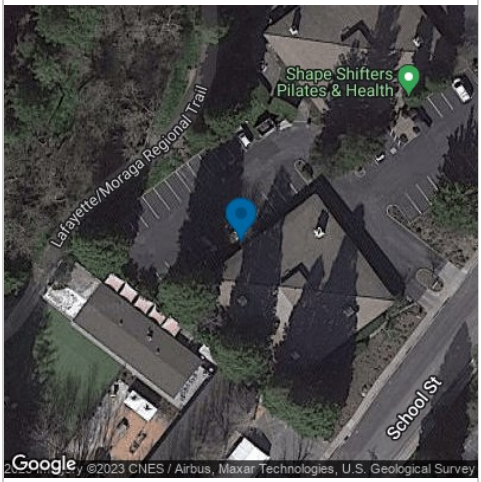
February 10, 2023

Lagerstroemia indica ID# 27
Crapemyrtle
Height: 31'-45' DBH: 4.2
Health: 60% - Fair



February 10, 2023

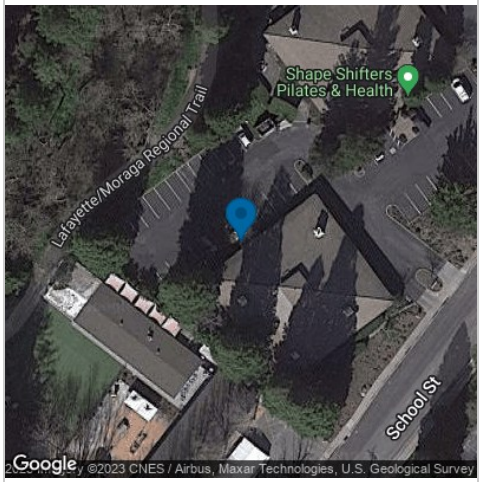
Lagerstroemia indica ID# 27
Crapemyrtle
Height: 31'-45' DBH: 4.2
Health: 60% - Fair



Diamond Construction Moraga

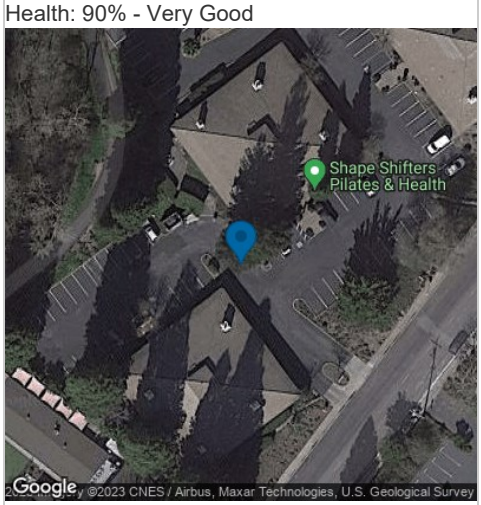
February 10, 2023

Lagerstroemia indica ID# 27
Crapemyrtle
Height: 31'-45' DBH: 4.2
Health: 60% - Fair



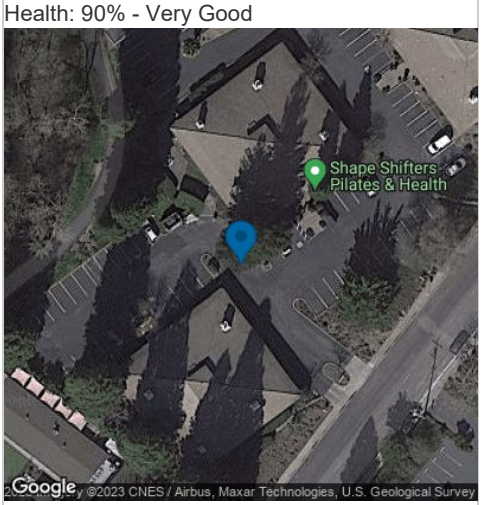
February 10, 2023

Sequoia sempervirens ID# 28
Coast Redwood
Height: 60' DBH: 38.5
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 28
Coast Redwood
Height: 60' DBH: 38.5
Health: 90% - Very Good



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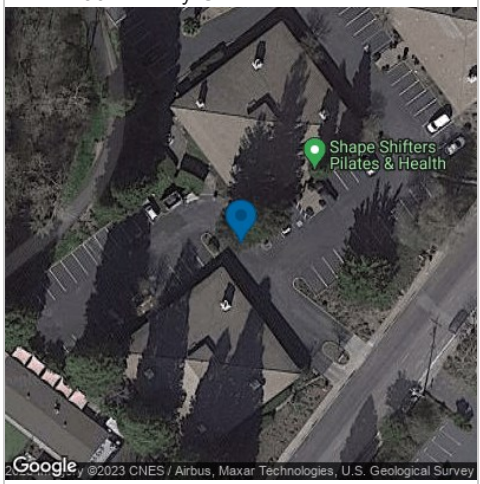
Diamond Construction Moraga

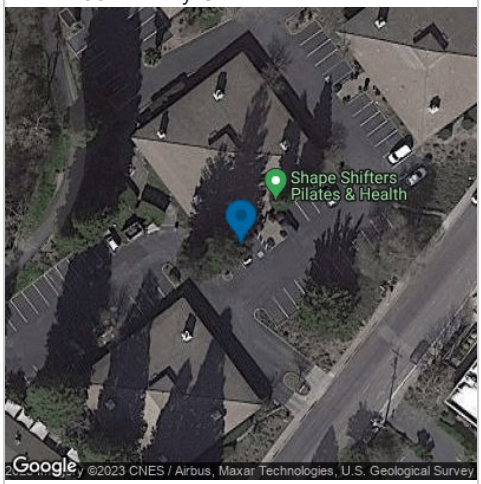
February 10, 2023

Sequoia sempervirens ID# 28
Coast Redwood
Height: 60' DBH: 38.5
Health: 90% - Very Good



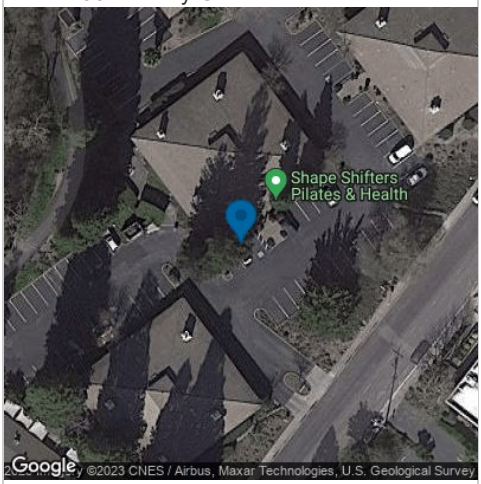
February 10, 2023

Sequoia sempervirens ID# 29
Coast Redwood
Height: 60' DBH: 42.3
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 29
Coast Redwood
Height: 60' DBH: 42.3
Health: 90% - Very Good



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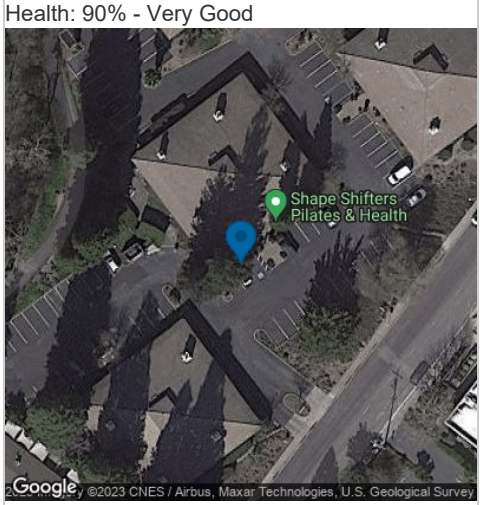
Diamond Construction Moraga

February 10, 2023

Sequoia sempervirens ID# 29
Coast Redwood
Height: 60' DBH: 42.3
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 30
Coast Redwood
Height: 60' DBH: 18.5
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 30
Coast Redwood
Height: 60' DBH: 18.5
Health: 90% - Very Good

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Sequoia sempervirens ID# 30
Coast Redwood
Height: 60' DBH: 18.5
Health: 90% - Very Good

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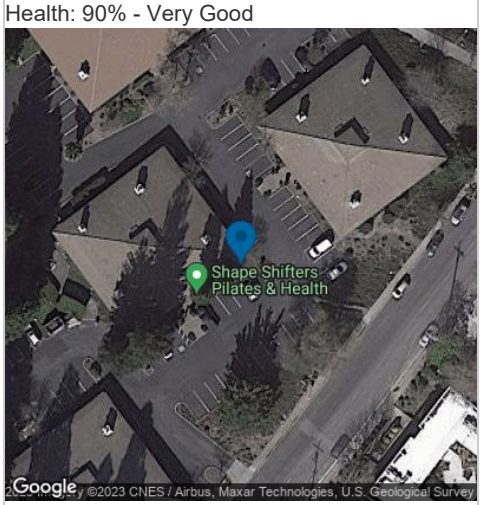
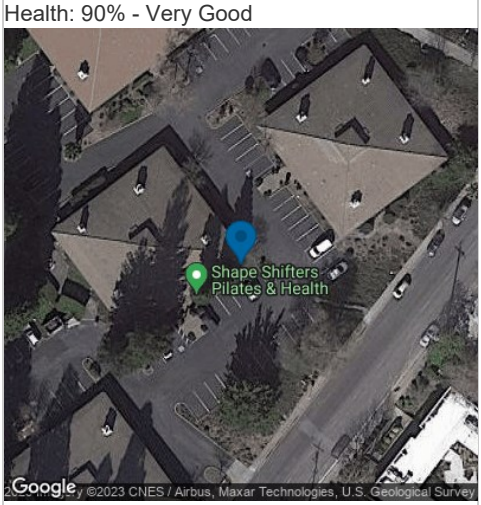
Sequoia sempervirens ID# 31
Coast Redwood
Height: 60' DBH: 19.5
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 31
Coast Redwood
Height: 60' DBH: 19.5
Health: 90% - Very Good





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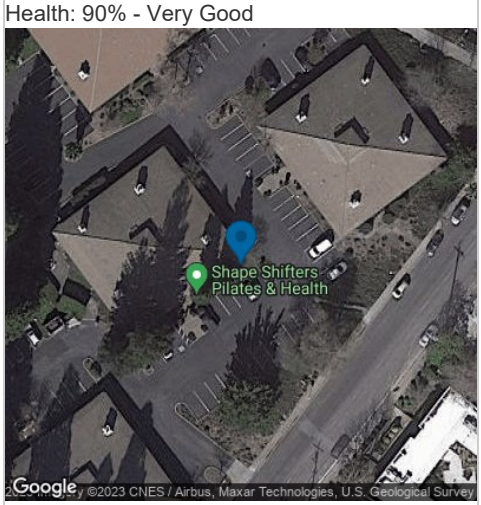
February 10, 2023

Sequoia sempervirens ID# 31
Coast Redwood
Height: 60' DBH: 19.5
Health: 90% - Very Good

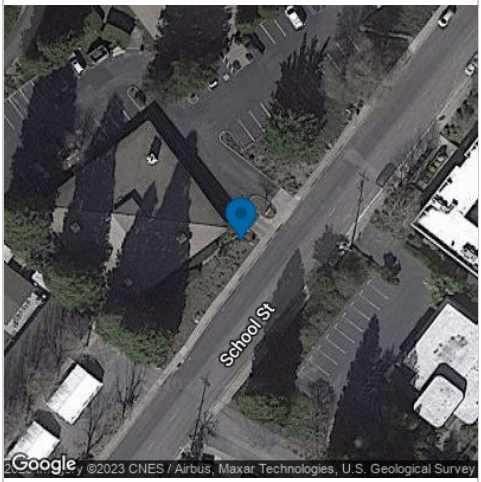
February 10, 2023

Sequoia sempervirens ID# 31
Coast Redwood
Height: 60' DBH: 19.5
Health: 90% - Very Good



February 10, 2023

Acer palmatum ID# 32
Japanese Maple
Height: 16'-30' DBH: 8/10/9/8
Health: 80% - Good



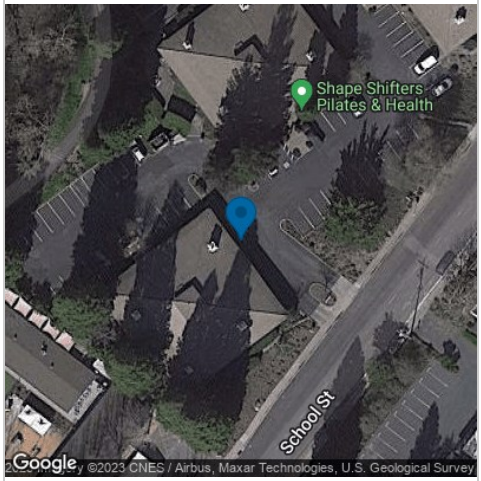
Diamond Construction Moraga

February 10, 2023

Acer palmatum ID# 32
Japanese Maple
Height: 16'-30' DBH: 8/10/9/8
Health: 80% - Good

February 10, 2023

Acer palmatum ID# 33
Japanese Maple
Height: 16'-30' DBH: 5/6/6/…
Health: 80% - Good



February 10, 2023

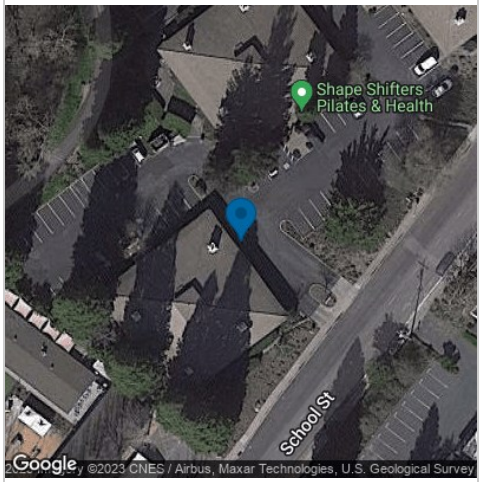
Acer palmatum ID# 33
Japanese Maple
Height: 16'-30' DBH: 5/6/6/…
Health: 80% - Good

arbornote

Diamond Construction Moraga

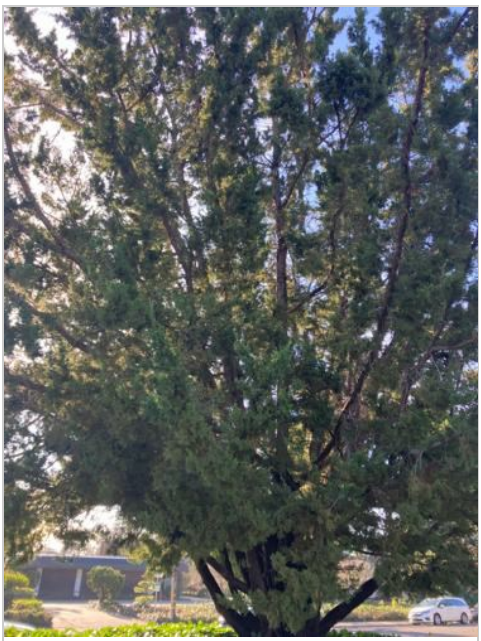
February 10, 2023

Acer palmatum ID# 33
Japanese Maple
Height: 16'-30' DBH: 5/6/6/…
Health: 80% - Good



February 10, 2023

Juniperus californica ID# 34
California Juniper
Height: 46'-60' DBH: 39"
Health: 60% - Fair



February 10, 2023

Juniperus californica ID# 34
California Juniper
Height: 46'-60' DBH: 39"
Health: 60% - Fair

arbornote

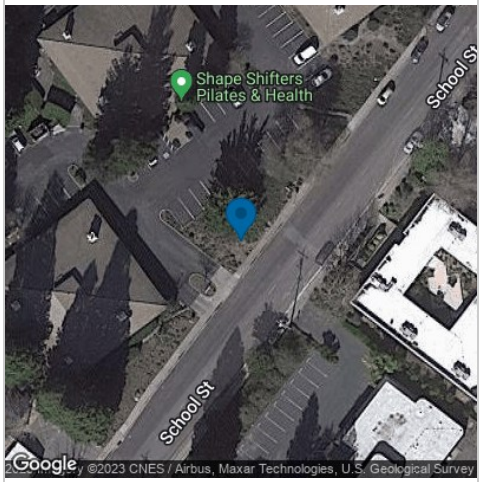
Diamond Construction Moraga

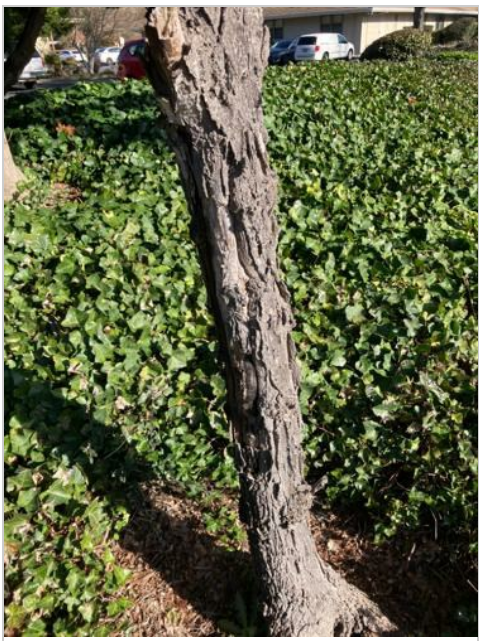
February 10, 2023

Juniperus californica ID# 34
California Juniper
Height: 46'-60' DBH: 39"
Health: 60% - Fair

February 10, 2023

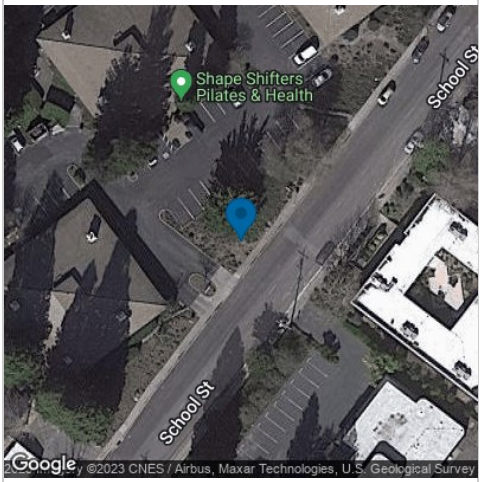
Gleditsia triacanthos ID# 35
Honey Locust
Height: 16'-30' DBH: 5.8
Health: 0% - Dead





February 10, 2023

Gleditsia triacanthos ID# 35
Honey Locust
Height: 16'-30' DBH: 5.8
Health: 0% - Dead



arbornote

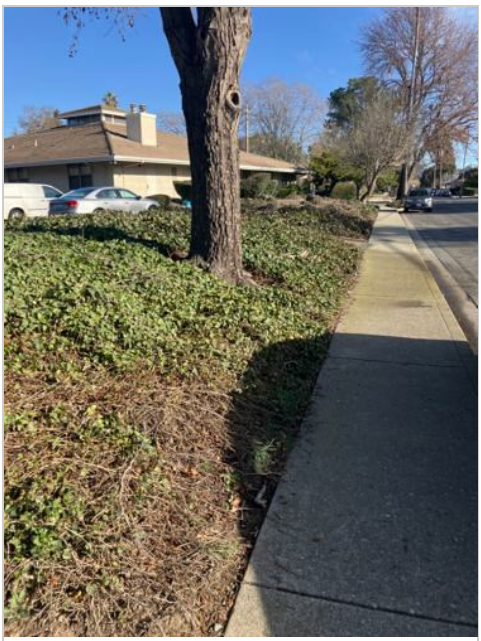
Diamond Construction Moraga

February 10, 2023

Gleditsia triacanthos ID# 35
Honey Locust
Height: 16'-30' DBH: 5.8
Health: 0% - Dead

February 10, 2023

Alnus rhombifolia ID# 36
White Alder
Height: 46'-60' DBH: 25"
Health: 40% - Poor



February 10, 2023

Alnus rhombifolia ID# 36
White Alder
Height: 46'-60' DBH: 25"
Health: 40% - Poor

arbornote

Diamond Construction Moraga

February 10, 2023

Alnus rhombifolia ID# 36
White Alder
Height: 46'-60' DBH: 25"
Health: 40% - Poor

February 10, 2023

Alnus rhombifolia ID# 36
White Alder
Height: 46'-60' DBH: 25"
Health: 40% - Poor

February 10, 2023

Gleditsia triacanthos ID# 37
Honey Locust
Height: 16'-30' DBH: 11.3
Health: 40% - Poor

arbornote

Diamond Construction Moraga

February 10, 2023

Gleditsia triacanthos ID# 37
Honey Locust
Height: 16'-30' DBH: 11.3
Health: 40% - Poor

February 10, 2023

Prunus x yedoensis cv. Ake… ID# 38
Akebono Yoshino Cherry
Height: 31'-45' DBH: 12/15
Health: 20% - Critical

February 10, 2023

Prunus x yedoensis cv. Ake… ID# 38
Akebono Yoshino Cherry
Height: 31'-45' DBH: 12/15
Health: 20% - Critical

arbornote

Diamond Construction Moraga

February 10, 2023

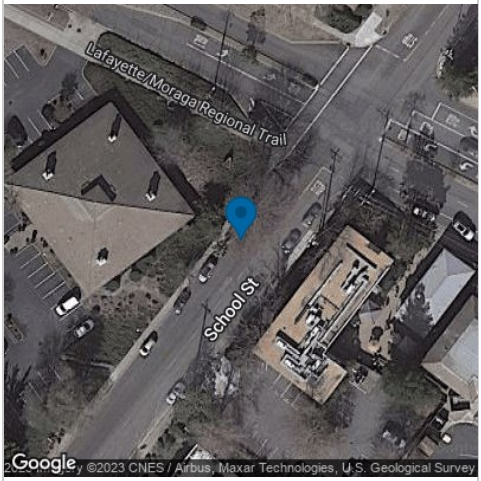
Prunus x yedoensis cv. Ake… ID# 38
Akebono Yoshino Cherry
Height: 31'-45' DBH: 12/15
Health: 20% - Critical

February 10, 2023

Prunus x yedoensis cv. Ake… ID# 38
Akebono Yoshino Cherry
Height: 31'-45' DBH: 12/15
Health: 20% - Critical

February 10, 2023

Washingtonia robusta ID# 39
Mexican Fan Palm
Height: 80 DBH: 19.7
Health: 60% - Fair

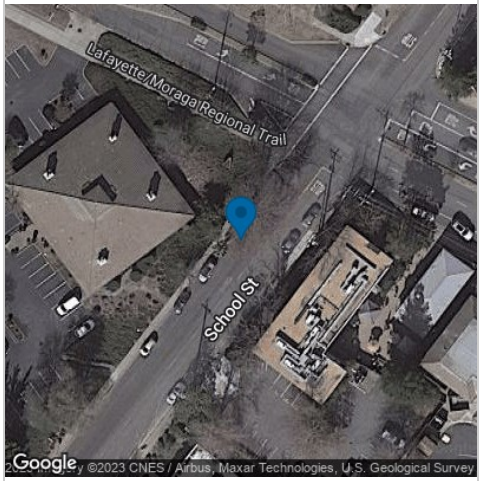


arbornote

Diamond Construction Moraga

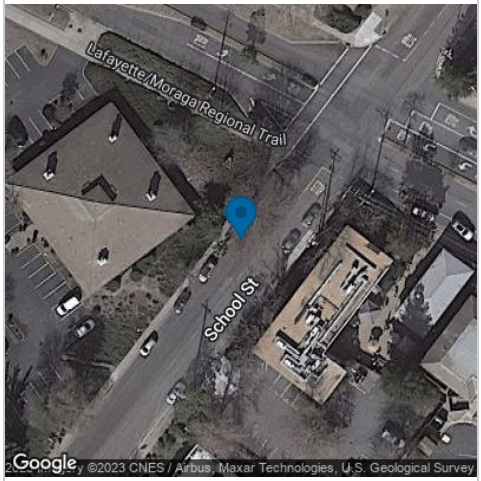
February 10, 2023

Washingtonia robusta ID# 39
Mexican Fan Palm
Height: 80 DBH: 19.7
Health: 60% - Fair



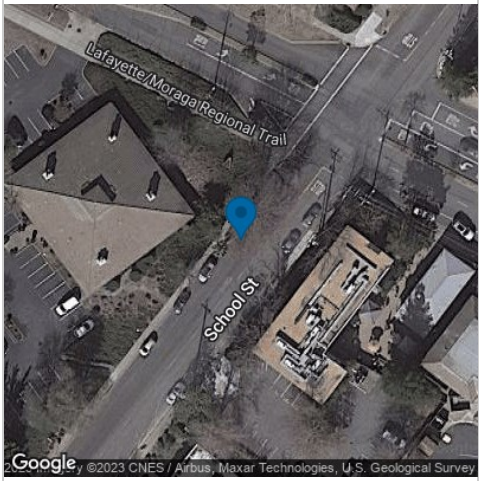
February 10, 2023

Washingtonia robusta ID# 39
Mexican Fan Palm
Height: 80 DBH: 19.7
Health: 60% - Fair



February 10, 2023

Washingtonia robusta ID# 39
Mexican Fan Palm
Height: 80 DBH: 19.7
Health: 60% - Fair



arbornote

Diamond Construction Moraga

February 10, 2023

Cottonwood spp. ID# 40
Cottonwood Species
Height: 46'-60' DBH: 42"
Health: 40% - Poor

February 10, 2023

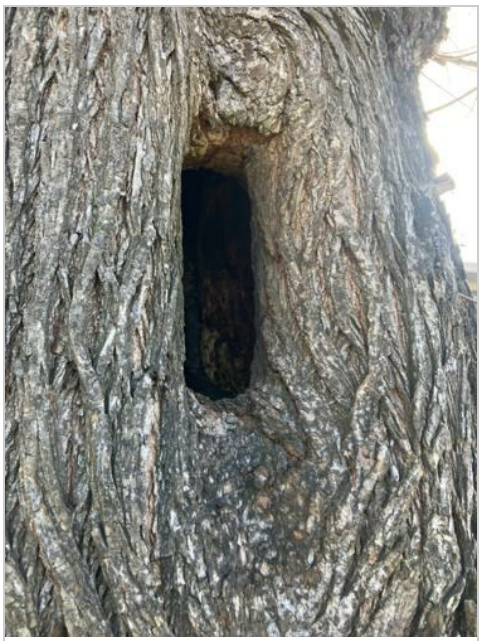
Cottonwood spp. ID# 40
Cottonwood Species
Height: 46'-60' DBH: 42"
Health: 40% - Poor

February 10, 2023

Cottonwood spp. ID# 40
Cottonwood Species
Height: 46'-60' DBH: 42"
Health: 40% - Poor

arbornote

Diamond Construction Moraga

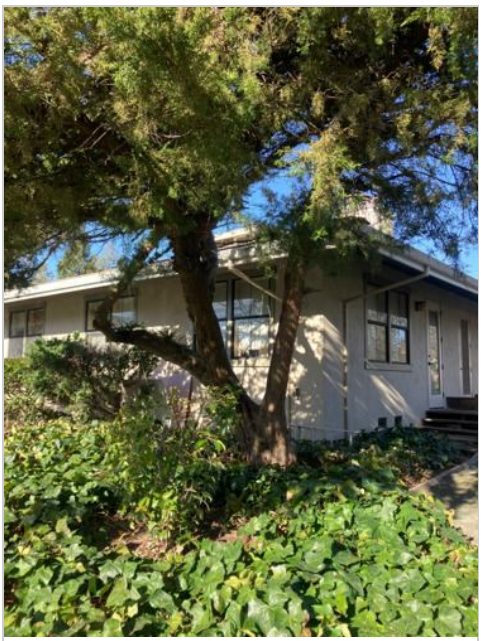


February 10, 2023

Cottonwood spp. ID# 40
Cottonwood Species
Height: 46'-60' DBH: 42"
Health: 40% - Poor

February 10, 2023

Cottonwood spp. ID# 40
Cottonwood Species
Height: 46'-60' DBH: 42"
Health: 40% - Poor



February 10, 2023

Juniperus californica ID# 41
California Juniper
Height: 46'-60' DBH: 12/16/10
Health: 60% - Fair

arbornote

Diamond Construction Moraga

February 10, 2023

Juniperus californica ID# 41
California Juniper
Height: 46'-60' DBH: 12/16/10
Health: 60% - Fair

February 10, 2023

Gleditsia triacanthos ID# 42
Honey Locust
Height: 16'-30' DBH: 3.3
Health: 40% - Poor

February 10, 2023

Gleditsia triacanthos ID# 42
Honey Locust
Height: 16'-30' DBH: 3.3
Health: 40% - Poor

Submitted July 23, 2024

Tree Evaluation

Prepared For:

Jeff Stone

Partner

Diamond Construction Inc.

P.O. Box 477

Lafayette, CA 94549

Prepared By:

Bob Peralta

Bob Peralta Arbor Consulting

American Society of Consulting Arborists

237 Berna Avenue

Napa, California 94559

(925) 525- 3795

June 26, 2024

Dear Jeff,

Thank you for asking me to provide a Consulting Arborist Report for your Proposed new Project located at 1600 School Street in Moraga, California. I originally visited the site on February 10, 2023, to review the Combined Topographic Survey Map for 1600, 1620, 1640, and 1660 School Street - provided to you by DeBolt Civil Engineering. The map I reviewed is dated 07/06/2022– Job No: 22231. I did a second site visit to review the exact locations of the footing and areas that will need to be excavated near the Redwood trees on your property and that border Saklan School. I reviewed all the updated drawings and did a site visit on June 24, 2024, to walk Redwood Trees – 15, 16, 18, 19, and 20.

The property was developed in 1982 and it is estimated the trees were planted within that time frame. The trees are estimated to be 42 years old. In our urban environment trees play a vital role not just for esthetics but they are environmentally important. Each year we become more aware of planting the right tree in the right location so a tree can thrive for many years. The life of most urban trees planted in confined landscape spaces is 50 to 75 years before the roots or canopy exceeds that of the growing space.

In the microclimate of Moraga, California where the days are relatively mild and with moist fog that creates a perfect environment for Redwood trees but for many other species. These trees were planted using year around watering that came from both rains and landscape irrigation. The trunk diameters of the trees that measure from 44.2 to 50.8 dbh., have resulted in a very extensive root system that goes well beyond the dripline of the trees. I soil probed along the fence between the school and your property and found roots on the surface down to 18" that exceed 1" and greater, and the same near the existing building. All five trees have created a root mass from tree Tag 20 back to Tree Tag 15 that extends well beyond the dripline of the center branches. Between the commercial buildings and the school, the roots have grown to the foundations of both properties.

There is also a sewer line that runs under these trees that always is a concern for any large mature trees on properties. The weight, root mass or the failure of the pipe can also create challenges after the new buildings are built. The trees would have to be removed to repair any underground pipes or utilities in the area.

I do not recommend cutting any roots on a tree this size. Trees this size need all the stability they can get as they continue to mature. As we have all seen in the past two years very large mature urban trees have fallen during high winds and heavy rains. The risk on large trees is the danger not only of total tree failure but also large limb failures as these trees mature.

Growing next to an active school, and soon to be apartments, I do not recommend keeping these trees between these two properties. These trees will continue grow and the risks will increase. I do recommend removing these five trees for safety and liability to people and property. I do not feel with proposed development that these large trees can safely be saved without creating a future risk.

Please give me a call if you have any questions.

Sincerely,

Bob Peralta

Bob Peralta
Certified Arborist WE-7150A
ASCA Consulting Arborist #505

Attachments: Maps and Pictures

arbornote

Diamond School Street Redwood Trees

Legend (5)

Coast Redwood (5)

arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good

arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 15
Coast Redwood
Height: 60' DBH: 49.7
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac

February 10, 2023

Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac

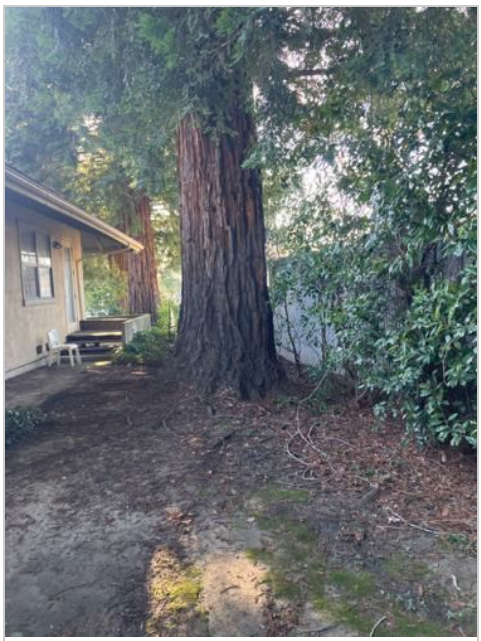
arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 16
Coast Redwood
Height: 60' DBH: 48"
Health: 90% - Very Good

Axac



February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good

arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 18
Coast Redwood
Height: 60' DBH: 50.8
Health: 90% - Very Good

February 10, 2023

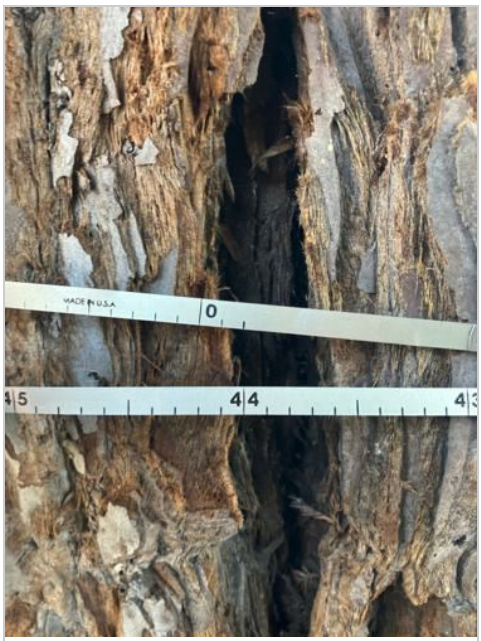
Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good

arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good



February 10, 2023

Sequoia sempervirens ID# 19
Coast Redwood
Height: 60' DBH: 44.2
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good

arbornote

Diamond School Street Redwood Trees

February 10, 2023

Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good

February 10, 2023

Sequoia sempervirens ID# 20
Coast Redwood
Height: 60' DBH: 47.5
Health: 90% - Very Good

ROCKRIDGE GEOTECHNICAL

May 21, 2026

Jeff Stone, CEO
Diamond Construction Inc
PO Box 477
Lafayette, CA 94549

Subject: Geotechnical Consultation
Proposed Improvements in Creek Setback Zone
Proposed Residential Development
1600-1660 School Street
Moraga, California

Dear Mr. Stone,

This letter presents the results of our geotechnical consultation regarding the proposed improvements to be constructed in the Laguna Creek setback zone for the 1600-1660 School Street residential development in Moraga. We previously performed a geotechnical investigation for this project, the results of which were presented in our report dated February 16, 2024.

The current improvements in the 30-foot-wide creek setback zone on the southeast side of Laguna Creek consist of a 10-foot-wide pedestrian path. Civil plans prepared by CBG Civil Engineers, dated May 19, 2026, call for low retaining walls (less than about 3 feet high) to be constructed between the proposed building pads and the existing pedestrian paths in some areas. In addition, the western terminus of A Street will extend a few feet into the setback zone. Based on our review of the proposed improvements in the creek setback zone, we conclude the proposed improvements to be constructed as part of the 1600-1660 School Street development will have no adverse biological impact and will not adversely impact the stability of the creek bank.

Sincerely yours,
ROCKRIDGE GEOTECHNICAL, INC.

Date: 05/21/2026

Craig S. Shields, P.E., G.E.
Principal Engineer

ROCKRIDGE GEOTECHNICAL

Prepared for **Diamond Construction Inc.**

GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL BUILDING
1600 SCHOOL STREET
MORAGA, CALIFORNIA

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February 16, 2024
Project No. 24-2553

ROCKRIDGE GEOTECHNICAL

February 16, 2024
Project No. 24-2553

Mr. Jeff Stone, CEO
Diamond Construction Inc
PO Box 477
Lafayette, CA 94549

Subject: Geotechnical Investigation
Proposed Residential Building
1600 School Street
Moraga, California

Dear Mr. Stone:

We are pleased to present the results of our geotechnical investigation for the proposed residential building to be constructed at 1600 School Street in Moraga, California. Our investigation was performed in accordance with our proposal dated January 8, 2024.

The project site consists of three contiguous parcels (APNs 257190-050, 051, and 052) encompassing a total area of approximately 2 acres. The site is irregularly shaped and is currently occupied by four office buildings surrounded by asphalt-paved parking and drive aisles. It is bordered by the Saklan School to the south, the Moraga Creek and Lafayette/Moraga Regional Trail to the west, Country Club Drive to the north, and School Street to the east. The ground surface on the site slopes gently downwards to the south.

The proposed project includes demolishing two of the existing office buildings, and constructing a new 66-unit residential building, parking lot, and landscaping improvements. The proposed multi-family building will be at grade and four stories tall. The first floor will be a concrete podium and will include parking. The remaining floors will surround a second-story courtyard on three sides.

Based on the results of our geotechnical investigation, we conclude there are no major geotechnical issues that would preclude development of the site as proposed. The primary geotechnical issues affecting the proposed development include: 1) the presence of moderately expansive near-surface soil, 2) the presence of a relatively weak clay layer which appears to extend to a depth of about 4 feet below existing grade, and 3) providing adequate support for the proposed building. If the weak clay layer is addressed, we conclude the proposed building may be supported on a mat foundation. One way to address the weak clay layer would be to overexcavate to a depth of 2.5 feet below existing grade, treat the upper 18 inches of the excavation subgrade in place with Quicklime, and then place engineered fill above the lime-treated clay to reach mat subgrade. Alternatively, the building may be supported by deepened conventional footings which bottom below the weak clay layer.

The recommendations contained in our report are based on limited subsurface exploration. Consequently, variations between expected and actual subsurface conditions may be found in localized areas during construction. Therefore, we should be engaged to observe site preparation, and foundation installation, during which time we may make changes to our recommendations if deemed necessary.

We appreciate the opportunity to provide our services to you on this project. Should you have any questions, please call.

Sincerely,
ROCKRIDGE GEOTECHNICAL, INC.

Clayton J. Proto, P.E.
Senior Engineer

Craig S. Shields, P.E., G.E.
Principal Engineer

Enclosure

ROCKRIDGE GEOTECHNICAL

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APPENDIX B – Laboratory Test Results

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Figure 2 Site Plan

Figure 3 Regional Geologic Map

Figure 4 Regional Fault and Historic Seismicity Map

Figure 5 Liquefaction Susceptibility Map

Figure 6 Utility Trench Low-Permeability Plug Detail

APPENDIX A

Figures A-1 through A-3 Cone Penetration Test Results, CPT-1 through CPT-3

Figures A-4 and A-5 Logs of Borings, HA-1 and HA-2

Figure A-6 Classification Chart

APPENDIX B

Figure B-1 Plasticity Chart

Figure B-2 Particle Size Distribution Reports

Figure B-3 Soil Corrosivity Test Results

ROCKRIDGE GEOTECHNICAL

GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL BUILDING
1600 SCHOOL STREET
Moraga, California

1.0 INTRODUCTION

This report presents the results of the geotechnical investigation performed by Rockridge Geotechnical, Inc. for the proposed residential building to be constructed at 1600 School Street in Moraga, California. The project site is on the western side of Saint Andrews Drive, west of the intersection of Moraga Way and Moraga Road, as shown on the Site Location Map, Figure 1.

The project site consists of three contiguous parcels (APNs 257190-050, 051, and 052) encompassing a total area of approximately 2 acres. The site is irregularly shaped and is currently occupied by four office buildings surrounded by asphalt-paved parking and drive aisles. It is bordered by the Saklan School to the south, the Moraga Creek and Lafayette/Moraga Regional Trail to the west, Country Club Drive to the north, and School Street to the east, as shown on Figure 2, Site Plan. The ground surface on the site slopes gently down to the south.

The proposed project includes combining the three parcels into a single parcel, demolishing two of the existing office buildings, constructing a new 66-unit residential building, a parking lot and drive aisle, and landscaping improvements. The proposed multi-family building will be at grade and four stories tall. The first floor will be a concrete podium and will include parking. The remaining floors will be framed in wood or light-gauge steel and will surround a second-story courtyard on three sides. Gray Geotech previously performed a geotechnical consultation and presented their results in a report titled *Preliminary Geotechnical Report, Proposed Residential Conversion, 1600 School Street, Moraga, CA, Project No. 18-063-01*, dated June 7, 2018.

2.0 SCOPE OF SERVICES

Our investigation was performed in accordance with our proposal dated January 8, 2024. Our scope of services consisted of exploring subsurface conditions at the site by performing three cone penetration tests (CPTs), advancing two hand-auger borings, performing laboratory testing

on selected soil samples, and performing engineering analyses to develop conclusions and recommendations regarding:

- site seismicity and seismic hazards, including the potential for liquefaction and lateral spreading, and total and differential settlement resulting from liquefaction and/or cyclic densification
- the most appropriate foundation type(s) for the proposed building
- design criteria for the recommended foundation type(s), including vertical and lateral capacities for each of the foundation type(s)
- estimates of foundation settlement
- lateral earth pressures for design of retaining walls
- site grading and excavation, including criteria for fill quality and compaction
- subgrade preparation for interior and exterior concrete slabs-on-grade
- pavement sections for asphalt concrete and Portland cement concrete
- 2022 California Building Code (CBC) site class and design spectral response acceleration parameters
- corrosivity of the near-surface soil and the potential effects on buried concrete and metal structures and foundations
- construction considerations.

3.0 FIELD INVESTIGATION AND LABORATORY TESTING

We explored the subsurface conditions at the site by performing three CPTs, advancing two hand-auger borings, and performing laboratory testing on selected soil samples. Before performing the field investigation, we obtained a soil boring permit from Contra Costa Environmental Health Division (CCEHD). We also contacted Underground Services Alert (USA) to notify them of our work, as required by law, and retained C. Cruz Sub-Surface Locators, Inc., a private utility locator, to reduce the potential for encountering buried utilities during our field investigation. Details of our field investigation and laboratory testing are presented in this section.

3.1 Cone Penetration Tests

Three CPTs, designated as CPT-1 through CPT-3, were performed to provide in-situ soil data at the approximate locations shown on Figure 2. Middle Earth Geo Testing of Hayward, California performed the CPTs on January 23, 2024, each to a depth of about 50 feet below the ground surface (bgs). The CPTs were performed by hydraulically pushing a 1.7-inch-diameter cone-tipped probe into the ground. The cone-tipped probe measured tip resistance and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges within the cone continuously measured soil parameters for the entire depth advanced. Soil data, including tip resistance and frictional resistance, were recorded by a computer while the test was conducted. Accumulated data were processed by computer to provide engineering information such as the types and approximate strength characteristics of the soil encountered. The CPT logs, showing tip resistance and friction ratio by depth, as well as interpreted soil behavior type, are presented in Appendix A on Figures A-1 through A-3. Upon completion, the CPT holes were backfilled with cement grout under the observation of a grout inspector from CCEHD.

3.2 Hand-Auger Borings

On January 23, 2024, we advanced two hand-auger borings, designated as HA-1 and HA-2. The approximate locations of the hand-auger borings are shown on Figure 2.

Borings HA-1 and HA-2 were each advanced using a 3-inch-diameter hand auger to a depth of 6.5 feet bgs. Our field engineer obtained soil samples at several depths for visual classification and laboratory testing. Upon completion, the boreholes were backfilled with soil cuttings. Descriptions of soil conditions encountered in the hand-auger borings are presented on Figures A-4 and A-5. The soil encountered in our borings was classified in accordance with the classification chart shown on Figure A-6.

3.3 Laboratory Testing

We re-examined the soil samples in the office to confirm the field classifications and selected representative samples for laboratory testing. Soil samples were tested by B. Hillebrandt Soils Testing, Inc. of Alamo, California to measure moisture content, fines content, and plasticity

(Atterberg Limits). In addition, soil corrosivity testing was performed by Project X Engineering of Murrieta, California on two samples from the borings. The results of the laboratory tests are presented in the boring logs and in Appendix B.

4.0 SUBSURFACE CONDITIONS

Regional geologic information (Figure 3) indicates the site is underlain by Holocene-age alluvium (Qha) that was deposited in a broad drainage with several creek channels, including Moraga Creek, which runs along the western side of the site. Our borings and CPTs indicate the upper 5 to 8 feet of soil underlying the site is highly variable, consisting mostly of loose to medium dense sand with varying fines content with occasional clay layers at the CPT-1 location, stiff to very stiff clay and medium dense clayey sand at the CPT-3 and HA-2 locations, and soft to medium stiff clay with varying sand content at the CPT-2 location. We anticipate this variability is the result of variable deposition of soil during past creek flooding events (prior to development) and what appears to be a second creek channel crossing the northwestern portion of the site in a 1939 aerial photograph of the site.

Below depths of 5 to 8 feet bgs, the alluvium consists mostly of stiff to very stiff clay that extends to depths ranging from 18 to 35 feet bgs. Below those depths, the alluvium consists of very dense granular soil and hard cohesive soil that extend to the maximum depth explored of approximately 50 feet bgs. Atterberg limits tests performed on a sample of the near-surface clay indicates the soil is moderately expansive[1] with a plasticity index (PI) of 23.

Groundwater was measured in our CPTs using a weighted tape measure at the completion of each CPT. The groundwater depth ranged from 7 to 8 feet bgs at the time of our field investigation. The groundwater was measured approximately 10 minutes after completion of each CPT, so these depths may not represent the stabilized groundwater depth.

The groundwater level at the site is expected to fluctuate several feet, depending on seasonal rainfall and other seasonal conditions, localized subsurface conditions, the presence of damaged

[1] Highly expansive soil undergoes large volumetric changes with changes in moisture content (i.e. it shrinks when dried and swells when wetted).

utility lines, and irrigation practices. To estimate the historic high groundwater at the site, we reviewed available groundwater data on the State of California Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov). The closest site is located at 1405 Moraga Way, approximately 900 feet northeast of the project site. This site has 9 monitoring wells where the depth to groundwater was recorded quarterly from 2003 to 2012. These readings show groundwater fluctuating from approximately 2.7 to 11.5 feet bgs. Monitoring well S-8 is the closest monitoring well to the project site (about 600 feet). The highest groundwater reading at S-8 was 4.4 feet bgs with five readings above 5 feet bgs.

Based on the results of our field investigation and review of available subsurface information within the site vicinity, we conclude groundwater as shallow as 4 feet bgs may occasionally be present at the site.

5.0 SEISMIC CONSIDERATIONS

5.1 Regional Seismicity

The site is located in the Coast Ranges Geomorphic Province of California that is characterized by northwest-trending valleys and ridges. These topographic features are controlled by folds and faults that resulted from the collision of the Farallon and North American plates and subsequent strike-slip faulting along the San Andreas Fault system. The San Andreas Fault is more than 600 miles long from Point Arena in the north to the Gulf of California in the south. The Coast Ranges Geomorphic Province is bounded on the east by the Great Valley and on the west by the Pacific Ocean.

The major active faults in the area are the Hayward, Calaveras, and Mount Diablo faults. These and other faults in the region are shown on Figure 4. Numerous damaging earthquakes have occurred along these faults in recorded time. For these and other active faults within a 50-kilometer radius of the site, the distance from the site and estimated characteristic moment magnitude[2] [Petersen et al. (2014) & Thompson et al. (2016)] are summarized in Table 1. These

[2] Moment magnitude (M_w) is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

references are based on the Third Uniform California Earthquake Rupture Forecast (UCERF3), prepared by Field et al. (2013).

TABLE 1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Site (km)	Direction	Characteristic Moment Magnitude
Total Hayward + Rodgers Creek (RC+HN+HS+HE)	6.4	West	7.58
Hayward (North, HN)	6.4	West	6.90
Hayward (South, HS)	7.0	Southwest	7.00
Total Calaveras (CN+CC+CS+CE)	8.0	East	7.43
Calaveras (North, CN)	8.0	East	6.86
Mount Diablo Thrust	9.5	East	6.67
Mount Diablo Thrust North CFM	9.9	Northeast	6.72
Concord	15	East	6.45
Mount Diablo Thrust South	22	East	6.50
Clayton	22	Northeast	6.57
Greenville (North)	23	East	6.86
Green Valley	24	North	6.30
Great Valley 05 (Pittsburg - Kirby Hills alt1)	30	Northeast	6.60
Great Valley 05 (Pittsburg - Kirby Hills alt2)	32	Northeast	6.66
Total North San Andreas (SAO+SAN+SAP+SAS)	36	Southwest	8.04
North San Andreas (Peninsula, SAP)	36	Southwest	7.38
Las Positas	38	Southeast	6.50
West Napa	38	North	6.97
Great Valley 06 (Midland alt1)	43	East	7.27
San Gregorio (North)	43	West	7.44
Monte Vista - Shannon	43	Southwest	7.14
Great Valley 06 (Midland alt2)	44	East	7.12
Rodgers Creek - Healdsburg	46	Northwest	7.19
North San Andreas (North Coast, SAN)	47	West	7.52

Damaging earthquakes have occurred along many of these faults in recorded history, as depicted on Figure 4 (USGS, 2021). Notable historic earthquakes which have impacted the Bay Area in recorded history include:

- 1838 San Andreas Earthquake, M_w = 7.4 (estimated)
- 1865 San Andreas Earthquake, M_w = 6.5 (estimated)
- 1868 Hayward Earthquake, M_w = 7.0 (estimated)
- 1906 Great San Francisco Earthquake (San Andreas Fault), M_w = 7.9 (estimated)
- 1989 Loma Prieta Earthquake (San Andreas Fault), M_w = 6.9
- 2014 West Napa Earthquake, M_w = 6.0

As a part of the UCERF3 project, researchers estimated that the probability of at least one $M_w \geq$ 6.7 earthquake occurring in the greater San Francisco Bay Area during a 30-year period (starting in 2014) is 72 percent. The highest probabilities are assigned to sections of the Hayward (South), Calaveras (Central), and the San Andreas (Santa Cruz Mountains) faults. The respective probabilities are approximately 25, 21, and 17 percent.

5.2 Geologic Hazards

Because the project site is in a seismically active region, we evaluated the potential for earthquake-induced geologic hazards including ground shaking, ground surface rupture, liquefaction,[3] lateral spreading,[4] and cyclic densification.[5] We used the results of our geotechnical investigation to evaluate the potential of these phenomena occurring at the site.

5.2.1 Ground Shaking

The seismicity of the site is governed by the activity of the Hayward and Calaveras faults, although ground shaking from future earthquakes on other faults, including the San Andreas and

[3] Liquefaction is a phenomenon where loose, saturated, cohesionless soil experiences temporary reduction in strength during cyclic loading such as that produced by earthquakes.

[4] Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

[5] Cyclic densification is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing ground-surface settlement.

Mount Diablo faults, will also be felt at the site. The intensity of earthquake ground motion at the site will depend upon the characteristics of the generating fault, distance to the fault rupture surface, and magnitude of the earthquake. We judge strong to very strong ground shaking could occur at the site during a large earthquake on one of the nearby faults.

5.2.2 Ground Surface Rupture

Historically, ground surface displacements closely follow the trace of geologically young faults. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. The closest known fault is the Moraga fault (undifferentiated Quaternary), which is mapped about 1,500 feet to west. Therefore, we conclude the probability of fault offset at the site from a known active fault to be very low. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed; however, we conclude that the probability of surface faulting, and consequently secondary ground failure from previously unknown faults, is very low.

5.2.3 Liquefaction and Associated Hazards

Liquefaction is a phenomenon in which saturated soil temporarily loses strength from the build-up of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction.

The project site is within a low to moderate liquefaction susceptibility zone, as shown on Figure 5, from the map titled *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region,* prepared by the USGS in cooperation with the California Geological Survey (CGS), dated 2006.

Liquefaction susceptibility was assessed using CLiq v3.5 (GeoLogismiki, 2023). CLiq uses measured CPT data and assesses liquefaction susceptibility and post-earthquake vertical

settlement given a user-defined earthquake magnitude and peak ground acceleration (PGA). We performed the liquefaction-triggering analysis using the methodology proposed by Idriss and Boulanger (2014) while considering an I_B (Robertson, 2016) cutoff value of 28. The cutoff is similar to an I_c of 2.65 for "young" and "normally consolidated" soils (i.e., those most susceptible to liquefaction) and consistent with local experience (Proto, 2024).

Based on the results of the CPTs, we conclude the site is underlain by thin layers of medium dense sand that may liquefy during an earthquake on a nearby fault. Based on the available information, these layers do not appear to be continuous. We estimate that total settlement due to post-liquefaction reconsolidation of these layers after a major earthquake on a nearby fault will be less than 1/2 inch and differential settlement will be less than 1/4 inch over a horizontal distance of 30 feet.

Ishihara (1985) presented an empirical relationship that provides criteria used to evaluate whether liquefaction-induced ground failure, such as sand boils, would be expected to occur under a given level of shaking for a liquefiable layer of given thickness overlain by a resistant, or protective, surficial layer. We conclude the non-liquefiable soil overlying the potentially liquefiable soil layers is likely sufficiently thick such that the potential for liquefaction-induced ground failure at the ground surface is low. Because the potentially liquefiable layers are thin and appear discontinuous, we conclude the probability of lateral spreading is very low.

5.2.4 Cyclic Densification

Cyclic densification (also referred to as differential compaction) of non-saturated granular soil (granular soil above groundwater table) can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements. Our CPTs and hand-auger borings indicate the soil above the groundwater table at the site is generally not susceptible to cyclic densification due to its cohesion or relative density; however, the clayey sand approximately 4 feet bgs at CPT-3 and HA-2 may be susceptible to 1/4 inch of ground settlement due to cyclic densification.

6.0 DISCUSSION AND CONCLUSIONS

From a geotechnical standpoint, we conclude the proposed improvements can be constructed as planned, provided the recommendations presented in this report are incorporated into the project plans and specifications and implemented during construction. The primary geotechnical concerns affecting the proposed improvements are: 1) the presence of moderately expansive near-surface soil, 2) the presence of a relatively weak clay layer which appears to extend to a depth of about 4 feet below existing grade, and 3) providing adequate support for the proposed building. These issues are discussed in more detail in the following sections.

6.1 Expansive Soil

Atterberg limits tests performed on samples of the near-surface clay indicate the clay is moderately expansive. Expansive soil is subject to volume changes during seasonal fluctuations in moisture content. These volume changes can cause movement and cracking of foundations, pavements and slabs. Therefore, foundations, pavements, and slabs should be designed and constructed to resist the effects of expansive soil. In general, the effects of expansive soil can be mitigated by moisture-conditioning the expansive soil, providing non-expansive soil below slabs, and either supporting foundations below the zone of severe moisture change or by providing a stiff, shallow foundation that can limit deformation of the superstructure as the underlying soil shrinks and swells.

At expansive soil sites, it is also critical to properly manage surface and subsurface drainage to prevent water from collecting beneath pavements, slabs, foundations and behind below-grade walls. If permeable pavements, tree wells, irrigated landscaped zones, and storm water infiltration basins will be constructed close to the proposed building, they should incorporate design elements that prevent saturation of the soil adjacent to and below building foundations. While the objective of permeable pavement systems and infiltration basins is to allow for water storage and infiltration, we conclude that infiltration into the subgrade soil is not feasible at this site due to the low permeability of the moderately expansive clay. Furthermore, from a geotechnical standpoint, water should not be allowed to collect alongside or beneath the building foundation, pavements and flatwork. This can be achieved by providing subdrain systems and

impermeable liners beneath permeable surfaces and infiltration basins and installing vertical barriers between permeable surfaces underlain by subdrains and non-permeable surfaces underlain by conventional aggregate base.

6.2 Foundation Support

Building loads were not available at the time this report was prepared. Based on our experience with similar building types, we have assumed a maximum column load of 400 kips under dead-plus-live-load conditions. This value should be confirmed by the project structural engineer prior to finalizing the foundation design.

The site is blanketed by native alluvium that has variable strength and compressibility. Due to the presence of soft to medium stiff near-surface clay encountered during the investigation in portions of the site, we conclude the proposed building should not be supported on conventional spread footings. Based on our experience, we believe the most appropriate foundation type for the proposed structure consists of either:

- a stiffened concrete mat, supported on engineered fill extending to a depth of at least 4 feet below current grades, or
- deepened spread footings which derive their support on stiff native soil at a depth of about 4 feet below current grades.

Our settlement analyses indicate total settlement of the proposed building supported on either of these foundation options, designed using the allowable bearing pressures presented in Section 7.3, will be less than 1-1/4 inches and differential settlement will be less than 3/4 inch across a horizontal distance of 30 feet. The building may experience an additional 3/4 inch of total settlement and 1/2 inch of differential settlement after a very large earthquake on a nearby fault, as outlined in Sections 5.2.3 and 5.2.4.

6.2.1 Mat Foundation on Engineered Fill

We conclude the proposed building may be supported on a mat foundation provided the existing near-surface weak clay that extends to a depth of about 4 feet below existing grade is improved

prior to mat placement. One option to address the near-surface weak clay layer would be to overexcavate to 2.5 feet below existing grade, treat 18 inches of the weak clay at the bottom of the overexcavation in-place with Quicklime, and then place engineered fill above the lime-treated soil to reach mat subgrade. We believe that this approach is preferrable to a deeper overexcavation without lime treatment, as the expose subgrade may be unstable due to the proximity of the groundwater table and may be difficult to compact. Recommendations for mat subgrade preparation, including lime treatment, are presented in Section 7.1. Recommendations for structural design of the mat are presented in Section 7.3.

6.2.2 Deepened Footings

We conclude the proposed building can be supported on conventional spread footings bearing on firm native soil. This can be achieved by deepening the structural footings, or alternatively, footing excavations may be over-excavated down to competent native material and backfilled with controlled low strength material (CLSM) up to the design bottom-of-footing elevation. The CLSM would serve to transfer footing loads competent soils and prevent the need for extending reinforced structural concrete down to the native material. For planning purposes, the footing depth can be assumed to be 4 feet below the existing grades. We should inspect the bottom of the footings prior to CLSM or steel placement to confirm the presence of competent bearing material.

6.3 Interior and Exterior Slab-on-Grade

If the building is supported on deepened footings, the interior floor slab may consist of a conventional slab-on-grade. The building slab-on-grade floor and capillary break/vapor barrier should be underlain by at least 12 inches of non-expansive soil. The non-expansive soil may consist of either imported select fill or soil treated in place with lime.

We conclude exterior concrete slabs-on-grade (i.e. concrete flatwork) should perform satisfactory if they are supported on at least 6 inches of Class 2 aggregate base and the subgrade is properly moisture-conditioned and compacted prior to placement of the aggregate base.

6.4 Construction Considerations

The soil to be excavated for the new foundations and underground utilities is expected to be consist of mostly clay with some zones of clayey sand, which can be excavated with conventional earth-moving equipment such as loaders and backhoes. If site grading is performed during the rainy season, the near-surface clay will likely be wet and will have to be dried before compaction can be achieved. Heavy rubber-tired equipment could cause excessive deflection (pumping) of the wet clay and, therefore, should be avoided if this condition occurs. If the project schedule or weather conditions do not permit enough time for drying of the soil by aeration, the subgrade can be treated with lime prior to compaction to create a stable subgrade. It is also important that the moisture content of subgrade soil is sufficiently high to reduce the expansion potential. If the grading work is performed during the dry season, moisture-conditioning may be required.

Excavations that will be entered by workers should be sloped or shored in accordance with CAL-OSHA standards (29 CFR Part 1926). The contractor should be responsible for the construction and safety of temporary slopes. We judge temporary slopes with a maximum inclination of 1:1 (horizontal to vertical) should be stable (consistent with Soil Type B), provided the slope above the groundwater level and is not surcharged by adjacent structures, construction equipment, or stockpiled soil.

6.5 Soil Corrosivity

Laboratory testing was performed by Project X Corrosion Engineering of Murrieta, California on two samples of soil obtained from Boring HA-1 at a depth of 2 feet bgs and Boring HA-2 at a depth of 3 feet bgs. The results of the test are presented in Appendix B of this report.

The resistivity test results (2,613 and 1,206 ohm-cm) indicate the near-surface soil is “highly corrosive” to buried metallic structures. Accordingly, all buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric-coated steel or iron may need to be protected against corrosion depending upon the critical nature of the structure. If it is necessary to have metal in contact with

soil, a corrosion engineer should be consulted to provide recommendations for corrosion protection.

The chloride ion concentrations (17.9 and 8.4 mg/kg) and pH (7.1 and 7.0) indicate the near-surface soil is "negligibly corrosive" to buried metallic structures and reinforcing steel in concrete structures below ground. The results also indicate the sulfate ion concentrations (23.0 and 11.0 mg/kg) are sufficiently low such that sulfates do not pose a threat to buried concrete.

7.0 RECOMMENDATIONS

Our recommendations for site preparation and grading, foundation design, and other geotechnical aspects of the project are presented in this section.

7.1 Site Preparation and Grading

Any vegetation and organic topsoil should be stripped in areas to receive improvements (i.e., building, pavement or flatwork). Site demolition should include the removal of all existing pavements, former foundation elements, and underground utilities. In general, abandoned underground utilities should be removed to the property line or service connections and properly capped or plugged with concrete. Where existing utility lines will not interfere with the proposed construction, they may be abandoned in-place provided the lines are filled with lean concrete or cement grout to the property line. Voids resulting from demolition activities that extend below finished improvements should be properly backfilled with engineered fill under our observation and following the recommendations provided later in this section.

The near-surface clay at the site has a moderate expansion potential. To mitigate the detrimental effects of moderately expansive near-surface soil, the building slab-on-grade floor should be underlain by at least 12 inches of non-expansive soil; the non-expansive soil should extend at least 5 feet beyond the perimeter of the proposed building, except where constrained by existing improvements. In addition, exterior concrete flatwork should be underlain by at least 6 inches of non-expansive soil; the non-expansive soil should extend at least 6 inches beyond the perimeter of the flatwork in landscaped areas. The non-expansive soil may consist of imported select fill (see Section 7.1.2) or lime-treated on-site soil (see Section 7.1.3).

In areas to receive fill or improvements, the soil subgrade should be scarified to a depth of at least 8 inches, moisture-conditioned, and compacted in accordance with the recommendations presented in Table 2. Additionally, pavement subgrade and Class 2 aggregate base should be non-yielding under wheel loading. The soil subgrade should be kept moisture conditioned until it is covered by fill or improvements. Note that "moisture-conditioning" may require wetting or drying of the soil, depending on the conditions encountered. On-site soil may be used as general fill, provided the material is free of organic matter, contains no rocks or lumps larger than 3 inches in greatest dimension, and be approved by the Geotechnical Engineer. If material to be used as fill is imported to the site, it should meet the requirements for select fill provided below in Section 7.1.1. A summary of the compaction requirements for the various types of fill that may be used at the site is presented below in Table 2.

TABLE 2
Summary of Compaction Recommendations

Location	Recommended Relative Compaction[7] (percent)	Moisture Recommendation
Building pad – moderate-plasticity clay	88 – 92	3+% above optimum
Building pad – low-plasticity soil	90+	Above optimum
General fill – lime-treated clay and low-plasticity on-site and imported	90+	Above optimum
General fill –moderate-plasticity clay	88 – 92	3+% above optimum
Utility trench backfill –moderate-plasticity clay	88 – 92	3+% above optimum
Utility trench backfill – low-plasticity soil	90+	Above optimum
Utility trench - clean sand or gravel	95+	Near optimum
Pavement subgrade –moderate-plasticity clay	95+	Above optimum
Pavement subgrade – low-plasticity	95+	Above optimum
Pavement – aggregate base	95+	Near optimum
Exterior slabs –moderate-plasticity clay	88 – 92	3+% above optimum
Exterior slabs – low-plasticity on-site and imported select fill	90+	Above optimum

Where the above recommended compaction requirements are in conflict with the Town of Moraga standard details for pavements and sidewalks within the public right-of-way, the Town of Moraga inspector should determine which compaction requirements should take precedence.

If grading work is performed during the rainy season, the contractor may find the subgrade material too wet to compact to the recommended relative compaction. If so, the subgrade will

[7] Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 laboratory compaction procedure.

have to be scarified and aerated to lower its moisture content so the specified compaction can be achieved. Material to be dried by aeration should be scarified to a depth of at least 8 inches, and the scarified soil should be turned at least twice a day to promote uniform drying. Once the moisture content of the aerated soil has been reduced to acceptable levels, the soil should be compacted in accordance with our recommendations presented in Table 2. Aeration typically is the least costly method used to stabilize the subgrade soil; however, it generally requires the most time to complete. Other soil stabilization alternatives include overexcavating and placing drier material, and lime treatment.

7.1.1 Mat Subgrade Preparation

If a mat foundation is selected, we recommend the building footprint be overexcavated to a depth of 2.5 feet below existing grade. The excavation should extend at least 5 feet outside the building footprint except where constrained by property lines or existing improvements, including underground utilities. The exposed soil subgrade at the bottom of the overexcavation should then be lime-treated (Section 7.1.3) in place to a depth of 18 inches and compacted in accordance with the recommendations presented in Table 2. Then engineered fill may be placed atop the compacted lime-treated soil to reach mat subgrade elevation. The engineered fill may consist of onsite or imported soil that meets the fill quality and compaction requirements presented in Section 7.1.

7.1.2 Select Fill

Select fill should consist of imported soil or on-site soil that is free of organic matter, contain no rocks or lumps larger than 3 inches in greatest dimension, have a liquid limit less than 40 and plasticity index less than 15, and be approved by the Geotechnical Engineer. Select fill should be placed in lifts not exceeding 8 inches in loose thickness, moisture-conditioned to above optimum moisture content, and compacted in accordance with the recommendations presented in Table 2. Samples of proposed select fill material should be submitted to the Geotechnical Engineer at least 3 business days prior to use at the site.

The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least 3 days before use at the site. If this data is not provided, a minimum of two weeks will be required to perform any necessary analytical testing.

Controlled Low-Strength Material

Controlled low-strength material (CLSM) may be considered as an alternative to fill beneath structures or pavement. CLSM should meet the requirements in the 2022 Caltrans Standard Specifications. It is an ideal backfill material when adequate room is limited or not available for conventional compaction equipment, or when settlement of the backfill must be minimized. No compaction is required to place CLSM. CLSM should have a minimum 28-day unconfined compressive strength of at least 100 pounds per square inch (psi). CLSM should be used for the required impermeable trench plugs, as described in Section 7.1.5 and Figure 6.

7.1.3 Lime-Treated Soil

Lime treatment of fine-grained soils generally includes site preparation, application of lime, mixing, compaction, and curing of the lime-treated soil. Field quality control measures should include checking the depth of lime treatment, degree of pulverization, lime spread rate measurement, lime content measurement, and moisture content and density measurements, and mixing efficiency.

The lime treatment process should be designed by a contractor specializing in its use and who is experienced in the application of lime in similar soil conditions. Based on our experience with lime treatment, we judge that the specialty contractor should be able to treat the moderately expansive on-site material to produce a non-expansive fill for building pad subgrades and, if desired, for exterior flatwork subgrades. For planning purposes, we recommend assuming the lime treatment will consist of 5 percent Dolomitic Quicklime by dry weight of soil. The dry weight of soil should be assumed to be 105 pounds per cubic foot (pcf) for calculating lime quantities. The specialty contractor should: 1) perform a lime demand test prior to treatment to determine the percentage of Quicklime required to achieve a pH of 12.4 or higher in the treated

soil, 2) perform an Atterberg limits test to confirm the proposed percentage of Quicklime will reduce the plasticity index of the treated soil to 15 or less, and 3) prepare a lime treatment procedure for our review prior to construction.

Prior to lime treatment, we recommend the site be graded to a level pad elevation in accordance with our previous recommendations and all below-grade obstructions be removed. The soil treated with lime should be mixed and compacted in one lift. The lime should be thoroughly blended with the soil and allowed to set for 24 hours prior to remixing and compaction. The lime-treated soil should be moisture-conditioned to above optimum moisture content and compacted to at least 90 percent relative compaction. It should be noted that disposal of lime-treated soil is typically expensive because of the high pH of the treated soil. In addition, lime-treated soil should be completely removed from landscaping areas as the high pH will prevent plant growth.

7.1.4 Exterior Flatwork

We recommend a minimum of 6 inches of Class 2 aggregate base be placed beneath proposed exterior concrete flatwork, including patio slabs and sidewalks; the non-expansive soil should extend at least 6 inches beyond the slab edges. Non-expansive soil beneath exterior slabs-on-grade, such as patios and sidewalks, should be moisture-conditioned and compacted in accordance with the requirements provided above in Table 2. Class 2 aggregate base beneath pedestrian concrete flatwork should be compacted to at least 90 percent relative compaction.

Even with 6 inches of non-expansive soil (including aggregate base layer), exterior slabs may experience some cracking due to shrinking and swelling of the underlying expansive soil. Thickening the slab edges and adding additional reinforcement will control this cracking to some degree. Where slabs are adjacent to landscaped areas, thickening the concrete edge will help control water infiltration beneath the slabs. In addition, where slabs provide access to the building, it would be prudent to dowel the entrance to the building to permit rotation of the slab as the exterior ground shrinks and swells and to prevent a vertical offset at the entries.

We do not recommend the use of pervious interlocking pavers at this site, due to presence of expansive subgrade soil. If pavers must be incorporated into this project, we should provide additional recommendations for proper subgrade preparation and subsurface drainage.

7.1.5 Utility Trench Backfill

Excavations for utility trenches can be readily made with a backhoe. All temporary excavations used in construction should be designed, planned, constructed, and maintained by the contractor and should conform to the current CAL-OSHA requirements. To provide uniform support, pipes or conduits should be bedded on a minimum of 4 inches of sand or fine gravel. After the pipes and conduits are tested, inspected (if required) and approved, they should be covered to a depth of 6 inches with clean sand or fine gravel, which should be mechanically tamped. The pipe bedding and cover should be eliminated where a low-permeability plug is required as described below.

Backfill for utility trenches and other excavations is also considered fill, and should be placed and compacted in accordance with the recommendations previously presented. If imported clean sand or gravel (defined as soil with less than 5 percent fines) is used as backfill, it should be compacted to at least 95 percent relative compaction. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to the pavement section.

Foundations for the proposed building should be bottomed below an imaginary line extending up at a 1.5:1 (horizontal to vertical) inclination from the base of utility trenches. Alternatively, the portion of the utility trench (excluding bedding) that is below the 1.5:1 line can be backfilled with controlled low-strength material (CLSM). If utility trenches are to be excavated below this 1.5:1 line after construction of the building foundations, the trench walls need to be fully supported with shoring until CLSM is placed.

Where utility trenches enter the building pad, an impermeable plug consisting of CLSM, at least 3 feet in length, should be installed where the trenches enter the building footprint. A typical detail for the recommended utility trench plug at building perimeters is presented on Figure 6.

Furthermore, where sand- or gravel-backfilled trenches cross below planter areas and pass below asphalt or concrete pavements, a similar plug should be placed at the edge of the pavement. The purpose of these recommendations is to reduce the potential for water to become trapped in trenches beneath the building or pavements. This trapped water can cause heaving of soils beneath slabs and softening of subgrade soil beneath pavements.

7.2 Subsurface and Surface Drainage, Landscaping and Bioswales

7.2.1 Subsurface and Surface Drainage

Positive surface drainage should be provided around the building to direct surface water away from the foundations. Grades around the building should be determined by the Civil Engineer and conform to the requirements of the 2022 CBC, which will help minimize stormwater accumulation adjacent to foundations. In addition, roof downspouts should be discharged into controlled drainage facilities to keep the water away from the foundations. The use of water-intensive landscaping around the perimeter of the building should be avoided to reduce the amount of water introduced to the expansive clay subgrade.

Care should be taken to minimize the potential for subsurface water to collect beneath pavements and pedestrian walkways. Where landscape beds and tree wells are immediately adjacent to pavements and flatwork that are not designed as permeable systems, we recommend vertical cutoff barriers be incorporated into the design to prevent irrigation water from saturating the subgrade and aggregate base. These barriers may consist of either flexible impermeable membranes or deepened concrete curbs.

Where a landscaped area will be adjacent to or near the proposed concrete flatwork, pavement and/or the proposed building, installation of a subdrain between the landscaping and the flatwork, pavement or building may be warranted to reduce the potential for subsurface water to migrate beneath the proposed improvements. We should review the civil and landscape plans to evaluate whether installation of subdrains is warranted once those plans are available.

7.2.2 Landscaping

Prior experience and industry literature indicate that some species of high water-demand[8] trees can induce ground-surface settlement by drawing water from the expansive clay, causing it to shrink. Where these types of trees are planted near the new building, the ground-surface settlement may result in damage to structures. This problem usually occurs 10 or more years after planting, as the trees reach mature height. To reduce the risk of tree-induced settlement, we recommend trees of the following genera not be planted within 25 feet of the building, unless adequate deep irrigation is provided at the tree locations: *Eucalyptus, Populus, Quercus, Crataegus, Salix, Sorbus* (simple-leafed), *Ulmus, Cupressus, Chamaecyparis,* and *Cupressocyparis.* Because this is a limited list and does not include all genera that may induce ground-surface settlement, a tree specialist should be consulted prior to selection of trees to be planted at the site.

7.2.3 Bioswales

The primary concerns with bioswales are: 1) providing suitable support for foundations and curbs constructed near the bioswales, and 2) potential for subsurface water from the bioswales to migrate (and possibly build up) beneath pavements and the proposed building. Consequently, we recommend that: 1) bioswales constructed at the site be provided with underdrains and/or drain inlets, and 2) bioswales be constructed no closer than 5 feet from the proposed building. The subdrain pipes should be installed 8 inches above the bottom of the bioswale for treatment areas that are at least 5 feet away from the new building and pavements. The intent of this recommendation is to allow infiltration into the underlying soil, but to reduce the potential for bio-retention areas to flood during periods of heavy rain. The sides of the bioswales should be sloped at a maximum gradient of 1.5:1 (horizontal:vertical).

Where bioswales must be located within 5 feet of the new building and pavements, the bottom of the bioswale should be lined with an impermeable liner. Where a vertical curb or foundation is

[8] "Water-demand" refers to the ability of the tree to withdraw large amounts of water from the soil subgrade, rather than soil suction exerted by the root system.

constructed near a bioswale, the curb and the edge of the foundation should be founded below an imaginary line extending up at an inclination of 1.5:1 (horizontal:vertical) from the base of the bioswale.

7.3 Foundation Design

Provided the estimated total and differential settlements presented in Section 6.2 are acceptable, the proposed building may be supported on either a conventionally reinforced mat foundation underlain by engineered fill or deepened footings. Recommendations for design of these foundation are presented below.

7.3.1 Mat Foundation on Engineered Fill

The building may be supported on a concrete mat foundation underlain by engineered fill, as outlined in Sections 6.2.1 and 7.1.1. The edges of the mat should be thickened such that the mat edge is bottomed at least 12 inches below the adjacent exterior grade. In addition, we recommend the mat edge be bottomed below an imaginary plane extending up at an inclination of 1.5:1 (horizontal:vertical) from the base of any vault, utility trench, bioswale/storm water treatment area, etc. If the design bottom-of-mat elevation is above this plane, the edge of mat can either be deepened, or over-excavated below the zone-of-influence line and replaced with CLSM to make up the difference.

For structural design of mat foundations, we recommend using an initial coefficient of vertical subgrade reaction of 20 pounds per cubic inch (pci). This value has been reduced to account for the size of the mat/equivalent footings (therefore, this is not k_{v1} for 1-foot-square plate) and may be increased by 50% for total load conditions. Once the structural engineer evaluates the initial distribution of bearing stress on the bottom of the mat, we can review the distribution and revise the coefficients of subgrade reaction, if appropriate. The maximum bearing pressure beneath the mat should not exceed 3,000 pounds per square foot (psf) under dead-plus-live-load conditions; this value may be increased by one-third for total load conditions, including wind and/or seismic.

For design of conventionally reinforced mat foundations in accordance with the Wire Reinforcement Institute's (WRI's) publication title *Design of Slab-on-Grade Foundations, An Update-07* (1981), we recommend the following design parameters:

- Climatic rating (C_w) – 15
- Effective Plasticity Index (PI) – 20

Lateral loads may be resisted by a combination of friction along the base of the mat and passive resistance against the vertical faces of the mat foundation. To compute lateral resistance for sustained loads, we recommend using an equivalent fluid weight of 240 pounds per cubic foot (pcf). To compute lateral resistance for transient loads, we recommend a uniform passive pressure of 1,500 psf be used. The upper foot of soil should be ignored in computing passive resistance unless confined by a slab or pavement. The allowable friction factor will depend on the type of vapor retarder or waterproofing used at the base of the mat. If the mat is in contact with soil (i.e., no membrane is used), an allowable base friction coefficient of 0.30 may be used in design. For bentonite-based waterproofing membranes, such as Paraseal or Voltex, a friction factor of 0.12 should be used (assumes a bentonite friction angle of 10 degrees). If Preprufe or a vapor retarder is used, a base friction factor of 0.20 should be used. Friction factors for other types of waterproofing membranes can be provided upon request. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

The mat subgrade should be free of standing water, debris, and disturbed materials prior to placing concrete vapor retarder or concrete. The bottoms and sides of the excavations should be wetted following excavation and maintained in a moist condition until concrete is placed. If the foundation soil dries during construction, the foundation will eventually heave, which may result in cracking and distress. We should check the foundation subgrade prior to placement of vapor retarder or reinforcing steel.

7.3.2 Deepened Footings

The proposed building may be supported on spread footings that derive support on firm native soil below the near-surface weak clay. This can be achieved by deepening the structural footings, or alternatively, footing excavations may be over-excavated down to competent native material and backfilled with CLSM up to the design bottom-of-footing elevation. The CLSM would serve to transfer footing loads competent soils and prevent the need for extending reinforced structural concrete down to the native material. For planning purposes, the footing depth can be assumed to be 4 feet below the existing grades.

The foundation system should include a continuous perimeter footing to minimize the potential for moisture fluctuations within the building footprint. Footings constructed near underground utilities, underslab vaults, or stormwater treatment features should be bottomed below an imaginary line extending up at an inclination of 1.5:1 (horizontal to vertical) from the bottom of the utility trench or vault. The footings may be designed using allowable bearing pressures of 2,500 pounds per square foot (psf) for dead-plus-live loads and 3,300 psf for total design loads, which include wind or seismic forces.

Lateral loads may be resisted by a combination of friction along the base of the footings and passive resistance against the vertical faces of the footings. To compute lateral resistance for sustained loads, we recommend using an equivalent fluid weight of 240 pcf. To compute lateral resistance for transient loads, we recommend a uniform passive pressure of 1,500 psf be used. The upper foot of soil should be ignored in computing passive resistance unless confined by a slab or pavement. An allowable base friction coefficient of 0.30 may be used where concrete or CLSM is in direct contact with soil. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

We should check footing excavations prior to placement of reinforcing steel or CLSM. Foundation excavations should be free of standing water, debris, undocumented fill, and disturbed materials prior to placing concrete. If footings are excavated during the rainy season, they may need to incorporate a mud slab to protect the footing subgrade. This will involve

overexcavating the footing by about 3 inches and placing lean concrete or CLSM in the bottom (following inspection by our engineer). A mud slab will help protect the footing subgrade during placement of reinforcing steel. Water can then be pumped from the excavations prior to placement of structural concrete, if present. The bottoms and sides of the footing excavations should be moistened following excavation and maintained in a moist condition until concrete is placed.

7.4 Floor Slabs

For the deepened footing option, the building floor slab may consist of conventional slabs-on-grade, provided it is underlain by a minimum 12-inch-thick layer of non-expansive fill such as imported select fill or lime-treated onsite soil, as presented in Section 7.1.

Where water vapor transmission through the floor slab is considered detrimental, we recommend installing a capillary moisture break and water vapor retarder beneath the floor slab (above the 12-inch-thick non-expansive fill layer). For the mat foundation option, the capillary break is not required and the vapor retarder can be placed directly on the compacted subgrade. A vapor retarder and capillary moisture break are generally not required beneath parking garage floor slabs because there is sufficient air circulation to allow evaporation of moisture that is transmitted through the slab; however, we recommend the vapor retarder and capillary break be installed below the slabs-on-grade in finished spaces, utility rooms, and any areas in or adjacent to the parking garage that will be used for storage and/or will receive a floor covering or coating.

A capillary moisture break consists of at least 4 inches of clean, free-draining gravel or crushed rock. The particle size of the capillary break material should meet the gradation requirements presented in Table 4.

TABLE 4
Gradation Requirements for Capillary Moisture Break
Crushed Rock

Sieve Size	Percentage Passing Sieve
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6

The vapor retarder should meet the requirements for Class A vapor retarders stated in ASTM E1745. The vapor retarder should be placed in accordance with the requirements of ASTM E1643. These requirements include overlapping seams by 6 inches, taping seams, and sealing penetrations in the vapor retarder.

The floor slab or mat should be properly cured. Concrete mixes with high water/cement (w/c) ratios result in excess water in the concrete, which increases the cure time and results in excessive vapor transmission through the mat/slab. Therefore, concrete for the mat/slab should have w/c ratio of less than 0.45 and water not be added in the field. If necessary, workability should be increased by adding plasticizers. Before floor coverings, if any, are placed, the contractor should check that the concrete surface and the moisture emission levels (if emission testing is required) meet the manufacturer's requirements.

7.5 Permanent Retaining Walls

Permanent retaining walls should be designed to resist lateral earth pressures imposed by the retained soil, as well as a surcharge pressure from nearby foundations and vehicles, where appropriate. In addition, because the site is in a seismically active area, retaining walls that retain more than 6 feet of soil should be designed for the more critical of static or seismic conditions.

For static conditions, we recommend restrained and unrestrained walls be designed for the following lateral earth repressures:

- Restrained Wall - At-rest earth pressure using an equivalent fluid weight of 64 pcf for drained conditions and 93 pcf for undrained conditions.
- Unrestrained Wall - Active earth pressure using an equivalent fluid weight of 43 pcf for drained conditions and 83 pcf for undrained conditions.

Walls that will retain more than 6 feet of soil will need to be designed for the more critical of static (presented above) or the following seismic conditions.

- Restrained Wall - Active earth pressure using an equivalent fluid weight of 43 pcf plus a seismic increment of 34 pcf for drained conditions; and 83 pcf plus a seismic increment of 16 pcf for undrained conditions.
- Unrestrained Wall - Active earth pressure using an equivalent fluid weight of 43 pcf plus a seismic increment of 14 pcf for drained conditions; and 83 pcf plus a seismic increment of 7 pcf for undrained conditions.

Where there will be vehicular traffic behind the top of a permanent wall within a horizontal distance equal to 1.5 times the height of the wall, the wall should be designed for vehicular surcharge of 50 psf over the upper 10 feet of the wall. Where existing foundations are supported above a "zone-of-influence" line extending up from a permanent wall at an inclination of 1.5:1 (horizontal to vertical), the wall should be designed for a surcharge pressure. The magnitude of the surcharge pressure will need to be evaluated on a case-by-case basis.

The recommended lateral earth pressures for "drained" conditions assume the walls are backdrained to prevent the buildup of hydrostatic pressure. Although site retaining walls will be above the groundwater level, water can accumulate behind the walls from other sources, such as rainfall, irrigation, and broken water lines. One acceptable method for backdraining a site retaining wall is to place a prefabricated drainage panel against the back of the wall. The drainage panel should extend down to a perforated PVC collector pipe at the base of the wall. The pipe should be surrounded by at least 4 inches of Caltrans Class 2 permeable material or 3/4-inch drain rock wrapped in filter fabric (Mirafi NC or equivalent). The pipe should be sloped to drain by gravity to a suitable outlet. For below-grade retaining walls, such as elevator pit walls, the walls may be designed for the recommended "undrained" earth pressures presented above over their entire height, in which case the drainage system may be omitted. To protect against

moisture migration, below-grade retaining walls should be waterproofed and water stops should be placed at all construction joints.

During backfill, retaining walls should be braced or hand compaction equipment used, to prevent unacceptable surcharges on walls (as determined by the structural engineer).

7.6 Flexible and Rigid Pavement Design

Design recommendations for asphalt concrete and Portland cement concrete pavements are presented in the following sections.

7.6.1 Flexible (Asphalt Concrete) Pavement Design

The State of California flexible pavement design method was used to develop the recommended asphalt concrete (AC) pavement sections. The final soil subgrade in asphalt-paved areas may consist of recompacted on-site clay or lime-treated native clay. If lime treatment is used to strengthen the soil subgrade, a minimum treatment depth of 12 inches should be used. On the basis of our experience, we selected R-values of 5 and 25 for the on-site expansive soil and lime-treated on-site soil, respectively. Recommended pavement sections for traffic indices (TIs) ranging from 4.5 to 6.0 are presented in Table 3. The Civil Engineer for the project should check that the TI's presented in this report are appropriate for the intended use. We can provide additional pavement sections for different TIs upon request.

TABLE 3
Asphalt-Concrete Pavement Sections

TI	Subgrade Lime Treated?	Asphaltic Concrete (inches)	Class 2 Aggregate Base R = 78 (inches)
4.5	No	2.5	9.5
4.5	Yes	2.5	6.5
5.0	No	3.0	10.0
5.0	Yes	3.0	6.5
5.5	No	3.0	12.0
5.5	Yes	3.0	8.0
6.0	No	3.5	13.0
6.0	Yes	3.5	8.5

The upper 12 inches of the subgrade should be moisture-conditioned and compacted in accordance with requirements presented in Table 2 in Section 7.1. The subgrade should be proof-rolled to confirm it is non-yielding prior to placement of the aggregate base. The aggregate base should be moisture-conditioned to near optimum and compacted to at least 95 percent relative compaction. The aggregate base should also be proof-rolled to confirm it is non-yielding prior to paving.

To prevent irrigation water from entering the pavement section, curbs adjacent to landscaped areas should extend through the base rock and at least 3 inches into the underlying clay. Where pavement is constructed near bio-swales or other storm water treatment areas, curbs should be deepened so that the base is founded below an imaginary line extending up at an inclination of 1.5:1 (horizontal: vertical) from the base of the bio-swale/treatment area.

7.6.2 Rigid (Portland Cement Concrete) Pavement

Concrete pavement design is based on a maximum single-axle load of 20,000 pounds and a maximum tandem axle load of 32,000 pounds and light truck traffic (i.e., a few trucks per week). The recommended rigid pavement section for these axle loads is 6-1/2 inches of Portland cement

concrete over 6 inches of Class 2 aggregate base. Where fire truck traffic is expected, the pavement section should consist of 7 inches of Portland cement concrete over 6 inches of Class 2 aggregate base.

The modulus of rupture of the concrete should be at least 500 psi at 28 days. Contraction joints should be constructed at 15-foot spacing. Where the outer edge of a concrete pavement meets asphalt concrete pavement, the concrete slab should be thickened by 50 percent at a taper not to exceed a slope of 1 in 10. For areas that will receive weekly garbage truck traffic, we recommend the slab be reinforced with a minimum of No. 4 bars at 16-inch spacing in both directions.

The upper 12 inches of the subgrade should be moisture-conditioned and compacted in accordance with requirements presented in Section 7.1. The aggregate base should be moisture-conditioned to near optimum and compacted to at least 95 percent relative compaction.

If pavements are adjacent to irrigated landscaped areas (including infiltration basins), curbs adjacent to those areas should extend through the aggregate base and at least 3 inches into the underlying soil to reduce the potential for irrigation water to infiltrate into the pavement section.

7.7 Seismic Design

The latitude and longitude of the site are 37.8338° and -121.1324°, respectively. For design per the 2022 CBC, we recommend the following:

- Site Class D (stiff soil, non-default)
- S_S = 1.849g, S_1 = 0.697g

The 2022 CBC is based on the guidelines contained within ASCE 7-16 (Supplement 3 revision), which stipulates that where S_1 is greater than 0.2 times gravity (g) for Site Class D, a ground motion hazard analysis is required unless the long-period spectral design parameters (S_{M1}, S_{D1}) are increased by 50%. Therefore, we recommend the following seismic design parameters, which include the 50% increase as designated by an asterisk:

- F_a = 1.0, F_v = 1.7
- S_{MS} = 1.849g, S_{M1}* = 1.777g
- S_{DS} = 1.233g, S_{D1}* = 1.185g
- Seismic Design Category D for Risk Factors I, II, and III

8.0 GEOTECHNICAL SERVICES DURING CONSTRUCTION

Prior to construction, Rockridge Geotechnical should review the project plans and specifications to verify that they conform to the intent of our recommendations. During construction, our field engineer should provide on-site observation and testing during placement and compaction of fill, and installation of foundations. These observations will allow us to compare actual with anticipated soil conditions and to verify that the contractor's work conforms to the geotechnical aspects of the plans and specifications.

9.0 LIMITATIONS

This geotechnical investigation has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. The recommendations made in this report are based on the assumption that the subsurface conditions do not deviate appreciably from those disclosed in the exploratory borings. If any variations or undesirable conditions are encountered during construction, we should be notified so that additional recommendations can be made. The foundation recommendations presented in this report are developed exclusively for the proposed development described in this report and are not valid for other locations and construction in the project vicinity.

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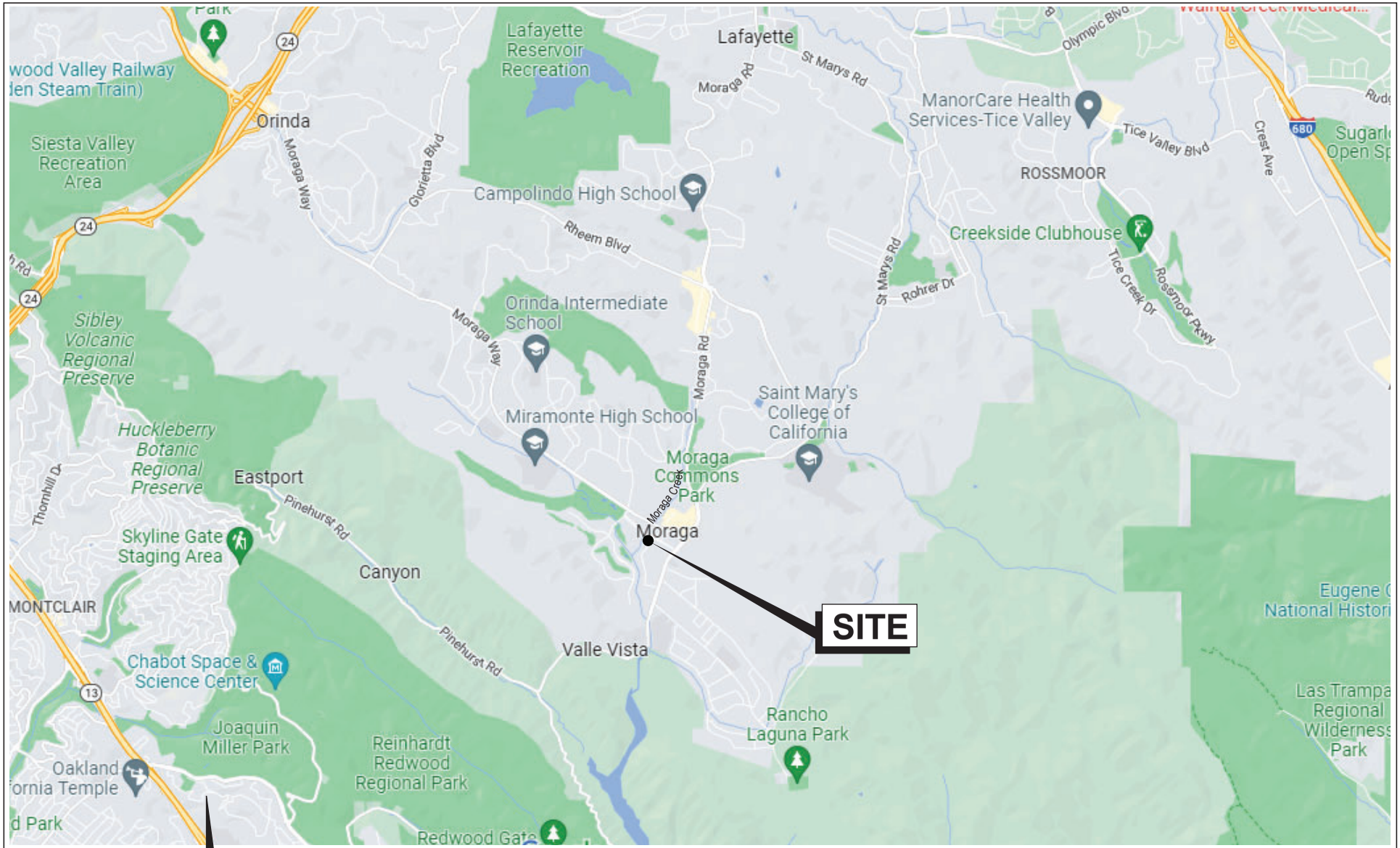
FIGURES



Base map: Google Maps, 2022

0 1 2 Miles

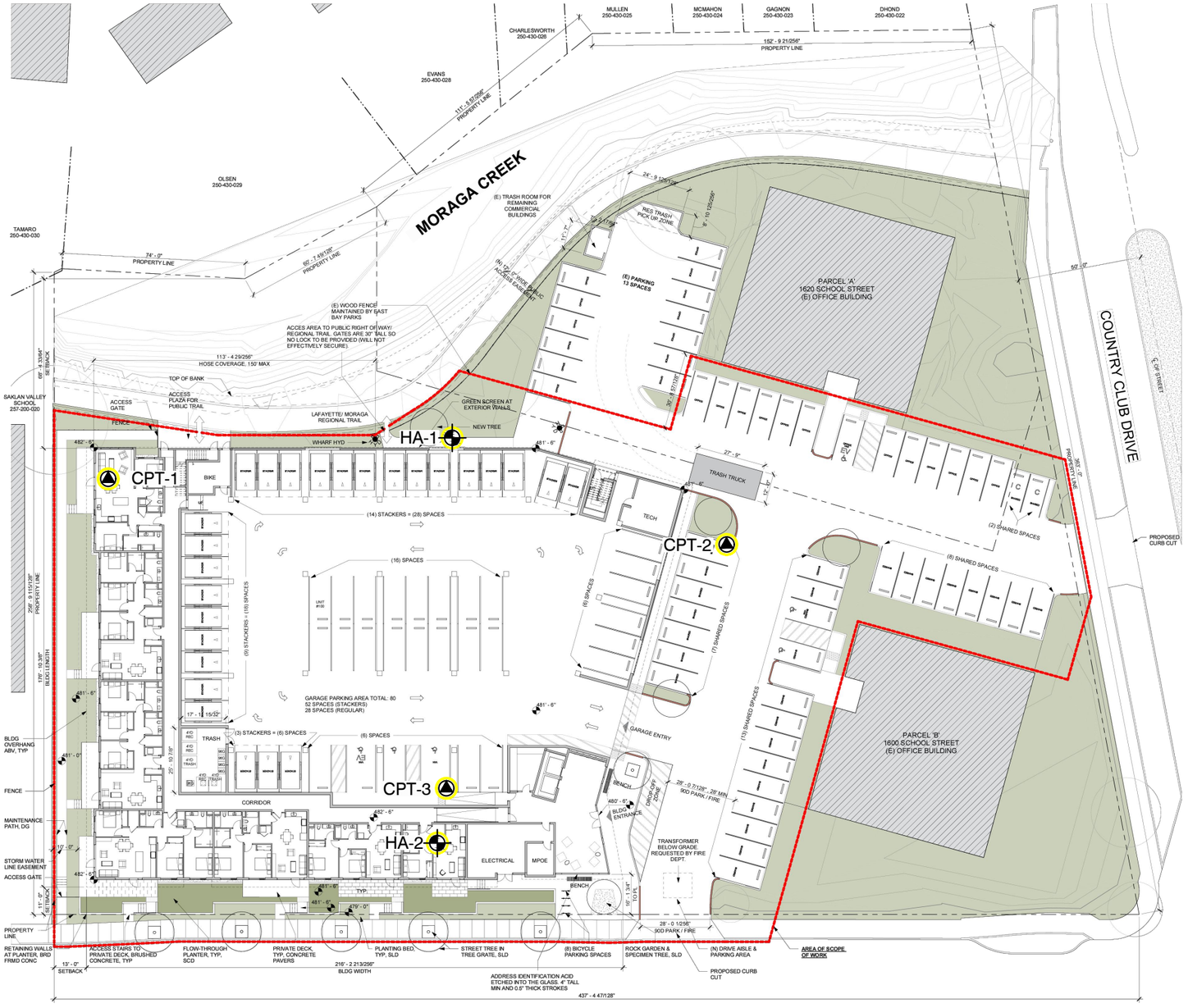
Approximate scale

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

SITE LOCATION MAP

Date 02/12/24 | Project No. 24-2553 | Figure 1



Reference: Base map from a drawing titled "Site Plan", by Form[4] Architecture, dated June 2, 2008.

EXPLANATION

CPT-1 — Approximate location of cone penetration test by Rockridge Geotechnical, Inc., January 23, 2024

HA-1 — Approximate location of hand-auger boring by Rockridge Geotechnical, Inc., January 23, 2024

Project limits

N

0 50 Feet

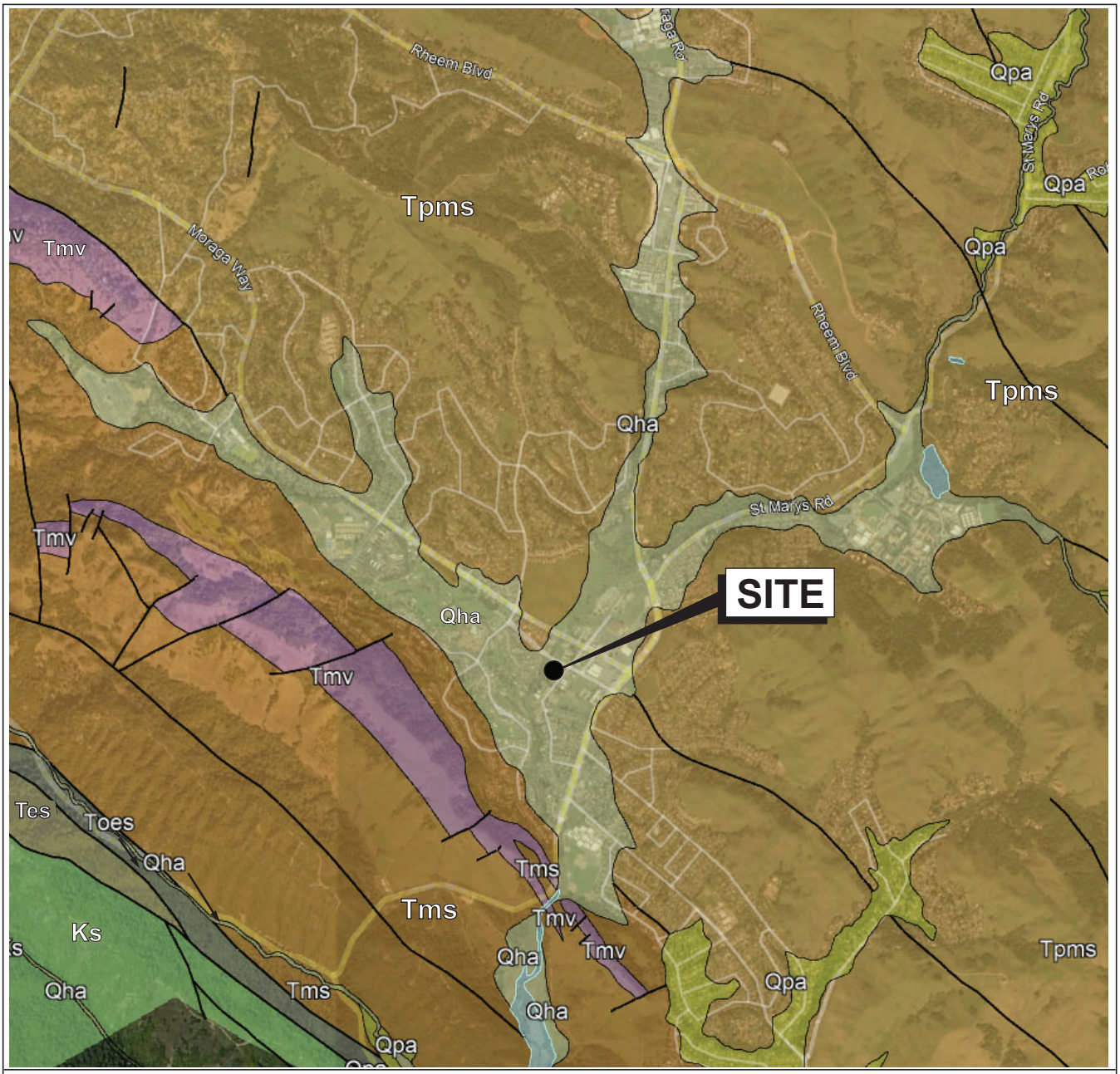
Approximate scale

1600 SCHOOL STREET
Moraga, California

SITE PLAN

Date 02/12/24	Project No. 24-2553	Figure 2

ROCKRIDGE GEOTECHNICAL



Base map: Google Earth with U.S. Geological Survey (USGS), Contra Costa County, 2022.

EXPLANATION

Qpa	Alluvium (Pleistocene)
Qha	Alluvium (Holocene)
Toes	Sedimentary rocks (Oligocene and (or) Eocene)
Tes	Sedimentary rocks (Eocene)
Tpms	Sedimentary rocks (Pliocene and early Miocene)
Tms	Sedimentary rocks (Miocene)
Tmv	Volcanic rocks (Miocene)
Ks	Great Valley complex sedimentary rocks (Cretaceous)

Geologic contact:
dashed where approximate and dotted where concealed, queried where uncertain

0 3,000 6,000 Feet

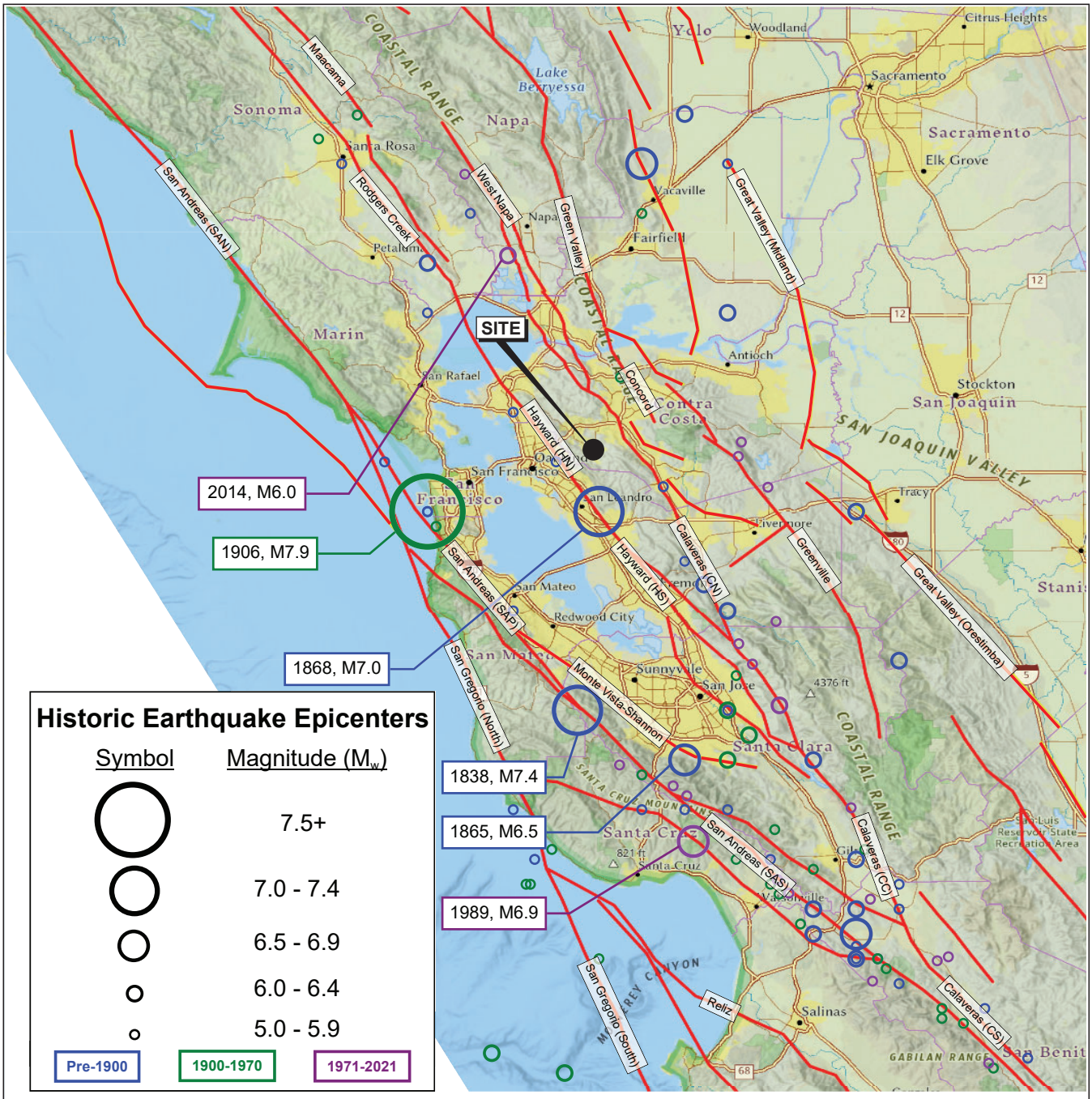
Approximate scale

1600 SCHOOL STREET
Moraga, California

REGIONAL GEOLOGIC MAP

ROCKRIDGE GEOTECHNICAL

Date 02/02/24 | Project No. 24-2553 | Figure 3

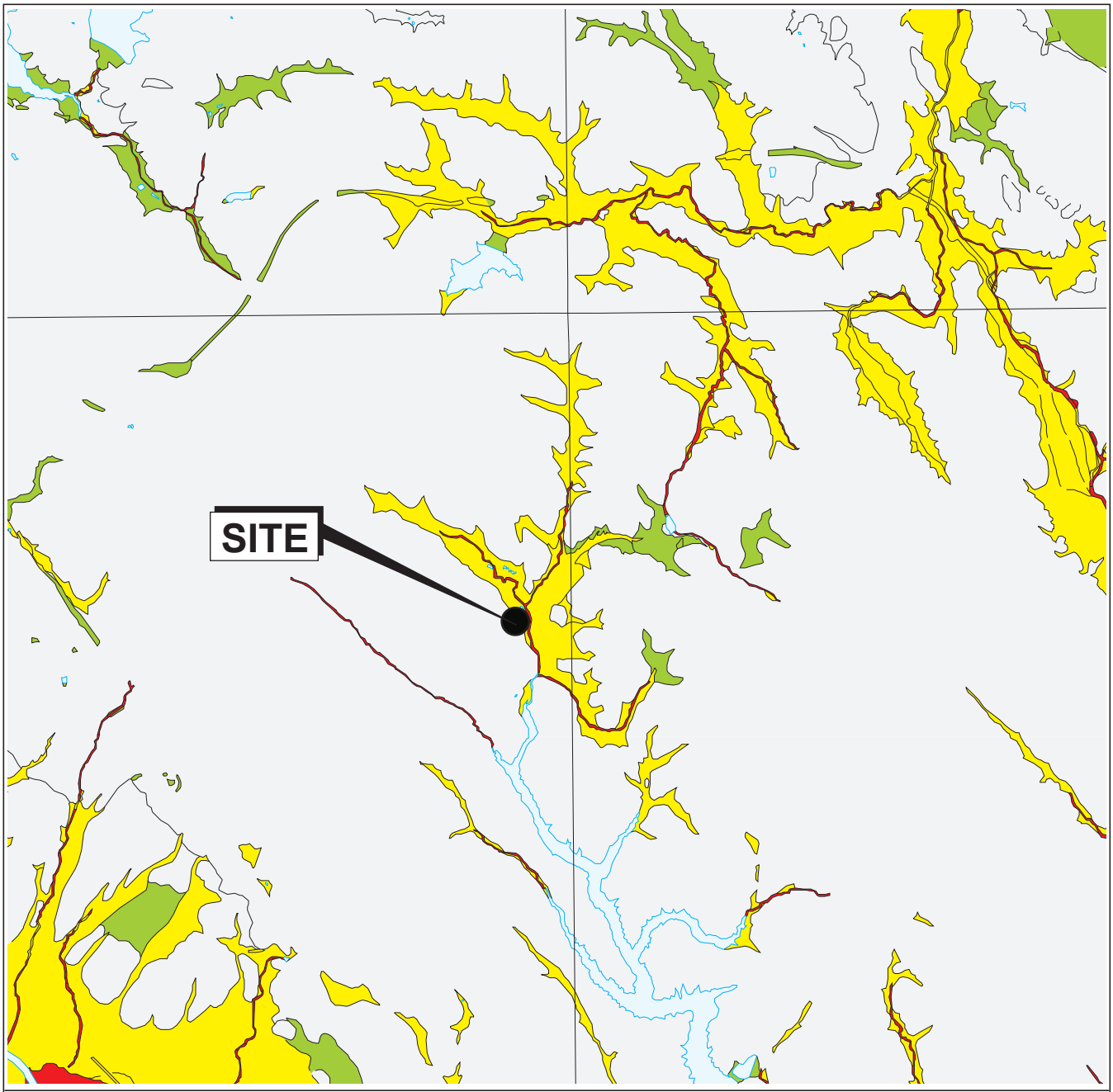


1600 SCHOOL STREET
Moraga, California

REGIONAL FAULT AND HISTORIC SEISMICITY MAP

ROCKRIDGE GEOTECHNICAL

Date 01/31/24	Project No. 24-2553	Figure 4



LIQUEFACTION SUSCEPTIBILITY

- VERY HIGH
- HIGH
- MODERATE
- LOW
- VERY LOW

Lines

Contact, dashed where location uncertainty is greater than about +- 100 m.

N

0 0.37 0.75 Miles

Approximate scale

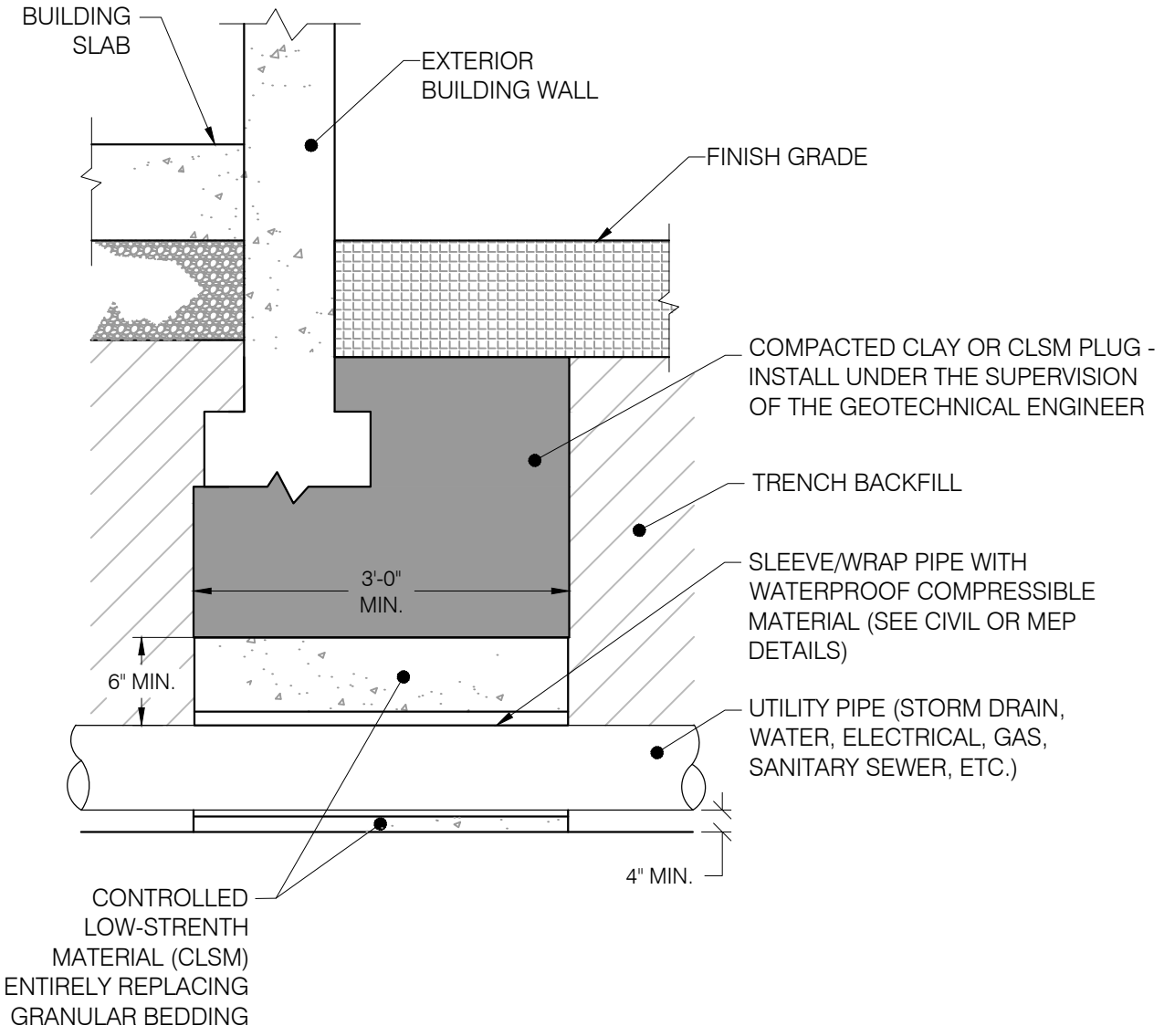
Reference:
Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California, by USGS, 2006

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

LIQUEFACTION SUSCEPTIBILITY MAP

Date 01/31/24	Project No. 24-2553	Figure 5



Not to Scale

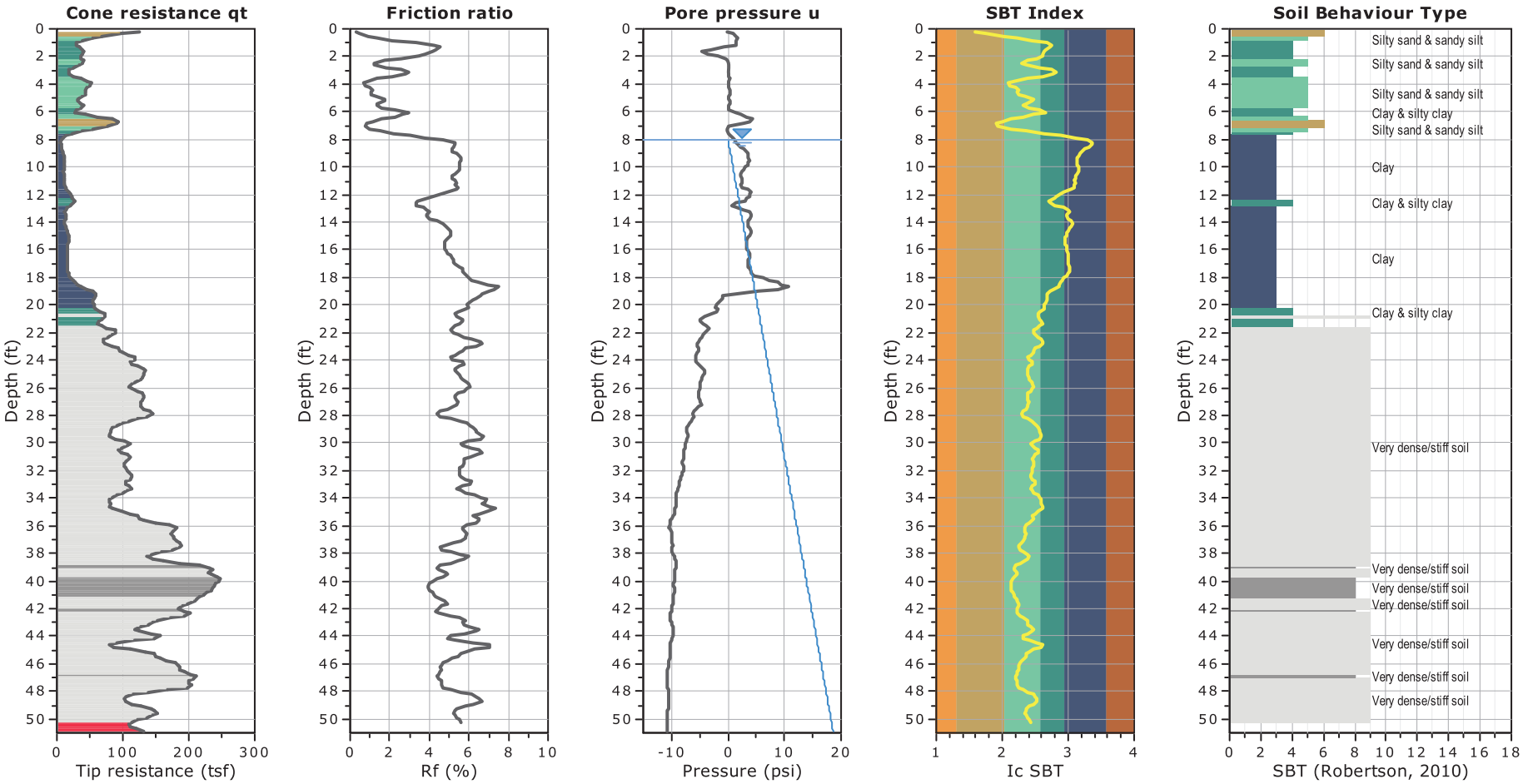
1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

UTILITY TRENCH LOW-PERMEABILITY PLUG AT BUILDING PERIMETER

Date 02/06/24	Project No. 24-2553	Figure 6

APPENDIX A
Cone Penetration Test Results and Logs of Hand-Auger Borings



Total Depth: 50.9 ft, Date: January 23, 2024
Depth to Groundwater: 8 feet (measured with weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

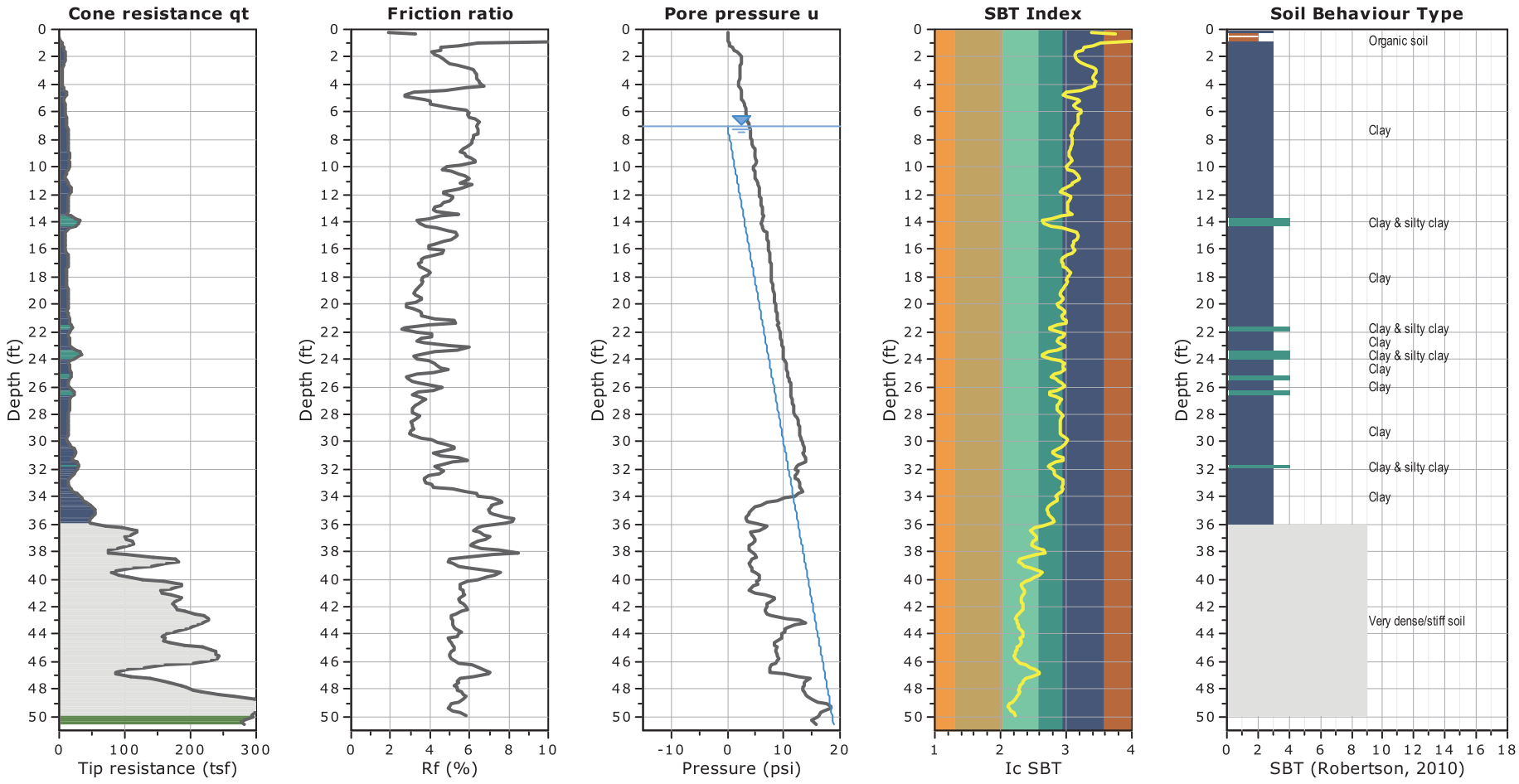
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-1

Date 02/02/24	Project No. 24-2553	Figure A-1



Total Depth: 50.5 ft, Date: January 23, 2024
Depth to Groundwater: 7 feet (measured with weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

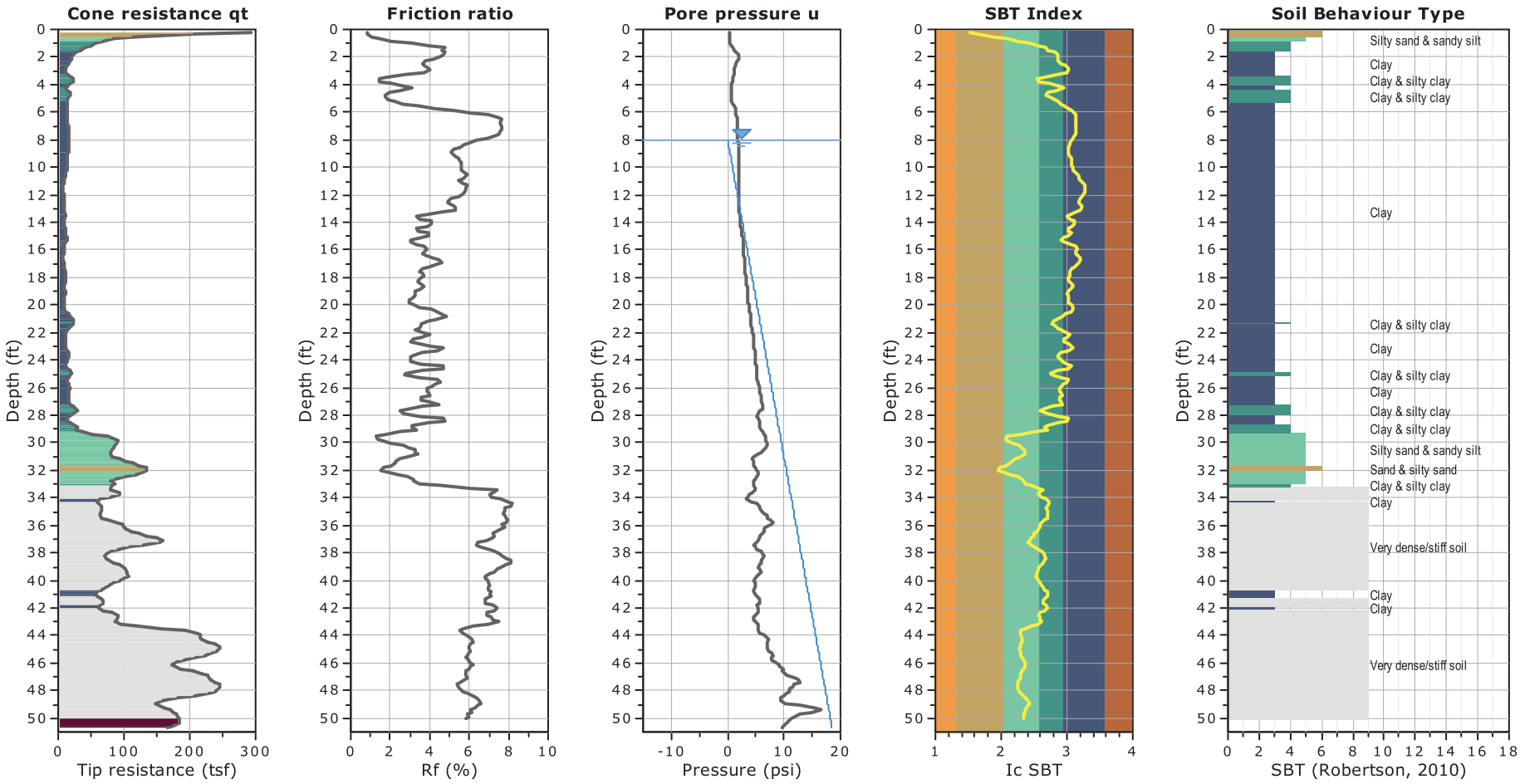
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-2

Date 02/02/24	Project No. 24-2553	Figure A-2



Total Depth: 50.7 ft, Date: January 23, 2024
Depth to Groundwater: 8 feet (measured with weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-3

Date 02/02/24	Project No. 24-2553	Figure A-3

PROJECT: **1600 SCHOOL STREET**
Moraga, California

Log of Boring HA-1

Boring location: See Site Plan, Figure 2 | Logged by: R. Reyes

Date started: 01/23/2024 | Date finished: 01/23/2024

Drilling method: 3-inch-diameter hand-auger

Hammer weight/drop: N/A | Hammer type: N/A

Sampler: Grab

DEPTH (feet)	SAMPLES: Sampler Type	SAMPLES: Sample	SAMPLES: Blows/ 6"	SAMPLES: SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA: Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
1	GRAB	☒			CL	CLAY with SAND (CL) red-gray, moist, fine sand, rootlets						
2	GRAB	☒				Soil Corrosivity Test; see Appendix B						
3	GRAB	☒			SP	SAND (SP) yellow-brown, moist, fine to medium sand, trace rootlets						
4	GRAB	☒			CL	CLAY with SAND (CL) red-gray, moist, fine sand, rootlets						
5	GRAB	☒			CL	SANDY CLAY (CL) light gray, moist, fine sand Particle Size Distribution; see Appendix B				63		
6	GRAB	☒										
7												
8												
9												
10												

Boring terminated at a depth of 6.5 feet below ground surface.
Boring backfilled with soil cuttings.
Groundwater not encountered during hand-augering.

ROCKRIDGE GEOTECHNICAL

Project No.: 24-2553 | Figure: A-4

PROJECT: **1600 SCHOOL STREET**
Moraga, California

Log of Boring HA-2

Boring location: See Site Plan, Figure 2 | Logged by: R. Reyes

Date started: 01/23/2024 | Date finished: 01/23/2024

Drilling method: 3-inch-diameter hand-auger

Hammer weight/drop: N/A | Hammer type: N/A

Sampler: Grab

DEPTH (feet)	SAMPLES: Sampler Type	SAMPLES: Sample	SAMPLES: Blows/ 6"	SAMPLES: SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA: Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
1	GRAB	☒			CL	SANDY CLAY (CL) red-gray, moist, fine to coarse sand, trace rootlets						
2	GRAB	☒				olive-gray Particle Size Distribution; see Appendix B LL = 39, PI = 23; see Appendix B				68	20	
3	GRAB	☒				Soil Corrosivity Test; see Appendix B						
4	GRAB	☒			SC	CLAYEY SAND (SC) olive-gray, moist, fine to coarse sand						
5	GRAB	☒										
6	GRAB	☒			CL	CLAY (CL) gray, moist, trace sand						
7												
8												
9												
10												

Boring terminated at a depth of 6.5 feet below ground surface.
Boring backfilled with soil cuttings.
Groundwater not encountered during hand-augering.

ROCKRIDGE GEOTECHNICAL

Project No.: 24-2553 | Figure: A-5

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine -Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

GRAIN SIZE CHART

Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

Unstabilized groundwater level

Stabilized groundwater level

SAMPLE DESIGNATIONS/SYMBOLS

- Sample taken with California or Modified California split-barrel sampler. Darkened area indicates soil recovered
- Classification sample taken with Standard Penetration Test sampler
- Undisturbed sample taken with thin-walled tube
- Disturbed sample
- Sampling attempted with no recovery
- Core sample
- Analytical laboratory sample
- Sample taken with Direct Push sampler
- Sonic

SAMPLER TYPE

C	Core barrel
CA	California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
D&M	Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
O	Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
PT	Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
MC	Modified California sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter
SPT	Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.38- or 1.5-inch inside diameter (refer to text)
ST	Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

1600 SCHOOL STREET
Moraga, California

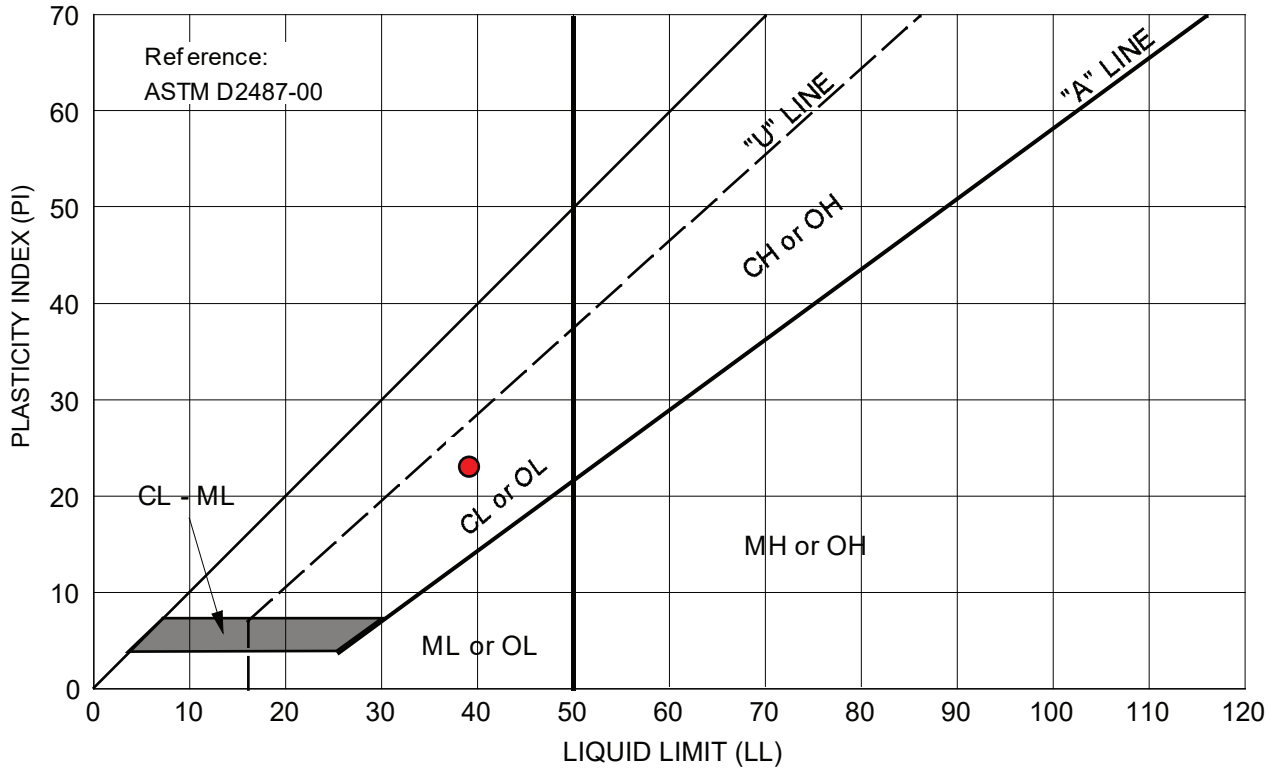
ROCKRIDGE GEOTECHNICAL

CLASSIFICATION CHART

Date 01/31/24 | Project No. 24-2553 | Figure A-6

ROCKRIDGE GEOTECHNICAL

APPENDIX B
Laboratory Test Results



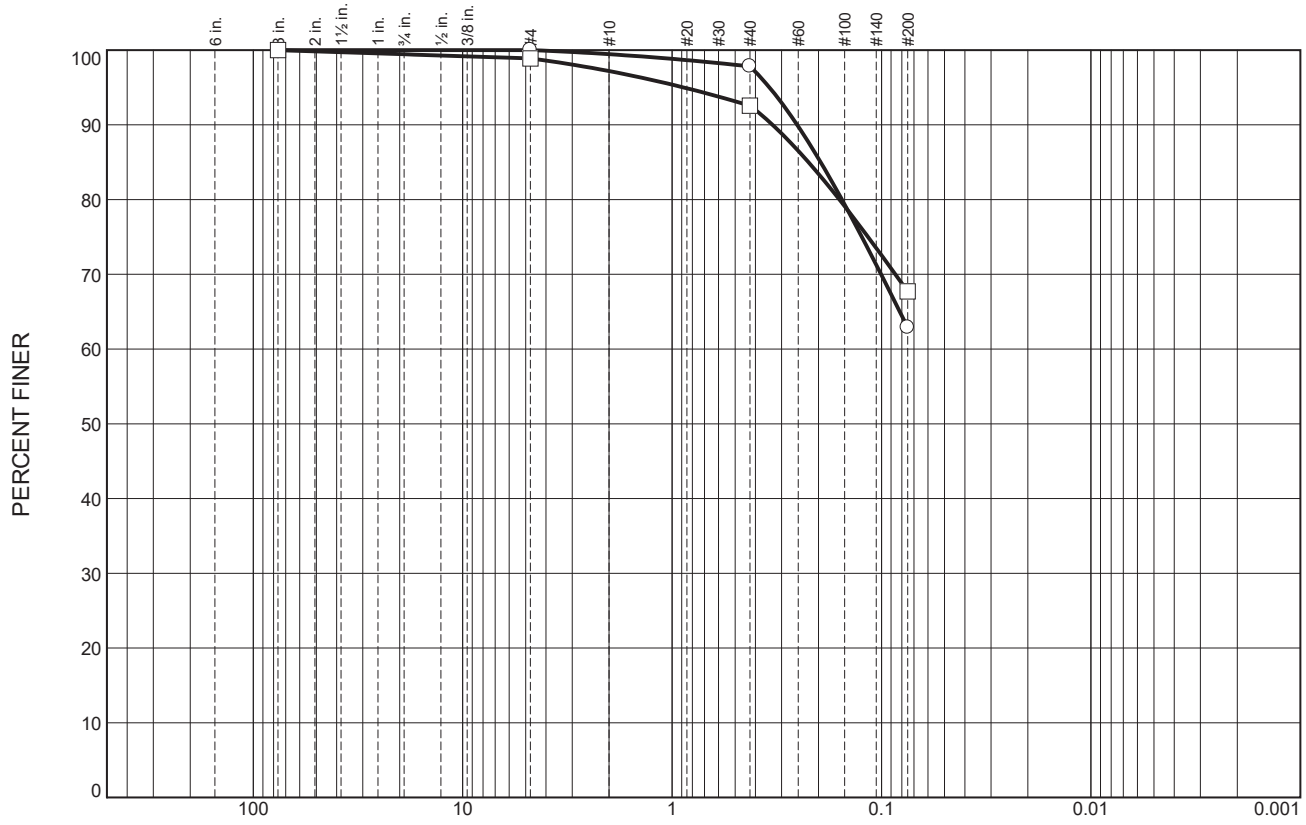
Symbol	Source	Description and Classification	Natural M.C. (%)	Liquid Limit (%)	Plasticity Index (%)	% Passing #200 Sieve
●	HA-2 at 2.0 feet	SANDY CLAY (CL), olive-gray	19.5	39	23	68

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

PLASTICITY CHART

Date 02/06/24 | Project No. 24-2553 | Figure B-1



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.5	1.7	34.9	62.9	
□	0.0	0.6	0.5	1.7	4.6	24.9	67.7	

SOIL DATA

SYMBOL	SOURCE	DEPTH (ft.)	Material Description	USCS
○	HA-1	5.0'	SANDY CLAY, light gray	CL
□	HA-2	2.0'	SANDY CLAY, olive-gray	CL

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

PARTICLE SIZE DISTRIBUTION REPORT

Date 02/06/24 | Project No. 24-2553 | Figure B-2

Project X
Corrosion Engineering
Corrosion Control – Soil, Water, Metallurgy Testing Lab

REPORT S240126I

	Method	ASTM D4327		ASTM D4327		ASTM G187		ASTM G51	ASTM G200	SM 4500-D	ASTM D4327	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D4327	ASTM D4327
Bore# / Description	**Depth**	**Sulfates** SO_4^{2-}		**Chlorides** Cl^-		**Resistivity** As Rec'd | Minimum		**pH**	**Redox**	**Sulfide** S^{2-}	**Nitrate** NO_3^-	**Ammonium** NH_4^+	**Lithium** Li^+	**Sodium** Na^+	**Potassium** K^+	**Magnesium** Mg^{2+}	**Calcium** Ca^{2+}	**Fluoride** F_2^{--}	**Phosphate** PO_4^{3-}
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	(Ohm-cm)	(Ohm-cm)		(mV)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
HA-1 Clay with Sand (CL) red-gray	2.0	23.0	0.0023	17.9	0.0018	4,288	2,613	7.1	155	1.0	0.9	1.6	0.0	27.6	1.7	21.7	103.9	5.7	10.1
HA-2 Sandy Clay (CL) olive-gray	3.0	11.0	0.0011	8.4	0.0008	1,943	1,206	7.0	158	0.3	0.6	0.1	0.0	15.2	2.9	17.4	89.9	7.8	1.1

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
mg/kg = milligrams per kilogram (parts per million) of dry soil weight
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
Chemical Analysis performed on 1:3 Soil-To-Water extract
PPM = mg/kg (soil) = mg/L (Liquid)

Note: Sometimes a bad sulfate hit is a contaminated spot. Typical fertilizers are Potassium chloride, ammonium sulfate or ammonium sulfate nitrate (ASN). So this is another reason why testing full corrosion series is good because we then have the data to see if those other ingredients are present meaning the soil sample is just fertilizer-contaminated soil. This can happen often when the soil samples collected are simply surface scoops which is why it's best to dig in a foot, throw away the top and test the deeper stuff. Dairy farms are also notorious for these items.

29990 Technology Dr., Suite 13, Murrieta, CA 92563 Tel: 213-928-7213 Fax: 951-226-1720
www.projectxcorrosion.com

1600 SCHOOL STREET
Moraga, California

ROCKRIDGE GEOTECHNICAL

SOIL CORROSIVITY TEST RESULTS

Date 01/31/24 | Project No. 24-2553 | Figure B-3

May 10, 2024

Mr. Brian Horn | Principal Planner
Town of Moraga Planning Department
329 Rheem Boulevard
Moraga, California 94556

Subject: **Geotechnical & Geological Peer Review**
Proposed Multi-Family Residential Building
1600-1660 School Street, Moraga, California 94556
Atlas Project No. 91-64942-I

Dear Mr. Horn:

As requested by the Town of Moraga (Town), **Atlas Technical Consultants (Atlas)** has reviewed the geotechnical engineering and geological aspects of the submitted documents for the proposed residential project to be constructed at 1600-1660 School Street, in Moraga, California. Our review included the following scope of work:

- Review of a report prepared by Rockridge Geotechnical (Rockridge) titled "Geotechnical Investigation, Proposed Residential Building, 1600 School Street, Moraga, California," dated February 16, 2024.
- Review of the geotechnical aspects of submitted architectural plan set prepared by Form4 Architecture (40 total sheets in set); planning submission set dated February 22, 2024.
- Review of the entitlement resubmittal civil plans prepared by DeBolt Civil Engineering, Sheets C.01 through C.05, dated January 15, 2024.
- A review of readily available published geotechnical and geologic information relevant to the proposed project.
- Site reconnaissance by a registered civil engineer on May 4, 2024.
- Preparation of this peer review letter.

PROJECT SUMMARY

Based on our review of the submitted plans and the geotechnical report provided by your office, it is our understanding that the project will consist of the construction of an at-grade, new multi-family residential building to be located at 1600-1660 School Street in Moraga, California. The new building would be four stories high, consisting of a ground-level concrete podium floor with interior parking, and a total of 66 residential units comprising the upper three levels of the building. The project would be constructed on a portion of an existing office park within which some of the existing buildings and onsite infrastructure would be demolished to make way for the project. According to the submitted civil plans, site grading would consist of a calculated 2,700 cubic yards (cy) of cut excavation and 1,200 cy of fill, resulting in 1,200 cy of off haul.

The project geotechnical engineer, Rockridge, recommended that foundations for the new building consist of either a structural mat foundation supported by a layer of engineered fill, or by conventional spread footing foundations deepened to provide support by stiffer, more competent soils at depth underlying relatively weak surficial materials.

REVIEW OF INFORMATION AND SITE RECONNAISSANCE

Our geotechnical engineer conducted a site reconnaissance on May 4, 2024. The surface conditions encountered at the site were generally similar to those indicated in the site plans and available published data. The property is irregular in shape and is located west of the intersection of Country Club Drive and School Street. The subject property consists of three combined parcels (1600, 1640 and 1660 School Street) totaling 2.0 acres. The combined property would be bound by Laguna Creek and a paved public trail and a portion of the remaining part of the office park (1620 School Street) on the west, Country Club Lane on the north, School Street on the east, and a private school (The Salkan School) on the south.

General Site Description

The subject site is set regionally in central Moraga southwest of the Town center. Topographically, the site is located within the relatively level Moraga Valley, an alluvial valley formed by Moraga Creek on the northwest and by Laguna Creek, a tributary of Moraga Creek, on the northeast (Contra Costa County, 2003). The property is currently occupied by a portion of the Moraga Office Park (1600-1660 School Street), which contains four, roughly square, single-story buildings, surrounding asphalt-paved driveways and parking lots, and landscaping. Laguna Creek and the adjoining trail passes through a portion of two of the parcels on the west side of the office park. Two of the three office buildings on the southern portion of the property will be demolished to make way for the development, and some of the remaining onsite paved parking areas would be expanded as part of the proposed project and be shared by the new development as well as the remaining office building. A fourth office building is located by the northwestern corner of the project on a separate parcel which would not be a part of the proposed project.

Subsurface Conditions

According to Rockridge, three Cone Penetration Tests (CPTs) were advanced using a CPT exploration rig equipped with a 1.7-inch diameter cone-tipped probe each to a depth of about 50 feet. Two 6.5-foot-deep hand auger probes were also conducted to obtain soil samples for visual classification and laboratory testing. Based on this exploration program, Rockridge concluded that the subsurface soils consist of a 5- to 8-foot-thick surficial layer of highly variable soils including loose to medium dense sand with varying fines contents, interbedded with soft to very stiff clay layers, which was interpreted to be representative of variable alluvial deposition from the adjoining creek. Underlying soils below the surficial layer generally consisted of stiff to very stiff clays, becoming stiffer with depth to the maximum depth of exploration of 50 feet.

Groundwater was measured in the completed CPT holes at depths of 7 to 8 feet about 10 minutes after completion of each hole. No stabilized groundwater measurements were conducted. Based on previously reported local measured groundwater depths, Rockridge concluded a historic high groundwater table depth of 4 feet was appropriate for the site.

Rockridge also performed a laboratory Atterberg Limits test on a sample of the near-surface soil, which resulted in measured Liquid Limit and Plasticity Index values of 39 and 23, respectively, indicative of medium plasticity and moderate expansion potential of the near-surface onsite soils.

Local Geology and Geologic Hazards

Dibblee (2005) mapped the property site as underlain by Quaternary period alluvium. Nearby elevated areas northwest and southeast of the site are underlain by Pliocene-age Orinda Formation at shallow depth consisting primarily of interbedded, terrestrial pebble conglomerate, sandstone, and claystone.

The 1975 USGS *Photointerpretation Map of Landslide and Other Surficial Deposits Map of the Oakland East Quadrangle* (Nilsen) shows the lower portion of the ridge bordering the southwestern edge of Moraga Valley to be a large regional older landslide, but shows no photointerpreted landslides in the general vicinity of the project site.

Site geologic and seismic hazards typical of the San Francisco Bay Area such as strong ground shaking were identified for this site. Rockridge identified the site as within a zone of low to moderate liquefaction susceptibility and performed the CPTs in order to evaluate liquefaction potential. Some isolated sand layers were identified by the CPTs below the project site, and using computer program CLiq, Rockridge interpreted potential site liquefaction total settlement to be less than ½ inch, and differential settlement to be less than ¼ inch over a 30-foot lateral distance. Rockridge also interpreted dynamic dry settlement to be potentially ¼ inch within the uppermost 4 feet of the site, and not significant below that depth. Due to the relatively minimal potential liquefaction settlement as well as such liquefaction settlement occurring within isolated sand layers, lateral spreading toward Laguna Creek does not appear to be an issue at this site.

Other typical geologic and seismic hazards such as fault rupture and tsunami inundation do not appear to impact this site. The architectural plans indicate a portion of the combined property is within the flood zone associated with the adjacent creek, although the proposed development is outside the flood zone. Any potential flooding of the site due to overtopping of the adjacent creek should and would be evaluated by a civil engineer/ flood specialist.

SIGNIFICANT GEOTECHNICAL CONSIDERATIONS

Based on our review of the geotechnical report, available literature, project plans, air-photo review, and site reconnaissance, the following significant geotechnical considerations either reported by Rockridge or interpreted by Atlas exist at the site:

- Identified potentially weak supporting material in the uppermost 4 feet of the soil profile.
- Moderately high expansion potential of the near-surface soils.
- Potential for strong seismic shaking at the site.
- Site surface and area drainage considerations.

Calculated seismic settlements due to site liquefaction and dynamic settlement would also be considered as part of foundation design for the building.

CONCLUSIONS

Based on our review and reconnaissance, it is our opinion that the identification and discussion of geologic hazards at the site and the geotechnical information and recommendations for the design of the project, including building foundations, as submitted, satisfactorily address the aforementioned geotechnical and geologic hazard considerations as applicable to the project, and in our opinion, no additional information needs to be provided by the project geotechnical engineer.

Prior to final permitting approval of the project, we suggest the following be performed and submitted either to the Town or another responsible reviewing agency (e.g., Contra Costa County).

- Structural Plan Review: The project geotechnical engineer should be consulted by the project structural engineer during the design process and should review the completed structural plans and calculations for conformance to their geotechnical recommendations, provide supplemental recommendations as necessary, and also provide a professional certification letter to that effect.
- Grading Plan Review: The project grading plans should also be reviewed by the geotechnical engineer and a similar certification letter should be prepared and submitted.

FUTURE DOCUMENTATION DURING CONSTRUCTION

After final approval of the project for construction, during project construction, the project geotechnical engineer should be retained to observe the geotechnical aspects of the construction. We suggest the geotechnical engineer provide written documentation to either the Town or other responsible reviewing agency for the following activities:

- Earthwork operations, including subgrade preparation, earthwork construction, and site subsurface drainage installations, as applicable.
- Recording of test locations and results of field and laboratory compaction tests where testing is determined to be appropriate by the project geotechnical engineer.
- Building foundations, including observation of foundation excavations, and confirmation of individual foundation embedment and supporting materials with respect to the geotechnical engineer's recommendations.
- Site drainage, including finish grading around the new building, and discharge of collected surface and subsurface water to appropriate discharge facilities.

LIMITATIONS

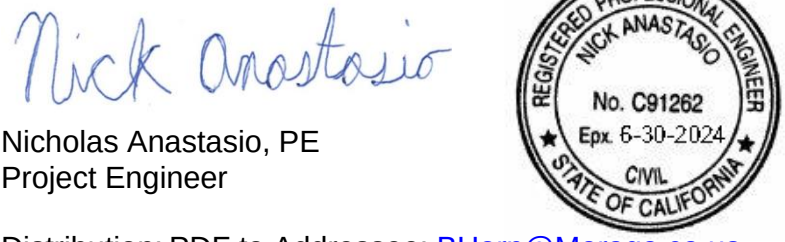
Our role as a third-party reviewer has been solely to provide technical advice to assist the Town of Moraga in its discretionary permit decisions, and we are afforded the same protection under law. Our services are limited to the review of the documents described; a visual review of the property; and developing an opinion as to the adequacy of the geohazard assessment

for the property and the project geotechnical engineer's conformance to local and current geotechnical engineering standard practice. We cannot confirm the accuracy of the information provided by others, nor can we confirm their conclusions and design recommendations. In addition, we have no control over the design or construction within this property and make no representations regarding its future condition(s).

Atlas appreciates this opportunity to be of service to the Town of Moraga. The opinions presented in this letter were prepared in accordance with generally accepted, local and current geotechnical engineering and engineering geology principles and practices. Should you have any questions or require additional information, please contact Mr. Nick Anastasio at nick.anastasio@oneatlas.com.

Sincerely,

ATLAS TECHNICAL CONSULTANTS LLC



Nicholas Anastasio, PE
Project Engineer

Distribution: PDF to Addressee; BHorn@Moraga.ca.us

NAA:pmf

REFERENCES

MAPS, DOCUMENTS AND REPORTS

Contra Costa County Community Development Department, 2003, *Contra Costa County Watershed Atlas*: published November 2003.

Dibblee, T.W., Jr., 2005, *Geologic map of the Oakland East Quadrangle, Contra Costa & Alameda Counties, California*: Santa Barbara Museum of Natural History, Dibblee Geology Center Map No. DF-160.

Nilsen, T.H., 1975, *Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Oakland East 7½" Quadrangle, Contra Costa and Alameda Counties, California*: U.S. Geological Survey Open-File Map 75-277-41.

June 5, 2026
Project No. 626018

Nate Levine, PE, TE
Public Works Director/Town Engineer
Town of Moraga
329 Rheem Blvd
Moraga, CA 94556
T: 925.888.7023
E: nlevine@moraga.ca.us

RE: Updates to the Traffic Impact Study for Development Project 1600 School Street, Moraga, CA Memorandum

This memorandum supplements the 1600 School Street Residential Traffic Impact Study (TIS) dated August 9, 2024, by TJKM Transportation Consultants for the Town of Moraga, California. Since publication of the TIS report, the developer revised the proposed site plans in February 2026. This analysis reviews those changes to confirm the findings remain accurate in the current context, with updated existing traffic volumes, while also evaluating any additional traffic impacts compared to the previously approved project. For purposes of this supplemental review, the 2024 TIS findings are assumed to remain generally applicable due to the close timing between the original and updated traffic counts, the reduced number of dwelling units, and the limited change in project trip generation.

Background

The Town of Moraga Planning Commission accepted the 2024 TIS prepared by TJKM in October 2024. The study evaluated a proposed 66-unit multifamily mid-rise development, which included demolition of two single-story office buildings within an existing four-building office complex. Since that time, the developer has revised the project to demolish all of the existing office buildings to build a 49-unit multifamily townhouse condominium development, consisting of 44 market rate units and 5 affordable units. The project site, located at the southwest corner of Country Club Drive and School Street, now has a total project area of 144,934 square feet (including on-site and off-site areas), with 128,474 gross square feet on-site.

Data Collection

To support this assessment, Sandis coordinated with IDAX to collect relevant traffic data on Tuesday, April 7, 2026, and Wednesday, April 8, 2026. This included the collection of Average Daily Traffic (ADT) with speed data. This has been collected and tabulated in ***Table 1*** below. Additionally, the project collected 14-hour multimodal Turning Movement Counts (TMCs). These TMCs were collected at the following locations:

- School Street at Country Club Drive (Tuesday, April 7, 2026, and Wednesday, April 8, 2026)
- School Street at De la Cruz Way (Tuesday, April 7, 2026, and Wednesday, April 8, 2026)
- School Street at Project Driveway (Tuesday, April 7, 2026)
- De la Cruz Way at Project Driveway (Tuesday, April 7, 2026)

Reference **Appendix A** for detailed traffic counts data.

Table 1: Data Collection

Location	Direction	85th Percentile Speed (mph)	ADT Volumes (vpd)
School St, between Hazelwood Pl & Saklan School North Driveway	NB	25.6	432
	SB	24.8	512
School St, between Saklan School North Driveway & Country Club Dr	NB	25.7	620
	SB	26.5	636
Country Club Dr, between Moraga Creek & School St	EB	31.2	1,112
	WB	32.2	1,330

Source: IDAX Data Collection from Tuesday, April 7, 2026, and Wednesday, April 8, 2026.
mph = miles per hour
vpd = vehicles per day

Alternative Mode Impacts

Pedestrian

Pedestrian circulation impacts have been reevaluated and remain less-than-significant. The revised off-site development plans do not introduce new changes to the pedestrian facilities beyond those previously evaluated. Recommended pedestrian-related improvements carried forward from the prior TIS are listed in ***Table 4*** in the Conclusion section of this memorandum.

Bicycle

Bicycle circulation impacts have been reevaluated and remain less-than-significant. The revised off-site development plans do not introduce new changes to the bicycle facilities beyond those previously evaluated. The original development plan proposed 8 bicycle parking spaces (4 bicycle racks) accessible from School Street, while the updated plans propose 6 bicycle parking spaces (3 bicycle racks) in an appropriate common area adjacent to the proposed on-site ADA parking stall near the Lafayette/Moraga Regional Trail, with access provided from both the trail and Country Club Drive. Recommended bicycle-related improvements carried forward from the prior TIS are listed in ***Table 4*** in the Conclusion section of this memorandum.

Since acceptance of the 2024 TIS, a new bicycle project has emerged independent of the proposed development project. Sandis is developing plans for the Moraga Road and Canyon Road Complete Streets Project, which would install Class II bicycle lanes and high-visibility crosswalks along the Moraga Road and Canyon Road corridors from Sanders Drive to St Marys Road.

Transit

Transit circulation impacts have been reevaluated and remain less-than-significant. The revised off-site development plans do not introduce new changes to the transit facilities beyond those previously evaluated.

Parking

Originally, 109 total parking spaces were proposed. Now, a total of 114 parking spaces are being proposed. The new parking spaces consist of 98 covered garage stalls, 2 on-site parking spaces, and 14 on-street parking stalls along Country Club Drive and School Street. Of the on-site parking spaces, 1 is an ADA parking stall. Refer to **Appendix C** for the Architect's Title Sheet with Parking Calculations.

The 14 on-street parking spaces are divided into 3 stalls along Country Club Drive and 11 stalls along School Street along the project frontages. Country Club Drive currently has no existing parking. The development project will relocate the existing Country Club Drive driveway toward the west and provide curb cut-outs to accommodate the proposed 3 parking spaces. With the proposed on-street parking configuration and relocated project driveway along Country Club Drive, driveway visibility will remain clear. School Street has existing on-street parking spaces that are being reconfigured to provide the 11 stalls along the project frontage. These spaces along School Street will be marked with white-striped parking space markings. No parking spaces are provided on either side of the School Street project driveway.

Recommended transportation-related improvements carried forward from the prior TIS are listed in ***Table 4*** in the Conclusion section of this memorandum. One of the recommendations includes painting 20 feet of red curb on both sides of the School Street project driveway to restrict parking. Red curb is not incorporated in the updated development plans. However, no on-street parking stall markings are proposed on either side of the School Street project driveway. Sandis still recommends to provide red curb to emphasize parking restrictions, which is noted in ***Table 4***. Restricting parking within 20 feet on both sides of the project driveway helps maintain driveway visibility. Another recommendation listed in ***Table 4*** includes installing a bulb-out at the southwest corner of the Country Club Drive and School Street intersection. The updated development plans incorporate the bulb-out, which restricts parking at the corner to improve visibility for vehicles and pedestrians, particularly at the existing crosswalk crossing Country Club Drive.

School Traffic Observations

Sandis conducted a field observation on Wednesday, April 29, 2026, to observe traffic behavior around The Saklan School during school drop-off (7:30 AM - 9:00 AM) and school pick-up (2:45 PM - 4:15 PM). The school has a single entrance and a one-way parking lot, with the entrance driveway to the south, and the exit driveway to the north along School St. The school is located between the Lafayette/Moraga Regional Trail and School Street (25 mph). The Willow Spring Community Church parking lot across from the school was closed for public use during the observation periods.

ADT tube counts were gathered between Hazelwood Place and Saklan School North Driveway, and between Saklan School North Driveway and Country Club Dr. The AM and PM Peak hours along School Street coincided with The Saklan School morning drop-off (8:00 AM - 9:00 AM) and afternoon pick-up (3:00 PM - 4:00 PM) times. **Appendix A** shows the peak hour traffic counts along those sections of School Street.

AM Peak Hour

During the school drop-off in the morning, students arrived by walking, biking, and by vehicle. The majority of the students arrived by vehicle from the north on School Street. Approximately four students arrived by bicycle, while pedestrians approached in similar numbers from both directions.

Peak activity occurred between 8:00 AM - 8:30 AM, including one school van and one bus. Vehicles used both the parking lot (longest queue observed were three vehicles) and on-street parking along the west side of School Street. Minor roadway queuing occurred as vehicles slowed to enter the site. One guardian was observed parking on the eastern side of School Street and escorted the student across the street. Vehicles departing from on-street parking on the west side, particularly those arriving from the north, often executed U-turns within the school frontage to head back towards Country Club Dr.

Staff arrived before the AM peak hour and parked either on the street or in the school parking lot. Plenty of street parking was available in front of the school and within 200 feet of the school area, both north and south of School Street. The school parking lot never reached capacity.

Non-school related activities observed during the morning included many dog walkers, a couple of leisure walkers and runners, commuting children riding their bikes southbound on School St between 8:00 AM - 8:15 AM, and a high volume of southbound vehicle traffic on School St with less traffic heading northbound. Vehicle speeding only occurred when the street was empty. Majority of observed vehicles were slow during the peak drop-off period.

PM Peak Hour

During the school pick-up in the afternoon, students left by walking, biking, and by vehicles. Most students left by vehicle, with significantly fewer students walking home compared to the morning. The same number of students who arrived by bike in the morning left in the same mode in the afternoon. Due to the school sequential schedule, the afternoon activity was more dispersed compared to the morning. The busiest time of students departing was around 3:00 PM when the school van exited, with another wave around 3:30 PM when the school bus departed.

Between 3:00 PM - 3:30 PM, the school had temporarily closed the parking lot with a sign, resulting in a higher volume of street parking compared to the morning. Parents were parked on both sides of School Street; parked vehicles extended approximately 200 feet beyond the school frontage both north and south of the campus. The majority of parents parked on the west side of School Street, and most came from the north and headed back north. As a result, there were more U-turn movements in the afternoon. These movements occurred either in front of the school campus, or just south of the school. Since parents also parked on the east side of the street, there were more street crossings as well. The only queueing observed were cars trying to park on the west side of the street, with up to 3 cars waiting behind them to safely continue southbound.

Non-school related activities observed during the evening included fewer dog walkers than the morning, more leisure walkers compared to the morning, no runners, and a couple of golf carts. Around 3:10 PM, there was a significant number of commuters from a different school walking and biking northbound on School St. There was also both northbound and southbound vehicle traffic along the street.

One reoccurring traffic behavior observed during drop-off and pick-up times was that bicyclists rode on the road and on the sidewalk. Bicyclists riding on the road took the entire lane, and vehicles respected them on the roadway despite School Street not having bike lane designations.

Based on the observations, the current proposed project is not anticipated to have significant adverse effect on the existing drop-off and pick-up activities at The Saklan School, which is in agreement with the previous TIS report.

Vehicle Trip Generation

Sandis utilized the trip distribution and assignment from the 2024 TIS report. Vehicle trip generation estimates for the current proposed project were calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The 11th edition is supported until December 31, 2026. To generate the number of trips for the revised proposed development project, the following information was used.

- Existing Land Use:
  - Small Office Building (Land Use 712)
- Proposed Land Use:
  - Single-Family Attached Housing (Land Use 215)
- Current Project Number of Dwelling Units:
  - 49 Total Dwelling Units
    - Market Rate Units: 44
    - Affordable Units: 5

The proposed project has been revised from the previously approved 66-unit, four-story multifamily apartment development to a 49-unit townhouse condominium development. The previous project was appropriately evaluated using the ITE Trip Generation Manual, 11th Edition, Land Use Code 221 for Multifamily Housing (Mid-Rise), based on its apartment-style configuration and four-story building height. The current project consists of attached townhouse dwelling units, which is more consistent with ITE Land Use Code 215 for Single-Family Attached Housing. Therefore, vehicle trip generation for the revised development plan is based on Land Use Code 215, using dwelling units as the independent variable, reflecting the change in residential building type from mid-rise multifamily apartments to attached townhouse condominiums.

Details of the trip generation calculation can be found in ***Table 2*** below. The estimated changes in vehicle trips for the current proposed project site are forecasted to be a net increase of 5 AM peak hour trips and net increase of 14 PM peak hour trips compared to the existing conditions. Refer to **Appendix B** for the trip generation and distribution diagrams for the current proposed project during the AM and PM peak hours, respectively.

The ***"Net Trip Comparisons"*** section in ***Table 2*** below presents the net project related peak hour trip volumes, comparing the existing peak hour trips with both the previous proposed project, and with the current proposed project trip generation. The land uses differ for existing conditions, the previous proposed project, and the current proposed project. As a result, the AM peak hour shows 3 more trips, and the PM peak hour shows 1 fewer trip compared to the previous project.

- Previous Project:
  - Multifamily Housing (Mid-Rise) (Land Use 221)
  - Number of Dwelling Units: 66 Total
- Current Project:
  - Single-Family Attached Housing (Land Use 215)
  - Number of Dwelling Units: 49 Total

Table 2: Current Proposed Project Vehicle Trip Generation

Land Use	Number of Dwelling Units	Size (1000 SF)	AM Peak Hour		PM Peak Hour	
			Trips (In / Out)	Total Trips	Trips (In / Out)	Total Trips
*Existing Building**						
Small Office Building (712)	–	8.89	12 / 3	15	4 / 7	11
Previous Proposed Project Building						
Multifamily Housing (Mid-Rise) (221)	66	–	4 / 13	17	16 / 10	26
Current Proposed Project Building						
Single-Family Attached Housing (215)	49	–	5 / 15	20	15 / 10	25
Net Trip Comparisons						
Existing (Small Office) – to – Previous Proposed Project (Multifamily) Comparison	–	–	**-8 / +10**	**+2**	**+12 / +3**	**+15**
Existing (Small Office) – to – Current Proposed Project (Single-Family) Comparison	-	-	**-7 / +12**	**+5**	**+11 / +3**	**+14**

Source: ITE Trip Generation Manual, 11th Edition
* Values obtained from page 28, Table 5: Project Trip Generation – Standard Alternative, 1600 School Street Residential Traffic Impact Study, 2024, by TJKM.

Level of Service (LOS)

Using Trafficware Synchro software and Highway Capacity Manual (HCM) methodology, the scenario for existing plus project conditions have been reanalyzed.

Based on the findings in the previous section, the revised project is expected to generate more trips during the PM peak hour. As shown in ***Table 2***, "Existing (Small Office)-to-Previous Proposed Project (Multifamily) Comparison" estimates 15 additional trips in the PM, and "Existing (Small Office)-to-Current Proposed Project (Single-Family) Comparison" estimates 14 additional trips in the PM. The PM net increase of 14 trips for the current proposed project was reviewed and determined to not materially affect the prior TIS conclusions. Instead, the AM peak hour was selected as the controlling analysis period for the Synchro Analysis because it reflects more critical operating conditions, including higher existing peak hour volumes and delay compared to the PM peak hour at surrounding intersections near the driveways. The Current Proposed Condition Synchro models a net increase of 5 trips from the existing AM peak hour volumes, distributed between the two business driveways.

All intersections are expected to continue to operate at an acceptable LOS of B or better during the respective peak hour. These results are tabulated in ***Table 3*** below along with existing conditions LOS and the previous project LOS for comparison.

Table 3: Level of Service

Existing Conditions LOS*					
No.	**Intersection**	**Control Type**	**Peak Hour**	**Delay (sec/veh)**	**Delay Based LOS**
1	School St & De la Cruz Way	TWSC	AM	8.8	A (WB)
2	School St & Driveway 1	TWSC	AM	10.3	B (EB)
3	Country Club Dr & School St	AWSC	AM	9.6	A
4	Country Club Dr & Driveway 2	TWSC	AM	9.1	A (NB)
Previous Project LOS*					
No.	**Intersection**	**Control Type**	**Peak Hour**	**Delay (sec/veh)**	**Delay Based LOS**
1	School St & De la Cruz Way	TWSC	AM	8.9	A (WB)
2	School St & Driveway 1	TWSC	AM	10.4	B (EB)
3	Country Club Dr & School St	AWSC	AM	9.7	A
4	Country Club Dr & Driveway 2	TWSC	AM	9.2	A (NB)
Current Project LOS					
No.	**Intersection**	**Control Type**	**Peak Hour**	**Delay (sec/veh)**	**Delay Based LOS**
1	School St & De la Cruz Way	TWSC	AM	8.8	A (WB)
2	School St & Driveway 1	TWSC	AM	10.5	B (EB)
3	Country Club Dr & School St	AWSC	AM	9.3	A
4	Country Club Dr & Driveway 2	TWSC	AM	9.5	A (NB)

Source: Trafficware Synchro
* Values obtained from page 37, Table 7: Existing Plus Project Conditions – Intersection Level of Service Analysis Results (Standard Alternative) 1600 School Street Residential Traffic Impact Study, 2024, by TJKM
AWSC = All-Way Stop Control
TWSC = Two-Way Stop Control

Vehicle Miles Traveled (VMT)

The 2024 TIS determined the proposed development project to be exempt from vehicle miles traveled (VMT) analysis by meeting at least one of the five screening criteria established by the Contra Costa Transportation Authority (CCTA) guidelines. As stated in the Town of Moraga General Plan 2040 Transportation Element, for interjurisdictional consistency, the CCTA guidelines are to be used for development-related traffic impact analyses, including guidelines for calculating VMT. The 2024 TIS report analyzed VMT using methodology published in the CCTA *Technical Procedures* (2022) section, and the criteria selected to screen out VMT analysis was that the development project is located in a low VMT area. This determination was reevaluated and is still true with the updated project plans since the project is being proposed in the same location. The VMT screening map used is from page 382, Figure 4.14-4 of the 2022 *Town of Moraga Comprehensive Advanced Planning Initiative, Draft Environmental Impact Report*. The map shows the proposed project site within a

transportation analysis zone (TAZ) with existing VMT of at least 15 percent below the countywide average. Refer to **Appendix D** for the VMT screening map, which is the same map used in the 2024 TIS.

Conclusion

Construction Coordination

Prior to issuance of grading, demolition, encroachment, or construction permits, the applicant shall submit a construction traffic and parking management plan for Town review and approval. The plan shall address construction access, worker parking, material deliveries, truck staging, lane and sidewalk closures, and school-area circulation. Construction activities that affect School Street, Country Club Drive, on-street parking, pedestrian access, or truck movements near The Saklan School shall be coordinated with the school and shall avoid school drop-off and pick-up periods unless otherwise approved by the Town Engineer.

Recommended Transportation Improvements

The original 2024 TIS recommended a series of safety enhancements and roadway modifications, as summarized in ***Table 4*** below. Since completion of the 2024 TIS, the development plans have been revised to incorporate most of these recommendations. ***Table 4*** identifies the recommendations that have been incorporated into the current development plan set. Given the reduction in the proposed dwelling unit count compared to the previous project proposal, the listed transportation-related improvements have been reviewed to assess their continued applicability. Based on this review, the recommendations from the original 2024 TIS that have not yet been incorporated into the current development plans remain applicable.

Table 4: Recommended Transportation Improvements

Recommendation	Location	Assessment
Bicycle Racks / Bicycle Parking	Near building entrances or at appropriate common areas, visitor areas, or other accessible locations serving residents and guests.	Incorporated in the updated development plans.
20 Feet of Red Curb	Both sides of the School St project driveway.	Not incorporated in the updated development plans. However, the updated plans do not propose on-street parking stall markings on either side of the School St project driveway. Sandis still recommends to provide red curb to emphasize the parking restrictions.
Class I Shared-Use Facility	Along Country Club Dr from School St to the Lafayette/Moraga Regional Trail.	Incorporated in the updated development plans.
Replace the Existing Channelized Eastbound Right-Turn Lane and Associated Wedge with an Eastbound Right-Turn Lane Pocket	West leg of the Country Club Dr and School St intersection.	Incorporated in the updated development plans.
Bulb-out	Southwest corner of the Country Club Dr and School St intersection.	Incorporated in the updated development plans.
Median Pedestrian Refuge Island	West leg crosswalk of the Country Club Dr and School St intersection.	Not incorporated in the updated development plans. Revise the Country Club Dr roadway cross-section as needed to accommodate an ADA-compliant median pedestrian refuge island.
High-Visibility Crosswalk	South leg of the Country Club Dr and School St intersection.	Not incorporated in the updated development plans. Provide dual ramps at the proposed bulb-out on the southwest corner of the Country Club Dr and School St intersection to ensure a perpendicular crossing at School St.

In conclusion, the revised project at 1600 School Street, as compared to the previously analyzed and approved project, would result in only minor changes related to driveway locations, site circulation, and trip generation. Based on this review, these updates do not materially affect the findings of the August 9, 2024, Traffic Impact Study done by TJKM. The original conclusions and recommendations remain applicable, and no new or significant traffic impacts are anticipated under the revised project scenario.

Regards,

SANDIS

Brendan Pang

Brendan Pang, PE
Project Engineer

SANDIS

Appendix A – Traffic Counts

Vehicle Classification Report Summary

Location: School St, Between Hazelwood Pl and Saklan School North Driveway

Count Direction: Northbound / Southbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 01

Direction	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Northbound	56	734	63	1	4	6	0	0	0	0	0	0	0	864
	6.5%	85.0%	7.3%	0.1%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Southbound	43	874	90	6	3	7	0	0	0	0	0	0	0	1,023
	4.2%	85.4%	8.8%	0.6%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	99	1,608	153	7	7	13	0	0	0	0	0	0	0	1,887
	5.2%	85.2%	8.1%	0.4%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Tuesday, April 7, 2026
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	5	0	0	0	1	0	0	0	0	0	0	0	**6**
7:00 AM	0	14	1	0	1	1	0	0	0	0	0	0	0	**17**
8:00 AM	1	72	5	0	0	0	0	0	0	0	0	0	0	**78**
9:00 AM	7	14	3	0	0	0	0	0	0	0	0	0	0	**24**
10:00 AM	0	22	2	0	1	0	0	0	0	0	0	0	0	**25**
11:00 AM	2	21	6	0	0	0	0	0	0	0	0	0	0	**29**
12:00 PM	0	17	4	0	0	0	0	0	0	0	0	0	0	**21**
1:00 PM	1	13	1	0	0	0	0	0	0	0	0	0	0	**15**
2:00 PM	12	52	4	0	0	0	0	0	0	0	0	0	0	**68**
3:00 PM	1	51	2	0	0	0	0	0	0	0	0	0	0	**54**
4:00 PM	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
5:00 PM	0	18	2	0	0	0	0	0	0	0	0	0	0	**20**
6:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
8:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
9:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**24**	**342**	**35**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**405**
	5.9%	**84.4%**	**8.6%**	**0.0%**	**0.5%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Tuesday, April 7, 2026
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
7:00 AM	0	11	5	0	0	1	0	0	0	0	0	0	0	**17**
8:00 AM	2	96	10	1	0	0	0	0	0	0	0	0	0	**109**
9:00 AM	1	8	2	0	0	0	0	0	0	0	0	0	0	**11**
10:00 AM	0	18	3	0	0	0	0	0	0	0	0	0	0	**21**
11:00 AM	2	14	4	0	0	0	0	0	0	0	0	0	0	**20**
12:00 PM	0	23	1	0	2	0	0	0	0	0	0	0	0	**26**
1:00 PM	2	17	3	0	0	0	0	0	0	0	0	0	0	**22**
2:00 PM	1	40	10	0	0	1	0	0	0	0	0	0	0	**52**
3:00 PM	2	49	4	1	0	0	0	0	0	0	0	0	0	**56**
4:00 PM	2	34	3	0	0	0	0	0	0	0	0	0	0	**39**
5:00 PM	1	30	1	0	0	0	0	0	0	0	0	0	0	**32**
6:00 PM	0	18	2	0	0	0	0	0	0	0	0	0	0	**20**
7:00 PM	0	13	0	0	0	0	0	0	0	0	0	0	0	**13**
8:00 PM	1	6	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**14**	**384**	**48**	**2**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**453**
	3.1%	**84.8%**	**10.6%**	**0.4%**	**0.4%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Wednesday, April 8, 2026
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	1	67	5	0	2	0	0	0	0	0	0	0	0	**75**
9:00 AM	1	17	3	1	0	3	0	0	0	0	0	0	0	**25**
10:00 AM	1	16	1	0	0	0	0	0	0	0	0	0	0	**18**
11:00 AM	12	14	0	0	0	0	0	0	0	0	0	0	0	**26**
12:00 PM	1	19	3	0	0	0	0	0	0	0	0	0	0	**23**
1:00 PM	1	62	3	0	0	0	0	0	0	0	0	0	0	**66**
2:00 PM	2	16	0	0	0	1	0	0	0	0	0	0	0	**19**
3:00 PM	7	84	4	0	0	0	0	0	0	0	0	0	0	**95**
4:00 PM	4	21	3	0	0	0	0	0	0	0	0	0	0	**28**
5:00 PM	1	21	5	0	0	0	0	0	0	0	0	0	0	**27**
6:00 PM	1	18	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
8:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
9:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**32**	**392**	**28**	**1**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**459**
	7.0%	**85.4%**	**6.1%**	**0.2%**	**0.4%**	**0.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Wednesday, April 8, 2026
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
6:00 AM	1	4	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	1	18	1	0	1	0	0	0	0	0	0	0	0	**21**
8:00 AM	3	113	13	2	0	1	0	0	0	0	0	0	0	**132**
9:00 AM	0	22	1	1	0	1	0	0	0	0	0	0	0	**25**
10:00 AM	1	44	4	0	0	0	0	0	0	0	0	0	0	**49**
11:00 AM	8	44	3	0	0	0	0	0	0	0	0	0	0	**55**
12:00 PM	4	20	4	0	0	0	0	0	0	0	0	0	0	**28**
1:00 PM	4	16	1	0	0	0	0	0	0	0	0	0	0	**21**
2:00 PM	1	35	3	0	0	1	0	0	0	0	0	0	0	**40**
3:00 PM	1	64	3	1	0	0	0	0	0	0	0	0	0	**69**
4:00 PM	2	29	5	0	0	0	0	0	0	0	0	0	0	**36**
5:00 PM	0	23	1	0	0	0	0	0	0	0	0	0	0	**24**
6:00 PM	1	25	1	0	0	0	0	0	0	0	0	0	0	**27**
7:00 PM	1	16	1	0	0	0	0	0	0	0	0	0	0	**18**
8:00 PM	1	5	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**29**	**490**	**42**	**4**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**570**
	5.1%	**86.0%**	**7.4%**	**0.7%**	**0.2%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	5	0	0	0	1	0	0	0	0	0	0	0	**6**
7:00 AM	0	15	1	0	1	1	0	0	0	0	0	0	0	**18**
8:00 AM	1	70	5	0	1	0	0	0	0	0	0	0	0	**77**
9:00 AM	4	16	3	1	0	2	0	0	0	0	0	0	0	**26**
10:00 AM	1	19	2	0	1	0	0	0	0	0	0	0	0	**23**
11:00 AM	7	18	3	0	0	0	0	0	0	0	0	0	0	**28**
12:00 PM	1	18	4	0	0	0	0	0	0	0	0	0	0	**23**
1:00 PM	1	38	2	0	0	0	0	0	0	0	0	0	0	**41**
2:00 PM	7	34	2	0	0	1	0	0	0	0	0	0	0	**44**
3:00 PM	4	68	3	0	0	0	0	0	0	0	0	0	0	**75**
4:00 PM	2	21	2	0	0	0	0	0	0	0	0	0	0	**25**
5:00 PM	1	20	4	0	0	0	0	0	0	0	0	0	0	**25**
6:00 PM	1	13	1	0	0	0	0	0	0	0	0	0	0	**15**
7:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
8:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
9:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**30**	**374**	**34**	**1**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**447**
	6.7%	**83.7%**	**7.6%**	**0.2%**	**0.7%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
6:00 AM	1	3	0	0	0	1	0	0	0	0	0	0	0	**5**
7:00 AM	1	15	3	0	1	1	0	0	0	0	0	0	0	**21**
8:00 AM	3	105	12	2	0	1	0	0	0	0	0	0	0	**123**
9:00 AM	1	15	2	1	0	1	0	0	0	0	0	0	0	**20**
10:00 AM	1	31	4	0	0	0	0	0	0	0	0	0	0	**36**
11:00 AM	5	29	4	0	0	0	0	0	0	0	0	0	0	**38**
12:00 PM	2	22	3	0	1	0	0	0	0	0	0	0	0	**28**
1:00 PM	3	17	2	0	0	0	0	0	0	0	0	0	0	**22**
2:00 PM	1	38	7	0	0	1	0	0	0	0	0	0	0	**47**
3:00 PM	2	57	4	1	0	0	0	0	0	0	0	0	0	**64**
4:00 PM	2	32	4	0	0	0	0	0	0	0	0	0	0	**38**
5:00 PM	1	27	1	0	0	0	0	0	0	0	0	0	0	**29**
6:00 PM	1	22	2	0	0	0	0	0	0	0	0	0	0	**25**
7:00 PM	1	15	1	0	0	0	0	0	0	0	0	0	0	**17**
8:00 PM	1	6	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**26**	**445**	**50**	**4**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**533**
	4.9%	**83.5%**	**9.4%**	**0.8%**	**0.4%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary

Location: School St, Between Hazelwood Pl and Saklan School North Driveway

Direction: Northbound / Southbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 01

Direction	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
Northbound	45	146	241	281	135	15	1	0	0	0	0	0	0	0	0	0	0	**864**
	5.2%	16.9%	27.9%	32.5%	15.6%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Southbound	68	228	273	309	125	19	1	0	0	0	0	0	0	0	0	0	0	**1,023**
	6.6%	22.3%	26.7%	30.2%	12.2%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	113	374	514	590	260	34	2	0	0	0	0	0	0	0	0	0	0	**1,887**
	6.0%	19.8%	27.2%	31.3%	13.8%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	20.0	mph	Mean (Average) Speed	19.5	mph
85th Percentile	25.6	mph	10 mph Pace	15.2 - 25.2	mph
95th Percentile	27.8	mph	Percent in Pace	60.8	%
Southbound			**Southbound**		
50th Percentile (Median)	19.0	mph	Mean (Average) Speed	18.7	mph
85th Percentile	24.8	mph	10 mph Pace	15.1 - 25.1	mph
95th Percentile	27.8	mph	Percent in Pace	56.7	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Tuesday, April 7, 2026
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	4	0	2	6	5	0	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 AM	9	14	31	19	5	0	0	0	0	0	0	0	0	0	0	0	0	**78**
9:00 AM	0	9	5	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**24**
10:00 AM	0	1	7	11	6	0	0	0	0	0	0	0	0	0	0	0	0	**25**
11:00 AM	0	5	7	12	5	0	0	0	0	0	0	0	0	0	0	0	0	**29**
12:00 PM	0	0	7	8	6	0	0	0	0	0	0	0	0	0	0	0	0	**21**
1:00 PM	0	1	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	**15**
2:00 PM	5	18	19	21	4	1	0	0	0	0	0	0	0	0	0	0	0	**68**
3:00 PM	6	13	21	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**54**
4:00 PM	1	0	1	10	8	1	0	0	0	0	0	0	0	0	0	0	0	**21**
5:00 PM	0	1	1	13	4	1	0	0	0	0	0	0	0	0	0	0	0	**20**
6:00 PM	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	1	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	**9**
8:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
9:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
10:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**25**	**63**	**104**	**143**	**64**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**405**
	6.2%	**15.6%**	**25.7%**	**35.3%**	**15.8%**	**1.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.5	mph	Mean (Average) Speed	19.6	mph
85th Percentile	25.5	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	28.0	mph	Percent in Pace	62.5	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Tuesday, April 7, 2026
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
7:00 AM	1	6	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 AM	15	35	32	24	3	0	0	0	0	0	0	0	0	0	0	0	0	**109**
9:00 AM	1	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
10:00 AM	2	2	5	10	2	0	0	0	0	0	0	0	0	0	0	0	0	**21**
11:00 AM	0	4	3	8	5	0	0	0	0	0	0	0	0	0	0	0	0	**20**
12:00 PM	0	2	7	12	5	0	0	0	0	0	0	0	0	0	0	0	0	**26**
1:00 PM	0	3	5	6	7	1	0	0	0	0	0	0	0	0	0	0	0	**22**
2:00 PM	1	7	17	21	6	0	0	0	0	0	0	0	0	0	0	0	0	**52**
3:00 PM	11	17	12	14	2	0	0	0	0	0	0	0	0	0	0	0	0	**56**
4:00 PM	1	5	9	14	9	1	0	0	0	0	0	0	0	0	0	0	0	**39**
5:00 PM	0	1	7	14	10	0	0	0	0	0	0	0	0	0	0	0	0	**32**
6:00 PM	2	1	1	11	4	1	0	0	0	0	0	0	0	0	0	0	0	**20**
7:00 PM	0	1	1	7	3	1	0	0	0	0	0	0	0	0	0	0	0	**13**
8:00 PM	0	1	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**34**	**87**	**112**	**150**	**65**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**453**
	7.5%	**19.2%**	**24.7%**	**33.1%**	**14.3%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19	mph
85th Percentile	25.1	mph	10 mph Pace	15.9 - 25.9	mph
95th Percentile	27.8	mph	Percent in Pace	59.16	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Wednesday, April 8, 2026
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	1	0	1	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	1	14	25	29	6	0	0	0	0	0	0	0	0	0	0	0	0	**75**
9:00 AM	0	3	7	10	5	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	2	1	3	10	1	1	0	0	0	0	0	0	0	0	0	0	0	**18**
11:00 AM	3	8	7	5	3	0	0	0	0	0	0	0	0	0	0	0	0	**26**
12:00 PM	1	2	4	9	7	0	0	0	0	0	0	0	0	0	0	0	0	**23**
1:00 PM	0	12	35	17	2	0	0	0	0	0	0	0	0	0	0	0	0	**66**
2:00 PM	1	4	6	4	4	0	0	0	0	0	0	0	0	0	0	0	0	**19**
3:00 PM	10	36	36	9	4	0	0	0	0	0	0	0	0	0	0	0	0	**95**
4:00 PM	0	2	6	8	10	2	0	0	0	0	0	0	0	0	0	0	0	**28**
5:00 PM	1	0	4	12	8	1	1	0	0	0	0	0	0	0	0	0	0	**27**
6:00 PM	0	1	2	7	6	3	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 PM	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**6**
8:00 PM	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	**4**
9:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**20**	**83**	**137**	**138**	**71**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**459**
	4.4%	**18.1%**	**29.8%**	**30.1%**	**15.5%**	**2.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.5	mph
85th Percentile	25.7	mph	10 mph Pace	13.4 - 23.4	mph
95th Percentile	27.7	mph	Percent in Pace	60.1	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Wednesday, April 8, 2026
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	2	6	7	4	1	1	0	0	0	0	0	0	0	0	0	0	0	**21**
8:00 AM	11	55	45	15	2	4	0	0	0	0	0	0	0	0	0	0	0	**132**
9:00 AM	0	2	12	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	0	9	12	25	3	0	0	0	0	0	0	0	0	0	0	0	0	**49**
11:00 AM	6	11	15	16	7	0	0	0	0	0	0	0	0	0	0	0	0	**55**
12:00 PM	5	3	5	12	2	1	0	0	0	0	0	0	0	0	0	0	0	**28**
1:00 PM	0	6	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
2:00 PM	0	7	14	14	4	1	0	0	0	0	0	0	0	0	0	0	0	**40**
3:00 PM	8	29	19	9	4	0	0	0	0	0	0	0	0	0	0	0	0	**69**
4:00 PM	0	10	13	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**36**
5:00 PM	2	0	5	14	3	0	0	0	0	0	0	0	0	0	0	0	0	**24**
6:00 PM	0	0	3	9	12	2	1	0	0	0	0	0	0	0	0	0	0	**27**
7:00 PM	0	1	1	6	10	0	0	0	0	0	0	0	0	0	0	0	0	**18**
8:00 PM	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	0	0	5	1	2	0	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**34**	**141**	**161**	**159**	**60**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**570**
	6.0%	**24.7%**	**28.2%**	**27.9%**	**10.5%**	**2.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.4	mph
85th Percentile	24.5	mph	10 mph Pace	11.9 - 21.9	mph
95th Percentile	27.9	mph	Percent in Pace	59.47	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	3	0	2	9	4	0	0	0	0	0	0	0	0	0	0	0	0	**18**
8:00 AM	5	14	28	24	6	0	0	0	0	0	0	0	0	0	0	0	0	**77**
9:00 AM	0	6	6	10	3	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	1	1	5	11	4	1	0	0	0	0	0	0	0	0	0	0	0	**23**
11:00 AM	2	7	7	9	4	0	0	0	0	0	0	0	0	0	0	0	0	**29**
12:00 PM	1	1	6	9	7	0	0	0	0	0	0	0	0	0	0	0	0	**24**
1:00 PM	0	7	19	13	3	0	0	0	0	0	0	0	0	0	0	0	0	**42**
2:00 PM	3	11	13	13	4	1	0	0	0	0	0	0	0	0	0	0	0	**45**
3:00 PM	8	25	29	11	3	0	0	0	0	0	0	0	0	0	0	0	0	**76**
4:00 PM	1	1	4	9	9	2	0	0	0	0	0	0	0	0	0	0	0	**26**
5:00 PM	1	1	3	13	6	1	1	0	0	0	0	0	0	0	0	0	0	**26**
6:00 PM	0	1	1	7	5	2	0	0	0	0	0	0	0	0	0	0	0	**16**
7:00 PM	0	1	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	**9**
8:00 PM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
9:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**25**	**76**	**125**	**148**	**72**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**457**
	5.5%	**16.6%**	**27.4%**	**32.4%**	**15.8%**	**2.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	20.0	mph	Mean (Average) Speed	19.5	mph
85th Percentile	25.6	mph	10 mph Pace	15.2 - 25.2	mph
95th Percentile	27.8	mph	Percent in Pace	60.8	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 to 4/8/2026
Site Code: 01

idax DATA SOLUTIONS

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	2	6	7	3	1	1	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	13	45	39	20	3	2	0	0	0	0	0	0	0	0	0	0	0	**122**
9:00 AM	1	2	9	6	2	0	0	0	0	0	0	0	0	0	0	0	0	**20**
10:00 AM	1	6	9	18	3	0	0	0	0	0	0	0	0	0	0	0	0	**37**
11:00 AM	3	8	9	12	6	0	0	0	0	0	0	0	0	0	0	0	0	**38**
12:00 PM	3	3	6	12	4	1	0	0	0	0	0	0	0	0	0	0	0	**29**
1:00 PM	0	5	7	7	4	1	0	0	0	0	0	0	0	0	0	0	0	**24**
2:00 PM	1	7	16	18	5	1	0	0	0	0	0	0	0	0	0	0	0	**48**
3:00 PM	10	23	16	12	3	0	0	0	0	0	0	0	0	0	0	0	0	**64**
4:00 PM	1	8	11	13	6	1	0	0	0	0	0	0	0	0	0	0	0	**40**
5:00 PM	1	1	6	14	7	0	0	0	0	0	0	0	0	0	0	0	0	**29**
6:00 PM	1	1	2	10	8	2	1	0	0	0	0	0	0	0	0	0	0	**25**
7:00 PM	0	1	1	7	7	1	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 PM	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**7**
10:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**37**	**119**	**140**	**160**	**68**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**539**
	6.9%	**22.1%**	**26.0%**	**29.7%**	**12.6%**	**2.6%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	19.0	mph	Mean (Average) Speed	18.7	mph
85th Percentile	24.8	mph	10 mph Pace	15.1 - 25.1	mph
95th Percentile	27.8	mph	Percent in Pace	56.7	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Hazelwood Pl and Saklan School North Driveway
Date Range: 4/7/2026 - 4/13/2026
Site Code: 01

Time	Tuesday 4/7/2026			Wednesday 4/8/2026			Thursday 4/9/2026			Friday 4/10/2026			Saturday 4/11/2026			Sunday 4/12/2026			Monday 4/13/2026			Mid-Week Average		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	1	1	2	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
1:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
2:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
3:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
4:00 AM	2	0	2	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
5:00 AM	3	1	4	3	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	5
6:00 AM	6	2	8	4	5	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	4	9
7:00 AM	17	17	34	16	21	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	19	36
8:00 AM	**78**	**109**	**187**	**75**	**132**	**207**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**77**	**121**	**197**
9:00 AM	24	11	35	25	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	18	43
10:00 AM	25	21	46	18	49	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	35	57
11:00 AM	29	20	49	26	55	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	38	65
12:00 PM	21	26	47	23	28	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	27	49
1:00 PM	15	22	37	66	21	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	22	62
2:00 PM	**68**	52	**120**	19	40	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	46	90
3:00 PM	54	**56**	110	**95**	**69**	**164**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**75**	**63**	**137**
4:00 PM	21	39	60	28	36	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	38	62
5:00 PM	20	32	52	27	24	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	28	52
6:00 PM	9	20	29	19	27	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	24	38
7:00 PM	9	13	22	6	18	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	16	23
8:00 PM	1	7	8	4	6	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	7	9
9:00 PM	1	4	5	2	8	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	8
10:00 PM	1	0	1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3
11:00 PM	0	0	0	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
Total	**405**	**453**	**858**	**459**	**570**	**1,029**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**432**	**512**	**944**
Percent	**47%**	**53%**		**45%**	**55%**		-	-		-	-		-	-		-	-		-	-		**46%**	**54%**	
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	08:00	08:00
Vol.	78	109	187	75	132	207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	121	197
PM Peak	14:00	15:00	14:00	15:00	15:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	15:00	15:00
Vol.	68	56	120	95	69	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	63	137

1. Mid-week average includes data between Tuesday and Thursday.

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Vehicle Classification Report Summary

Location: School St, Between Saklan School North Driveway and Country Club Dr

Count Direction: Northbound / Southbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 02

Direction	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Northbound	47	1,099	69	1	9	13	0	0	0	0	0	0	1	1,239
	3.8%	88.7%	5.6%	0.1%	0.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	
Southbound	59	1,085	91	5	16	15	0	0	0	0	0	0	1	1,272
	4.6%	85.3%	7.2%	0.4%	1.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	
Total	106	2,184	160	6	25	28	0	0	0	0	0	0	2	2,511
	4.2%	87.0%	6.4%	0.2%	1.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Tuesday, April 7, 2026
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
6:00 AM	0	5	0	0	0	2	0	0	0	0	0	0	0	7
7:00 AM	0	14	3	0	1	0	0	0	0	0	0	0	0	18
8:00 AM	1	116	4	0	0	0	0	0	0	0	0	0	0	121
9:00 AM	7	22	4	0	0	0	0	0	0	0	0	0	1	34
10:00 AM	0	28	3	0	1	1	0	0	0	0	0	0	0	33
11:00 AM	2	32	8	0	1	0	0	0	0	0	0	0	0	43
12:00 PM	1	25	5	0	0	0	0	0	0	0	0	0	0	31
1:00 PM	1	13	1	0	1	0	0	0	0	0	0	0	0	16
2:00 PM	5	64	3	0	0	1	0	0	0	0	0	0	0	73
3:00 PM	2	79	2	0	0	1	0	0	0	0	0	0	0	84
4:00 PM	0	45	3	0	0	0	0	0	0	0	0	0	0	48
5:00 PM	0	31	2	0	0	0	0	0	0	0	0	0	0	33
6:00 PM	0	15	2	0	0	0	0	0	0	0	0	0	0	17
7:00 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	12
8:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
9:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	**19**	**510**	**42**	**0**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**581**
	3.3%	**87.8%**	**7.2%**	**0.0%**	**0.7%**	**0.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Tuesday, April 7, 2026
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	0	13	1	0	0	0	0	0	0	0	0	0	0	14
7:00 AM	2	33	4	0	2	0	0	0	0	0	0	0	0	41
8:00 AM	5	122	5	1	0	0	0	0	0	0	0	0	1	134
9:00 AM	1	16	4	0	0	1	0	0	0	0	0	0	0	22
10:00 AM	0	20	3	1	1	2	0	0	0	0	0	0	0	27
11:00 AM	3	29	4	0	1	1	0	0	0	0	0	0	0	38
12:00 PM	1	26	4	0	1	1	0	0	0	0	0	0	0	33
1:00 PM	3	19	3	0	1	0	0	0	0	0	0	0	0	26
2:00 PM	2	57	12	0	2	0	0	0	0	0	0	0	0	73
3:00 PM	4	60	3	0	1	0	0	0	0	0	0	0	0	68
4:00 PM	3	37	2	0	0	0	0	0	0	0	0	0	0	42
5:00 PM	1	30	2	0	0	0	0	0	0	0	0	0	0	33
6:00 PM	1	19	2	0	0	0	0	0	0	0	0	0	0	22
7:00 PM	0	13	1	0	0	0	0	0	0	0	0	0	0	14
8:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
9:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	**26**	**510**	**50**	**2**	**9**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**603**
	4.3%	**84.6%**	**8.3%**	**0.3%**	**1.5%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Wednesday, April 8, 2026
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	**4**
6:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	14	2	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	1	127	4	0	2	2	0	0	0	0	0	0	0	**136**
9:00 AM	1	24	2	0	0	3	0	0	0	0	0	0	0	**30**
10:00 AM	1	23	1	1	1	0	0	0	0	0	0	0	0	**27**
11:00 AM	12	21	2	0	0	0	0	0	0	0	0	0	0	**35**
12:00 PM	2	31	2	0	0	0	0	0	0	0	0	0	0	**35**
1:00 PM	0	72	2	0	1	0	0	0	0	0	0	0	0	**75**
2:00 PM	0	31	0	0	0	0	0	0	0	0	0	0	0	**31**
3:00 PM	5	115	3	0	0	1	0	0	0	0	0	0	0	**124**
4:00 PM	5	43	3	0	0	1	0	0	0	0	0	0	0	**52**
5:00 PM	1	34	5	0	0	0	0	0	0	0	0	0	0	**40**
6:00 PM	0	21	0	0	0	0	0	0	0	0	0	0	0	**21**
7:00 PM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
8:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**28**	**589**	**27**	**1**	**5**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**658**
	4.3%	**89.5%**	**4.1%**	**0.2%**	**0.8%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Wednesday, April 8, 2026
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	**5**
6:00 AM	1	6	2	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	2	30	1	0	2	1	0	0	0	0	0	0	0	**36**
8:00 AM	3	125	5	2	1	3	0	0	0	0	0	0	0	**139**
9:00 AM	0	33	1	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	1	39	7	0	0	0	0	0	0	0	0	0	0	**47**
11:00 AM	9	51	5	0	0	0	0	0	0	0	0	0	0	**65**
12:00 PM	3	22	4	0	0	0	0	0	0	0	0	0	0	**29**
1:00 PM	4	23	2	0	2	1	0	0	0	0	0	0	0	**32**
2:00 PM	1	50	2	1	0	1	0	0	0	0	0	0	0	**55**
3:00 PM	3	72	5	0	1	1	0	0	0	0	0	0	0	**82**
4:00 PM	2	32	4	0	1	0	0	0	0	0	0	0	0	**39**
5:00 PM	0	28	1	0	0	0	0	0	0	0	0	0	0	**29**
6:00 PM	2	25	1	0	0	1	0	0	0	0	0	0	0	**29**
7:00 PM	2	17	0	0	0	0	0	0	0	0	0	0	0	**19**
8:00 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**33**	**575**	**41**	**3**	**7**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**669**
	4.9%	**85.9%**	**6.1%**	**0.4%**	**1.0%**	**1.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	**4**
6:00 AM	0	5	0	0	1	1	0	0	0	0	0	0	0	**7**
7:00 AM	0	14	3	0	1	0	0	0	0	0	0	0	0	**18**
8:00 AM	1	122	4	0	1	1	0	0	0	0	0	0	0	**129**
9:00 AM	4	23	3	0	0	2	0	0	0	0	0	0	1	**33**
10:00 AM	1	26	2	1	1	1	0	0	0	0	0	0	0	**32**
11:00 AM	7	27	5	0	1	0	0	0	0	0	0	0	0	**40**
12:00 PM	2	28	4	0	0	0	0	0	0	0	0	0	0	**34**
1:00 PM	1	43	2	0	1	0	0	0	0	0	0	0	0	**47**
2:00 PM	3	48	2	0	0	1	0	0	0	0	0	0	0	**54**
3:00 PM	4	97	3	0	0	1	0	0	0	0	0	0	0	**105**
4:00 PM	3	44	3	0	0	1	0	0	0	0	0	0	0	**51**
5:00 PM	1	33	4	0	0	0	0	0	0	0	0	0	0	**38**
6:00 PM	0	18	1	0	0	0	0	0	0	0	0	0	0	**19**
7:00 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
8:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
9:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**27**	**555**	**38**	**1**	**6**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**637**
	4.2%	**87.1%**	**6.0%**	**0.2%**	**0.9%**	**1.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	

Note: Average only condsidered on days with 24-hours of data.

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	**3**
6:00 AM	1	10	2	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	2	32	3	0	2	1	0	0	0	0	0	0	0	**40**
8:00 AM	4	124	5	2	1	2	0	0	0	0	0	0	1	**139**
9:00 AM	1	25	3	0	0	1	0	0	0	0	0	0	0	**30**
10:00 AM	1	30	5	1	1	1	0	0	0	0	0	0	0	**39**
11:00 AM	6	40	5	0	1	1	0	0	0	0	0	0	0	**53**
12:00 PM	2	24	4	0	1	1	0	0	0	0	0	0	0	**32**
1:00 PM	4	21	3	0	2	1	0	0	0	0	0	0	0	**31**
2:00 PM	2	54	7	1	1	1	0	0	0	0	0	0	0	**66**
3:00 PM	4	66	4	0	1	1	0	0	0	0	0	0	0	**76**
4:00 PM	3	35	3	0	1	0	0	0	0	0	0	0	0	**42**
5:00 PM	1	29	2	0	0	0	0	0	0	0	0	0	0	**32**
6:00 PM	2	22	2	0	0	1	0	0	0	0	0	0	0	**27**
7:00 PM	1	15	1	0	0	0	0	0	0	0	0	0	0	**17**
8:00 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**34**	**548**	**50**	**4**	**11**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**660**
	5.2%	**83.0%**	**7.6%**	**0.6%**	**1.7%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary

Location: School St, Between Saklan School North Driveway and Country Club Dr

Direction: Northbound / Southbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 02

Direction	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
Northbound	17	134	346	489	220	33	0	0	0	0	0	0	0	0	0	0	0	1,239
	1.4%	10.8%	27.9%	39.5%	17.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Southbound	23	133	365	460	251	36	4	0	0	0	0	0	0	0	0	0	0	1,272
	1.8%	10.5%	28.7%	36.2%	19.7%	2.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	40	267	711	949	471	69	4	0	0	0	0	0	0	0	0	0	0	2,511
	1.6%	10.6%	28.3%	37.8%	18.8%	2.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	21.0	mph	Mean (Average) Speed	21.0	mph
85th Percentile	25.7	mph	10 mph Pace	16.3 - 26.3	mph
95th Percentile	29.1	mph	Percent in Pace	71.1	%
Southbound			**Southbound**		
50th Percentile (Median)	21.3	mph	Mean (Average) Speed	21.1	mph
85th Percentile	26.5	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	29.1	mph	Percent in Pace	65.8	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Tuesday, April 7, 2026
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	3	6	4	5	0	0	0	0	0	0	0	0	0	0	0	0	**18**
8:00 AM	0	6	43	58	14	0	0	0	0	0	0	0	0	0	0	0	0	**121**
9:00 AM	3	9	7	7	7	1	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	2	2	10	11	7	1	0	0	0	0	0	0	0	0	0	0	0	**33**
11:00 AM	1	13	9	13	7	0	0	0	0	0	0	0	0	0	0	0	0	**43**
12:00 PM	3	5	4	8	11	0	0	0	0	0	0	0	0	0	0	0	0	**31**
1:00 PM	0	4	1	6	5	0	0	0	0	0	0	0	0	0	0	0	0	**16**
2:00 PM	0	10	30	19	13	1	0	0	0	0	0	0	0	0	0	0	0	**73**
3:00 PM	1	11	30	33	8	1	0	0	0	0	0	0	0	0	0	0	0	**84**
4:00 PM	0	2	15	15	12	4	0	0	0	0	0	0	0	0	0	0	0	**48**
5:00 PM	0	2	6	16	9	0	0	0	0	0	0	0	0	0	0	0	0	**33**
6:00 PM	0	2	5	7	3	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 PM	0	3	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	**12**
8:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
9:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**10**	**73**	**169**	**206**	**111**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**581**
	1.7%	**12.6%**	**29.1%**	**35.5%**	**19.1%**	**2.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.7	mph	Mean (Average) Speed	20.7	mph
85th Percentile	25.7	mph	10 mph Pace	16.4 - 26.4	mph
95th Percentile	28.6	mph	Percent in Pace	69.9	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Tuesday, April 7, 2026
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	2	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	1	2	22	14	1	1	0	0	0	0	0	0	0	0	0	0	0	**41**
8:00 AM	5	30	40	48	11	0	0	0	0	0	0	0	0	0	0	0	0	**134**
9:00 AM	0	6	5	4	7	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 AM	0	3	11	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**27**
11:00 AM	0	7	13	11	5	2	0	0	0	0	0	0	0	0	0	0	0	**38**
12:00 PM	0	4	12	10	6	1	0	0	0	0	0	0	0	0	0	0	0	**33**
1:00 PM	0	3	7	8	6	2	0	0	0	0	0	0	0	0	0	0	0	**26**
2:00 PM	3	4	22	23	16	2	3	0	0	0	0	0	0	0	0	0	0	**73**
3:00 PM	3	4	22	23	16	0	0	0	0	0	0	0	0	0	0	0	0	**68**
4:00 PM	2	4	10	12	13	1	0	0	0	0	0	0	0	0	0	0	0	**42**
5:00 PM	0	3	1	13	16	0	0	0	0	0	0	0	0	0	0	0	0	**33**
6:00 PM	0	2	2	12	5	1	0	0	0	0	0	0	0	0	0	0	0	**22**
7:00 PM	0	2	3	5	3	1	0	0	0	0	0	0	0	0	0	0	0	**14**
8:00 PM	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**14**	**76**	**184**	**198**	**115**	**13**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**603**
	2.3%	**12.6%**	**30.5%**	**32.8%**	**19.1%**	**2.2%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.7	mph	Mean (Average) Speed	20.7	mph
85th Percentile	26.2	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	29.0	mph	Percent in Pace	64.01	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Wednesday, April 8, 2026
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	3	2	4	5	2	0	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	3	9	38	64	19	3	0	0	0	0	0	0	0	0	0	0	0	**136**
9:00 AM	0	4	3	16	6	1	0	0	0	0	0	0	0	0	0	0	0	**30**
10:00 AM	2	4	4	11	4	2	0	0	0	0	0	0	0	0	0	0	0	**27**
11:00 AM	0	12	9	10	4	0	0	0	0	0	0	0	0	0	0	0	0	**35**
12:00 PM	2	3	10	11	8	1	0	0	0	0	0	0	0	0	0	0	0	**35**
1:00 PM	0	6	26	35	8	0	0	0	0	0	0	0	0	0	0	0	0	**75**
2:00 PM	0	1	11	11	6	2	0	0	0	0	0	0	0	0	0	0	0	**31**
3:00 PM	0	13	41	62	7	1	0	0	0	0	0	0	0	0	0	0	0	**124**
4:00 PM	0	3	14	25	7	3	0	0	0	0	0	0	0	0	0	0	0	**52**
5:00 PM	0	0	7	16	16	1	0	0	0	0	0	0	0	0	0	0	0	**40**
6:00 PM	0	0	1	9	9	2	0	0	0	0	0	0	0	0	0	0	0	**21**
7:00 PM	0	2	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	**10**
8:00 PM	0	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**7**	**61**	**177**	**283**	**109**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**658**
	1.1%	**9.3%**	**26.9%**	**43.0%**	**16.6%**	**3.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.6	mph	Mean (Average) Speed	21.2	mph
85th Percentile	25.6	mph	10 mph Pace	16.3 - 26.3	mph
95th Percentile	29.3	mph	Percent in Pace	72.6	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

Wednesday, April 8, 2026
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	1	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	4	12	16	3	1	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 AM	1	9	41	71	16	1	0	0	0	0	0	0	0	0	0	0	0	**139**
9:00 AM	1	3	9	12	9	0	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	0	3	8	20	13	3	0	0	0	0	0	0	0	0	0	0	0	**47**
11:00 AM	3	8	13	19	19	3	0	0	0	0	0	0	0	0	0	0	0	**65**
12:00 PM	2	4	6	8	8	1	0	0	0	0	0	0	0	0	0	0	0	**29**
1:00 PM	0	3	13	15	1	0	0	0	0	0	0	0	0	0	0	0	0	**32**
2:00 PM	1	4	19	18	12	1	0	0	0	0	0	0	0	0	0	0	0	**55**
3:00 PM	1	11	26	32	12	0	0	0	0	0	0	0	0	0	0	0	0	**82**
4:00 PM	0	4	10	16	7	2	0	0	0	0	0	0	0	0	0	0	0	**39**
5:00 PM	0	1	6	11	9	2	0	0	0	0	0	0	0	0	0	0	0	**29**
6:00 PM	0	1	4	7	15	2	0	0	0	0	0	0	0	0	0	0	0	**29**
7:00 PM	0	0	4	8	6	1	0	0	0	0	0	0	0	0	0	0	0	**19**
8:00 PM	0	1	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	0	1	3	1	3	0	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**9**	**57**	**181**	**262**	**136**	**23**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**669**
	1.3%	**8.5%**	**27.1%**	**39.2%**	**20.3%**	**3.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.5	mph	Mean (Average) Speed	21.4	mph
85th Percentile	26.7	mph	10 mph Pace	17.4 - 27.4	mph
95th Percentile	29.5	mph	Percent in Pace	68.31	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

idax DATA SOLUTIONS

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	3	4	4	5	1	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 AM	2	8	41	61	17	2	0	0	0	0	0	0	0	0	0	0	0	**131**
9:00 AM	2	7	5	12	7	1	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	2	3	7	11	6	2	0	0	0	0	0	0	0	0	0	0	0	**31**
11:00 AM	1	13	9	12	6	0	0	0	0	0	0	0	0	0	0	0	0	**41**
12:00 PM	3	4	7	10	10	1	0	0	0	0	0	0	0	0	0	0	0	**35**
1:00 PM	0	5	14	21	7	0	0	0	0	0	0	0	0	0	0	0	0	**47**
2:00 PM	0	6	21	15	10	2	0	0	0	0	0	0	0	0	0	0	0	**54**
3:00 PM	1	12	36	48	8	1	0	0	0	0	0	0	0	0	0	0	0	**106**
4:00 PM	0	3	15	20	10	4	0	0	0	0	0	0	0	0	0	0	0	**52**
5:00 PM	0	1	7	16	13	1	0	0	0	0	0	0	0	0	0	0	0	**38**
6:00 PM	0	1	3	8	6	1	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 PM	0	3	1	4	4	1	0	0	0	0	0	0	0	0	0	0	0	**13**
8:00 PM	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**4**
9:00 PM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**11**	**71**	**177**	**250**	**116**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**646**
	1.7%	**11.0%**	**27.4%**	**38.7%**	**18.0%**	**3.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	21.0	mph	Mean (Average) Speed	21.0	mph
85th Percentile	25.7	mph	10 mph Pace	16.3 - 26.3	mph
95th Percentile	29.1	mph	Percent in Pace	71.1	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 to 4/8/2026
Site Code: 02

idax DATA SOLUTIONS

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	2	8	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	1	3	17	15	2	1	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	3	20	41	60	14	1	0	0	0	0	0	0	0	0	0	0	0	**139**
9:00 AM	1	5	7	8	8	0	0	0	0	0	0	0	0	0	0	0	0	**29**
10:00 AM	0	3	10	16	8	2	0	0	0	0	0	0	0	0	0	0	0	**39**
11:00 AM	2	8	13	15	12	3	0	0	0	0	0	0	0	0	0	0	0	**53**
12:00 PM	1	4	9	9	7	1	0	0	0	0	0	0	0	0	0	0	0	**31**
1:00 PM	0	3	10	12	4	1	0	0	0	0	0	0	0	0	0	0	0	**30**
2:00 PM	2	4	21	21	14	2	2	0	0	0	0	0	0	0	0	0	0	**66**
3:00 PM	2	8	24	28	14	0	0	0	0	0	0	0	0	0	0	0	0	**76**
4:00 PM	1	4	10	14	10	2	0	0	0	0	0	0	0	0	0	0	0	**41**
5:00 PM	0	2	4	12	13	1	0	0	0	0	0	0	0	0	0	0	0	**32**
6:00 PM	0	2	3	10	10	2	0	0	0	0	0	0	0	0	0	0	0	**27**
7:00 PM	0	1	4	7	5	1	0	0	0	0	0	0	0	0	0	0	0	**18**
8:00 PM	0	1	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 PM	0	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**13**	**70**	**187**	**236**	**130**	**23**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**662**
	2.0%	**10.6%**	**28.2%**	**35.6%**	**19.6%**	**3.5%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	21.3	mph	Mean (Average) Speed	21.1	mph
85th Percentile	26.5	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	29.1	mph	Percent in Pace	65.8	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: School St, Between Saklan School North Driveway and Country Club Dr
Date Range: 4/7/2026 - 4/13/2026
Site Code: 02

Time	Tuesday 4/7/2026			Wednesday 4/8/2026			Thursday 4/9/2026			Friday 4/10/2026			Saturday 4/11/2026			Sunday 4/12/2026			Monday 4/13/2026			Mid-Week Average		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	1	1	2	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	2
1:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
2:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
3:00 AM	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
4:00 AM	2	0	2	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
5:00 AM	2	1	3	4	5	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	6
6:00 AM	7	14	21	6	9	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	12	18
7:00 AM	18	41	59	16	36	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	39	56
8:00 AM	**121**	**134**	**255**	**136**	**139**	**275**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**129**	**137**	**265**
9:00 AM	34	22	56	30	34	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	28	60
10:00 AM	33	27	60	27	47	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	37	67
11:00 AM	43	38	81	35	65	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	52	91
12:00 PM	31	33	64	35	29	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	31	64
1:00 PM	16	26	42	75	32	107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	29	75
2:00 PM	73	**73**	146	31	55	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	64	116
3:00 PM	**84**	68	**152**	**124**	**82**	**206**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**104**	**75**	**179**
4:00 PM	48	42	90	52	39	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	41	91
5:00 PM	33	33	66	40	29	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	31	68
6:00 PM	17	22	39	21	29	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	26	45
7:00 PM	12	14	26	10	19	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	17	28
8:00 PM	1	6	7	6	7	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	7	10
9:00 PM	2	6	8	4	8	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	7	10
10:00 PM	2	1	3	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4
11:00 PM	1	1	2	2	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3
Total	**581**	**603**	**1,184**	**658**	**669**	**1,327**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**620**	**636**	**1,256**
Percent	**49%**	**51%**		**50%**	**50%**		-	-		-	-		-	-		-	-		-	-		**49%**	**51%**	
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	08:00	08:00
Vol.	121	134	255	136	139	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129	137	265
PM Peak	15:00	14:00	15:00	15:00	15:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	15:00	15:00
Vol.	84	73	152	124	82	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	75	179

1. Mid-week average includes data between Tuesday and Thursday.

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Vehicle Classification Report Summary

Location: Country Club Dr, Between School St and Moraga Creek

Count Direction: Eastbound / Westbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 03

Direction	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Eastbound	56	1,771	370	2	22	2	0	0	0	0	0	0	0	2,223
	2.5%	79.7%	16.6%	0.1%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Westbound	42	2,285	305	2	23	1	0	0	0	1	0	0	0	2,659
	1.6%	85.9%	11.5%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	98	4,056	675	4	45	3	0	0	0	1	0	0	0	4,882
	2.0%	83.1%	13.8%	0.1%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

DATA SOLUTIONS

Tuesday, April 7, 2026
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
6:00 AM	0	21	2	0	0	0	0	0	0	0	0	0	0	23
7:00 AM	2	33	13	0	1	0	0	0	0	0	0	0	0	49
8:00 AM	2	108	32	0	3	0	0	0	0	0	0	0	0	145
9:00 AM	4	42	8	0	0	0	0	0	0	0	0	0	0	54
10:00 AM	0	41	6	0	0	0	0	0	0	0	0	0	0	47
11:00 AM	3	49	8	0	1	1	0	0	0	0	0	0	0	62
12:00 PM	1	54	10	0	2	0	0	0	0	0	0	0	0	67
1:00 PM	1	43	9	1	0	0	0	0	0	0	0	0	0	54
2:00 PM	2	78	25	0	3	0	0	0	0	0	0	0	0	108
3:00 PM	9	79	12	1	1	0	0	0	0	0	0	0	0	102
4:00 PM	3	68	14	0	2	0	0	0	0	0	0	0	0	87
5:00 PM	3	62	19	0	0	0	0	0	0	0	0	0	0	84
6:00 PM	2	56	13	0	0	0	0	0	0	0	0	0	0	71
7:00 PM	3	33	4	0	1	0	0	0	0	0	0	0	0	41
8:00 PM	0	27	3	0	0	0	0	0	0	0	0	0	0	30
9:00 PM	0	16	6	0	0	0	0	0	0	0	0	0	0	22
10:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	**35**	**822**	**185**	**2**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,059**
	3.3%	**77.6%**	**17.5%**	**0.2%**	**1.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

DATA SOLUTIONS

Tuesday, April 7, 2026
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	1	5	1	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	17	4	0	0	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	58	4	1	1	0	0	0	0	0	0	0	0	**64**
8:00 AM	2	108	28	0	5	0	0	0	0	0	0	0	0	**143**
9:00 AM	1	62	12	0	2	0	0	0	0	0	0	0	0	**77**
10:00 AM	3	52	10	0	0	0	0	0	0	0	0	0	0	**65**
11:00 AM	1	62	11	0	2	0	0	0	0	0	0	0	0	**76**
12:00 PM	0	64	6	0	0	0	0	0	0	0	0	0	0	**70**
1:00 PM	0	77	8	0	1	0	0	0	0	0	0	0	0	**86**
2:00 PM	1	99	14	0	0	0	0	0	0	0	0	0	0	**114**
3:00 PM	2	113	11	0	1	0	0	0	0	0	0	0	0	**127**
4:00 PM	1	102	7	0	0	0	0	0	0	0	0	0	0	**110**
5:00 PM	1	85	12	0	1	0	0	0	0	0	0	0	0	**99**
6:00 PM	2	69	14	0	0	0	0	0	0	0	0	0	0	**85**
7:00 PM	0	56	12	0	0	0	0	0	0	0	0	0	0	**68**
8:00 PM	0	35	4	0	0	0	0	0	0	0	0	0	0	**39**
9:00 PM	0	15	2	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**15**	**1,097**	**162**	**1**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,288**
	1.2%	**85.2%**	**12.6%**	**0.1%**	**1.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

DATA SOLUTIONS

Wednesday, April 8, 2026
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	17	3	0	0	0	0	0	0	0	0	0	0	**20**
7:00 AM	1	45	13	0	1	0	0	0	0	0	0	0	0	**60**
8:00 AM	5	107	35	0	2	0	0	0	0	0	0	0	0	**149**
9:00 AM	0	57	8	0	1	0	0	0	0	0	0	0	0	**66**
10:00 AM	1	41	8	0	1	0	0	0	0	0	0	0	0	**51**
11:00 AM	2	55	12	0	0	0	0	0	0	0	0	0	0	**69**
12:00 PM	1	40	7	0	1	0	0	0	0	0	0	0	0	**49**
1:00 PM	2	50	14	0	0	0	0	0	0	0	0	0	0	**66**
2:00 PM	1	73	16	0	0	1	0	0	0	0	0	0	0	**91**
3:00 PM	3	109	23	0	1	0	0	0	0	0	0	0	0	**136**
4:00 PM	1	96	12	0	0	0	0	0	0	0	0	0	0	**109**
5:00 PM	0	98	14	0	1	0	0	0	0	0	0	0	0	**113**
6:00 PM	3	56	6	0	0	0	0	0	0	0	0	0	0	**65**
7:00 PM	1	51	8	0	0	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	31	3	0	0	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**21**	**949**	**185**	**0**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,164**
	1.8%	**81.5%**	**15.9%**	**0.0%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

DATA SOLUTIONS

Wednesday, April 8, 2026
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	24	3	0	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	58	12	1	2	0	0	0	0	0	0	0	0	**73**
8:00 AM	1	123	25	0	2	0	0	0	0	0	0	0	0	**151**
9:00 AM	0	49	5	0	1	1	0	0	0	0	0	0	0	**56**
10:00 AM	1	48	6	0	2	0	0	0	0	0	0	0	0	**57**
11:00 AM	7	59	10	0	1	0	0	0	0	0	0	0	0	**77**
12:00 PM	7	83	8	0	2	0	0	0	0	0	0	0	0	**100**
1:00 PM	3	83	10	0	0	0	0	0	0	0	0	0	0	**96**
2:00 PM	2	70	5	0	0	0	0	0	0	1	0	0	0	**78**
3:00 PM	3	143	22	0	0	0	0	0	0	0	0	0	0	**168**
4:00 PM	2	118	13	0	0	0	0	0	0	0	0	0	0	**133**
5:00 PM	0	95	11	0	0	0	0	0	0	0	0	0	0	**106**
6:00 PM	1	90	5	0	0	0	0	0	0	0	0	0	0	**96**
7:00 PM	0	65	5	0	0	0	0	0	0	0	0	0	0	**70**
8:00 PM	0	38	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**27**	**1,188**	**143**	**1**	**10**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1,371**
	2.0%	**86.7%**	**10.4%**	**0.1%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
6:00 AM	0	19	3	0	0	0	0	0	0	0	0	0	0	22
7:00 AM	2	39	13	0	1	0	0	0	0	0	0	0	0	55
8:00 AM	4	108	34	0	3	0	0	0	0	0	0	0	0	149
9:00 AM	2	50	8	0	1	0	0	0	0	0	0	0	0	61
10:00 AM	1	41	7	0	1	0	0	0	0	0	0	0	0	50
11:00 AM	3	52	10	0	1	1	0	0	0	0	0	0	0	67
12:00 PM	1	47	9	0	2	0	0	0	0	0	0	0	0	59
1:00 PM	2	47	12	1	0	0	0	0	0	0	0	0	0	62
2:00 PM	2	76	21	0	2	1	0	0	0	0	0	0	0	102
3:00 PM	6	94	18	1	1	0	0	0	0	0	0	0	0	120
4:00 PM	2	82	13	0	1	0	0	0	0	0	0	0	0	98
5:00 PM	2	80	17	0	1	0	0	0	0	0	0	0	0	100
6:00 PM	3	56	10	0	0	0	0	0	0	0	0	0	0	69
7:00 PM	2	42	6	0	1	0	0	0	0	0	0	0	0	51
8:00 PM	0	29	3	0	0	0	0	0	0	0	0	0	0	32
9:00 PM	0	16	5	0	0	0	0	0	0	0	0	0	0	21
10:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	**32**	**890**	**190**	**2**	**15**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,131**
	2.8%	**78.7%**	**16.8%**	**0.2%**	**1.3%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

idax DATA SOLUTIONS

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	1	6	1	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	21	4	0	0	0	0	0	0	0	0	0	0	**25**
7:00 AM	0	58	8	1	2	0	0	0	0	0	0	0	0	**69**
8:00 AM	2	116	27	0	4	0	0	0	0	0	0	0	0	**149**
9:00 AM	1	56	9	0	2	1	0	0	0	0	0	0	0	**69**
10:00 AM	2	50	8	0	1	0	0	0	0	0	0	0	0	**61**
11:00 AM	4	61	11	0	2	0	0	0	0	0	0	0	0	**78**
12:00 PM	4	74	7	0	1	0	0	0	0	0	0	0	0	**86**
1:00 PM	2	80	9	0	1	0	0	0	0	0	0	0	0	**92**
2:00 PM	2	85	10	0	0	0	0	0	0	1	0	0	0	**98**
3:00 PM	3	128	17	0	1	0	0	0	0	0	0	0	0	**149**
4:00 PM	2	110	10	0	0	0	0	0	0	0	0	0	0	**122**
5:00 PM	1	90	12	0	1	0	0	0	0	0	0	0	0	**104**
6:00 PM	2	80	10	0	0	0	0	0	0	0	0	0	0	**92**
7:00 PM	0	61	9	0	0	0	0	0	0	0	0	0	0	**70**
8:00 PM	0	37	2	0	0	0	0	0	0	0	0	0	0	**39**
9:00 PM	0	15	2	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**26**	**1,150**	**159**	**1**	**15**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1,353**
	1.9%	**85.0%**	**11.8%**	**0.1%**	**1.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary

Location: Country Club Dr, Between School St and Moraga Creek

Direction: Eastbound / Westbound

Date Range: 4/7/2026 to 4/8/2026

Site Code: 03

Direction	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
Eastbound	2	18	59	437	1,179	465	57	6	0	0	0	0	0	0	0	0	0	2,223
	0.1%	0.8%	2.7%	19.7%	53.0%	20.9%	2.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Westbound	9	30	35	366	1,332	766	110	8	2	1	0	0	0	0	0	0	0	2,659
	0.3%	1.1%	1.3%	13.8%	50.1%	28.8%	4.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	11	48	94	803	2,511	1,231	167	14	2	1	0	0	0	0	0	0	0	4,882
	0.2%	1.0%	1.9%	16.4%	51.4%	25.2%	3.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Total Study Percentile Speed Summary		
Eastbound		
50th Percentile (Median)	27.6	mph
85th Percentile	31.2	mph
95th Percentile	33.6	mph
Westbound		
50th Percentile (Median)	28.5	mph
85th Percentile	32.2	mph
95th Percentile	34.8	mph

Total Study Speed Statistics		
Eastbound		
Mean (Average) Speed	27.4	mph
10 mph Pace	22.4 - 32.4	mph
Percent in Pace	83.4	%
Westbound		
Mean (Average) Speed	28.4	mph
10 mph Pace	23.6 - 33.6	mph
Percent in Pace	81.7	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Tuesday, April 7, 2026
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	1	4	13	5	0	0	0	0	0	0	0	0	0	0	0	**23**
7:00 AM	0	1	4	7	25	12	0	0	0	0	0	0	0	0	0	0	0	**49**
8:00 AM	0	1	1	31	78	29	4	1	0	0	0	0	0	0	0	0	0	**145**
9:00 AM	0	0	6	13	20	14	0	1	0	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	0	2	16	20	9	0	0	0	0	0	0	0	0	0	0	0	**47**
11:00 AM	0	1	1	18	25	13	4	0	0	0	0	0	0	0	0	0	0	**62**
12:00 PM	0	0	0	13	37	15	2	0	0	0	0	0	0	0	0	0	0	**67**
1:00 PM	0	0	1	7	33	11	2	0	0	0	0	0	0	0	0	0	0	**54**
2:00 PM	0	0	1	20	59	24	4	0	0	0	0	0	0	0	0	0	0	**108**
3:00 PM	0	1	3	31	49	17	1	0	0	0	0	0	0	0	0	0	0	**102**
4:00 PM	0	1	2	14	42	27	1	0	0	0	0	0	0	0	0	0	0	**87**
5:00 PM	0	2	2	16	41	19	4	0	0	0	0	0	0	0	0	0	0	**84**
6:00 PM	0	1	6	11	38	13	2	0	0	0	0	0	0	0	0	0	0	**71**
7:00 PM	0	0	4	11	16	9	1	0	0	0	0	0	0	0	0	0	0	**41**
8:00 PM	1	2	0	3	19	5	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	1	0	0	5	13	1	2	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	0	0	2	2	0	0	1	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**2**	**10**	**35**	**222**	**534**	**226**	**27**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,059**
	0.2%	**0.9%**	**3.3%**	**21.0%**	**50.4%**	**21.3%**	**2.5%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	27.5	mph	Mean (Average) Speed	27.3	mph
85th Percentile	31.1	mph	10 mph Pace	22.4 - 32.4	mph
95th Percentile	33.7	mph	Percent in Pace	82.2	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Tuesday, April 7, 2026
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	0	1	3	9	6	2	0	0	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	0	0	10	31	18	5	0	0	0	0	0	0	0	0	0	0	**64**
8:00 AM	1	0	3	23	70	38	8	0	0	0	0	0	0	0	0	0	0	**143**
9:00 AM	0	0	0	11	33	25	8	0	0	0	0	0	0	0	0	0	0	**77**
10:00 AM	0	3	1	9	31	20	1	0	0	0	0	0	0	0	0	0	0	**65**
11:00 AM	0	2	3	16	35	19	1	0	0	0	0	0	0	0	0	0	0	**76**
12:00 PM	0	0	0	6	39	23	1	1	0	0	0	0	0	0	0	0	0	**70**
1:00 PM	0	0	0	14	42	25	4	1	0	0	0	0	0	0	0	0	0	**86**
2:00 PM	0	0	3	14	64	26	5	1	1	0	0	0	0	0	0	0	0	**114**
3:00 PM	0	1	1	14	72	34	4	1	0	0	0	0	0	0	0	0	0	**127**
4:00 PM	0	0	2	15	60	31	2	0	0	0	0	0	0	0	0	0	0	**110**
5:00 PM	0	0	1	14	51	28	5	0	0	0	0	0	0	0	0	0	0	**99**
6:00 PM	0	2	2	14	36	28	2	0	1	0	0	0	0	0	0	0	0	**85**
7:00 PM	0	0	1	13	33	16	4	1	0	0	0	0	0	0	0	0	0	**68**
8:00 PM	2	0	0	12	13	12	0	0	0	0	0	0	0	0	0	0	0	**39**
9:00 PM	1	0	1	2	9	4	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**4**	**9**	**19**	**199**	**638**	**360**	**52**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,288**
	0.3%	**0.7%**	**1.5%**	**15.5%**	**49.5%**	**28.0%**	**4.0%**	**0.4%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.4	mph	Mean (Average) Speed	28.3	mph
85th Percentile	32.1	mph	10 mph Pace	22.9 - 32.9	mph
95th Percentile	34.7	mph	Percent in Pace	81.52	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Wednesday, April 8, 2026
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	0	1	14	4	1	0	0	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	0	1	14	27	17	1	0	0	0	0	0	0	0	0	0	0	**60**
8:00 AM	0	4	4	29	70	38	3	1	0	0	0	0	0	0	0	0	0	**149**
9:00 AM	0	0	0	12	34	19	1	0	0	0	0	0	0	0	0	0	0	**66**
10:00 AM	0	0	1	13	25	10	2	0	0	0	0	0	0	0	0	0	0	**51**
11:00 AM	0	2	2	13	39	11	1	1	0	0	0	0	0	0	0	0	0	**69**
12:00 PM	0	0	0	10	25	12	2	0	0	0	0	0	0	0	0	0	0	**49**
1:00 PM	0	0	0	14	34	17	1	0	0	0	0	0	0	0	0	0	0	**66**
2:00 PM	0	0	4	13	48	24	2	0	0	0	0	0	0	0	0	0	0	**91**
3:00 PM	0	0	1	29	82	19	5	0	0	0	0	0	0	0	0	0	0	**136**
4:00 PM	0	0	3	16	69	18	3	0	0	0	0	0	0	0	0	0	0	**109**
5:00 PM	0	0	3	16	74	17	2	1	0	0	0	0	0	0	0	0	0	**113**
6:00 PM	0	2	1	9	40	10	3	0	0	0	0	0	0	0	0	0	0	**65**
7:00 PM	0	0	2	14	29	13	2	0	0	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	0	2	7	20	5	0	0	0	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	0	0	4	11	2	1	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**0**	**8**	**24**	**215**	**645**	**239**	**30**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,164**
	0.0%	**0.7%**	**2.1%**	**18.5%**	**55.4%**	**20.5%**	**2.6%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	27.6	mph	Mean (Average) Speed	27.6	mph
85th Percentile	31.2	mph	10 mph Pace	22.6 - 32.6	mph
95th Percentile	33.4	mph	Percent in Pace	84.8	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Wednesday, April 8, 2026
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	0	0	1	9	13	4	0	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	0	0	17	28	19	8	1	0	0	0	0	0	0	0	0	0	**73**
8:00 AM	0	1	3	19	76	46	6	0	0	0	0	0	0	0	0	0	0	**151**
9:00 AM	0	0	0	10	29	17	0	0	0	0	0	0	0	0	0	0	0	**56**
10:00 AM	0	1	1	3	31	17	4	0	0	0	0	0	0	0	0	0	0	**57**
11:00 AM	2	6	0	10	31	20	8	0	0	0	0	0	0	0	0	0	0	**77**
12:00 PM	2	6	1	9	47	30	5	0	0	0	0	0	0	0	0	0	0	**100**
1:00 PM	0	2	2	19	43	24	5	1	0	0	0	0	0	0	0	0	0	**96**
2:00 PM	0	2	2	7	42	24	0	0	0	1	0	0	0	0	0	0	0	**78**
3:00 PM	0	2	2	13	96	49	6	0	0	0	0	0	0	0	0	0	0	**168**
4:00 PM	0	0	1	13	76	40	3	0	0	0	0	0	0	0	0	0	0	**133**
5:00 PM	0	0	1	7	61	35	2	0	0	0	0	0	0	0	0	0	0	**106**
6:00 PM	1	1	2	12	46	30	3	1	0	0	0	0	0	0	0	0	0	**96**
7:00 PM	0	0	0	13	37	17	3	0	0	0	0	0	0	0	0	0	0	**70**
8:00 PM	0	0	1	7	19	11	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	0	0	3	8	5	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	0	0	1	6	2	1	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**5**	**21**	**16**	**167**	**694**	**406**	**58**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,371**
	0.4%	**1.5%**	**1.2%**	**12.2%**	**50.6%**	**29.6%**	**4.2%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.6	mph	Mean (Average) Speed	28.5	mph
85th Percentile	32.2	mph	10 mph Pace	23.7 - 33.7	mph
95th Percentile	34.8	mph	Percent in Pace	82.64	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Total Study Average
Eastbound

Time	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	1	3	14	5	1	0	0	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	1	3	11	26	15	1	0	0	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	3	3	30	74	34	4	1	0	0	0	0	0	0	0	0	0	**149**
9:00 AM	0	0	3	13	27	17	1	1	0	0	0	0	0	0	0	0	0	**62**
10:00 AM	0	0	2	15	23	10	1	0	0	0	0	0	0	0	0	0	0	**51**
11:00 AM	0	2	2	16	32	12	3	1	0	0	0	0	0	0	0	0	0	**68**
12:00 PM	0	0	0	12	31	14	2	0	0	0	0	0	0	0	0	0	0	**59**
1:00 PM	0	0	1	11	34	14	2	0	0	0	0	0	0	0	0	0	0	**62**
2:00 PM	0	0	3	17	54	24	3	0	0	0	0	0	0	0	0	0	0	**101**
3:00 PM	0	1	2	30	66	18	3	0	0	0	0	0	0	0	0	0	0	**120**
4:00 PM	0	1	3	15	56	23	2	0	0	0	0	0	0	0	0	0	0	**100**
5:00 PM	0	1	3	16	58	18	3	1	0	0	0	0	0	0	0	0	0	**100**
6:00 PM	0	2	4	10	39	12	3	0	0	0	0	0	0	0	0	0	0	**70**
7:00 PM	0	0	3	13	23	11	2	0	0	0	0	0	0	0	0	0	0	**52**
8:00 PM	1	1	1	5	20	5	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 PM	1	0	0	5	12	2	2	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	0	0	1	2	1	0	1	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**2**	**12**	**35**	**224**	**594**	**238**	**33**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,143**
	0.2%	**1.0%**	**3.1%**	**19.6%**	**52.0%**	**20.8%**	**2.9%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	27.6	mph	Mean (Average) Speed	27.4	mph
85th Percentile	31.2	mph	10 mph Pace	22.4 - 32.4	mph
95th Percentile	33.6	mph	Percent in Pace	83.4	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 to 4/8/2026
Site Code: 03

Total Study Average
Westbound

Time	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	1	0	1	4	2	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	0	1	2	9	10	3	0	0	0	0	0	0	0	0	0	0	**25**
7:00 AM	0	0	0	14	30	19	7	1	0	0	0	0	0	0	0	0	0	**71**
8:00 AM	1	1	3	21	73	42	7	0	0	0	0	0	0	0	0	0	0	**148**
9:00 AM	0	0	0	11	31	21	4	0	0	0	0	0	0	0	0	0	0	**67**
10:00 AM	0	2	1	6	31	19	3	0	0	0	0	0	0	0	0	0	0	**62**
11:00 AM	1	4	2	13	33	20	5	0	0	0	0	0	0	0	0	0	0	**78**
12:00 PM	1	3	1	8	43	27	3	1	0	0	0	0	0	0	0	0	0	**87**
1:00 PM	0	1	1	17	43	25	5	1	0	0	0	0	0	0	0	0	0	**93**
2:00 PM	0	1	3	11	53	25	3	1	1	1	0	0	0	0	0	0	0	**99**
3:00 PM	0	2	2	14	84	42	5	1	0	0	0	0	0	0	0	0	0	**150**
4:00 PM	0	0	2	14	68	36	3	0	0	0	0	0	0	0	0	0	0	**123**
5:00 PM	0	0	1	11	56	32	4	0	0	0	0	0	0	0	0	0	0	**104**
6:00 PM	1	2	2	13	41	29	3	1	1	0	0	0	0	0	0	0	0	**93**
7:00 PM	0	0	1	13	35	17	4	1	0	0	0	0	0	0	0	0	0	**71**
8:00 PM	1	0	1	10	16	12	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 PM	1	0	1	3	9	5	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	0	3	5	1	1	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**6**	**17**	**22**	**188**	**669**	**390**	**60**	**7**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,362**
	0.4%	**1.2%**	**1.6%**	**13.8%**	**49.1%**	**28.6%**	**4.4%**	**0.5%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	28.5	mph	Mean (Average) Speed	28.4	mph
85th Percentile	32.2	mph	10 mph Pace	23.6 - 33.6	mph
95th Percentile	34.8	mph	Percent in Pace	81.7	%

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Country Club Dr, Between School St and Moraga Creek
Date Range: 4/7/2026 - 4/13/2026
Site Code: 03

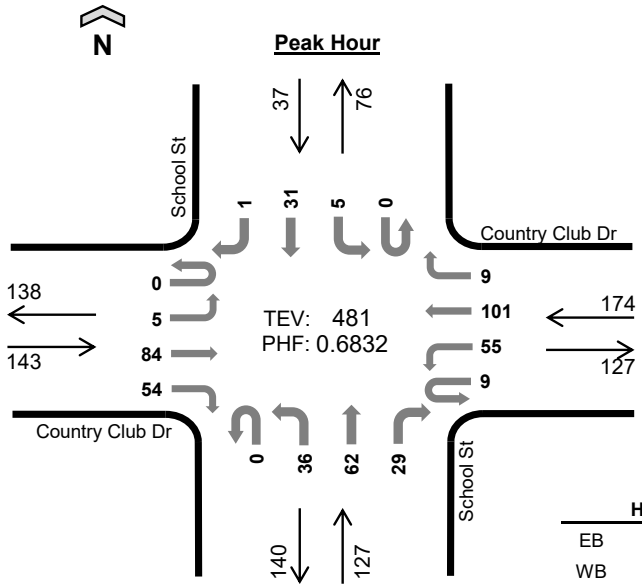
Time	Tuesday 4/7/2026			Wednesday 4/8/2026			Thursday 4/9/2026			Friday 4/10/2026			Saturday 4/11/2026			Sunday 4/12/2026			Monday 4/13/2026			Mid-Week Average		
	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	1	1	2	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2
1:00 AM	0	0	0	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
2:00 AM	0	1	1	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2
3:00 AM	0	2	2	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
4:00 AM	1	2	3	1	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	4
5:00 AM	5	7	12	2	8	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	11
6:00 AM	23	21	44	20	27	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	24	46
7:00 AM	49	64	113	60	73	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	69	123
8:00 AM	**145**	**143**	**288**	**149**	**151**	**300**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**147**	**147**	**294**
9:00 AM	54	77	131	66	56	122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	67	127
10:00 AM	47	65	112	51	57	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	61	110
11:00 AM	62	76	138	69	77	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66	77	142
12:00 PM	67	70	137	49	100	149	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58	85	143
1:00 PM	54	86	140	66	96	162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	91	151
2:00 PM	**108**	114	222	91	78	169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	96	196
3:00 PM	102	**127**	**229**	**136**	**168**	**304**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**119**	**148**	**267**
4:00 PM	87	110	197	109	133	242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98	122	220
5:00 PM	84	99	183	113	106	219	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99	103	201
6:00 PM	71	85	156	65	96	161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	91	159
7:00 PM	41	68	109	60	70	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	69	120
8:00 PM	30	39	69	34	38	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	39	71
9:00 PM	22	17	39	18	16	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	17	37
10:00 PM	5	9	14	3	10	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10	14
11:00 PM	1	5	6	2	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5
Total	**1,059**	**1,288**	**2,347**	**1,164**	**1,371**	**2,535**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1,112**	**1,330**	**2,441**
Percent	**45%**	**55%**		**46%**	**54%**		-	-		-	-		-	-		-	-		-	-		**46%**	**54%**	
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	08:00	08:00
Vol.	145	143	288	149	151	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	147	147	294
PM Peak	14:00	15:00	15:00	15:00	15:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	15:00	15:00
Vol.	108	127	229	136	168	304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119	148	267

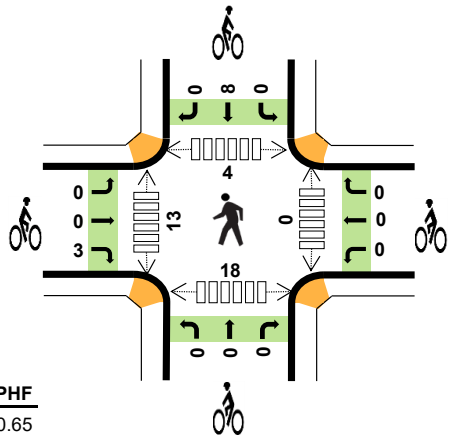
1. Mid-week average includes data between Tuesday and Thursday.

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

School St
Country Club Dr

Date: 4/7/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	1%	0.65
WB	2%	0.73
NB	0%	0.59
SB	3%	0.77
TOTAL	1%	0.68

Peak Hour Count Summaries

Peak Hour Interval Start		Country Club Dr Eastbound				Country Club Dr Westbound				School St Northbound				School St Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	2	26	27	1	16	25	4	0	13	17	5	0	0	10	0	146	0
8:15 AM		0	0	32	18	4	26	28	2	0	12	29	13	0	0	12	0	176	0
8:30 AM		0	1	9	5	2	3	24	2	0	9	13	5	0	4	4	0	81	0
8:45 AM		0	2	17	4	2	10	24	1	0	2	3	6	0	1	5	1	78	481
Pk Hr	All	0	5	84	54	9	55	101	9	0	36	62	29	0	5	31	1	481	
	HV	0	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	6	
	HV%	-	0%	2%	0%	0%	2%	2%	0%	-	0%	0%	0%	-	0%	3%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	1	0	1	*3*	2	0	0	0	*2*	0	5	0	2	*7*
8:15 AM	0	1	0	0	*1*	1	1	0	8	*10*	0	5	0	2	*7*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	1	9	*12*
8:45 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	1	3	5	*9*
Peak Hour	2	3	0	1	*6*	3	1	0	8	*12*	0	13	4	18	*35*

Count Summaries - All Vehicles

Interval Start	Country Club Dr Eastbound				Country Club Dr Westbound				School St Northbound				School St Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	0	0	0	3	0	0	0	1	0	0	2	1	0	8	0
6:15 AM	0	4	1	1	2	3	6	2	0	0	1	1	0	0	1	1	23	0
6:30 AM	0	0	5	0	2	2	2	0	0	0	1	1	0	3	2	0	18	0
6:45 AM	1	0	6	1	2	1	7	1	0	1	0	1	0	0	0	0	21	70
7:00 AM	0	1	7	1	3	2	9	0	0	1	1	1	0	2	4	0	32	94
7:15 AM	0	0	5	6	2	4	8	0	0	1	1	3	0	3	4	0	37	108
7:30 AM	0	2	8	1	4	1	15	4	0	5	1	0	0	4	4	1	50	140
7:45 AM	1	1	14	6	3	8	17	2	0	6	3	0	0	3	1	0	65	184
8:00 AM	**0**	**2**	**26**	**27**	**1**	**16**	**25**	**4**	**0**	**13**	**17**	**5**	**0**	**0**	**10**	**0**	**146**	**298**
8:15 AM	**0**	**0**	**32**	**18**	**4**	**26**	**28**	**2**	**0**	**12**	**29**	**13**	**0**	**0**	**12**	**0**	**176**	**437**
8:30 AM	**0**	**1**	**9**	**5**	**2**	**3**	**24**	**2**	**0**	**9**	**13**	**5**	**0**	**4**	**4**	**0**	**81**	**468**
8:45 AM	**0**	**2**	**17**	**4**	**2**	**10**	**24**	**1**	**0**	**2**	**3**	**6**	**0**	**1**	**5**	**1**	**78**	**481**
9:00 AM	0	3	6	2	2	6	15	1	0	3	5	2	0	4	3	1	53	388
9:15 AM	0	3	9	2	1	1	15	2	0	1	5	1	0	1	1	1	43	255
9:30 AM	0	0	5	1	1	1	17	0	0	0	0	4	0	1	4	1	35	209
9:45 AM	0	1	15	1	2	4	19	3	0	4	2	4	0	1	2	1	59	190
10:00 AM	0	2	7	2	4	3	11	2	0	1	4	4	0	0	2	0	42	179
10:15 AM	0	1	11	2	2	3	12	0	0	5	6	5	0	1	3	0	51	187
10:30 AM	0	1	5	0	2	7	11	2	0	2	4	2	0	5	6	5	52	204
10:45 AM	1	2	7	5	1	5	8	3	0	2	8	1	0	3	2	1	49	194
11:00 AM	0	3	10	3	5	7	13	3	0	3	8	4	0	3	2	4	68	220
11:15 AM	0	1	5	2	2	4	14	3	0	0	2	6	0	7	2	1	49	218
11:30 AM	0	1	12	2	1	9	15	4	0	3	6	3	0	5	4	2	67	233
11:45 AM	0	2	9	1	1	3	14	3	0	4	3	5	0	1	1	2	49	233
12:00 PM	0	1	15	5	2	3	15	0	0	4	3	3	0	1	5	0	57	222
12:15 PM	0	5	10	1	0	1	14	3	0	4	8	5	0	6	3	1	61	234
12:30 PM	0	1	11	1	2	1	16	2	0	1	5	2	0	2	5	1	50	217
12:45 PM	0	1	15	3	0	7	11	1	0	0	2	2	0	3	2	2	49	217
1:00 PM	0	1	8	0	3	2	25	2	0	2	7	1	0	1	1	1	54	214
1:15 PM	0	3	10	1	1	6	17	2	0	1	5	1	0	5	3	1	56	209
1:30 PM	0	1	7	4	0	2	20	3	0	1	4	1	0	6	3	0	52	211
1:45 PM	0	0	14	1	3	4	17	1	0	2	2	0	0	4	7	1	56	218
2:00 PM	0	2	15	7	3	9	15	4	0	3	10	2	0	3	8	2	83	247
2:15 PM	0	0	19	13	1	5	23	4	0	19	19	3	0	2	1	0	109	300
2:30 PM	0	5	18	2	1	5	24	4	0	2	4	2	0	2	4	5	78	326
2:45 PM	0	1	11	10	2	6	15	5	0	4	3	2	0	5	5	1	70	340
3:00 PM	0	4	9	4	1	6	26	3	0	8	15	8	0	2	5	1	92	349
3:15 PM	0	3	13	10	0	6	24	7	0	4	6	8	0	0	7	0	88	328
3:30 PM	0	5	16	7	0	6	22	3	0	6	14	5	0	8	6	2	100	350
3:45 PM	0	9	15	4	2	3	25	3	0	5	8	4	0	4	5	3	90	370
4:00 PM	0	1	16	4	0	6	15	5	0	3	8	7	0	3	5	5	78	356
4:15 PM	1	1	6	3	0	2	18	2	0	6	5	4	0	2	5	2	57	325
4:30 PM	1	5	16	5	0	2	24	8	0	2	5	1	0	7	1	4	81	306
4:45 PM	0	2	12	2	0	7	22	1	0	1	5	5	0	3	2	4	66	282
5:00 PM	0	3	19	2	0	6	16	1	0	2	2	4	0	2	1	2	60	264
5:15 PM	0	3	8	4	0	4	20	3	0	5	5	2	0	5	3	2	64	271
5:30 PM	0	3	11	4	0	1	22	7	0	3	5	3	0	3	4	6	72	262
5:45 PM	0	2	18	4	0	3	21	1	0	0	5	3	0	1	3	1	62	258
6:00 PM	0	3	11	2	0	1	17	2	0	1	2	1	0	0	1	4	45	243
6:15 PM	0	3	15	4	0	2	12	3	0	4	0	3	0	1	3	1	51	230
6:30 PM	0	4	14	2	0	3	18	3	0	2	4	1	0	5	1	4	61	219
6:45 PM	0	1	10	0	0	2	17	2	0	1	2	1	0	1	2	1	40	197
7:00 PM	0	1	11	1	0	0	14	2	0	2	2	1	0	0	2	0	36	188
7:15 PM	0	4	3	0	0	1	22	2	0	0	2	0	0	0	1	0	35	172
7:30 PM	0	1	6	0	2	4	15	6	0	0	1	0	0	1	0	0	36	147
7:45 PM	0	1	7	1	1	2	9	2	0	0	4	1	0	5	1	0	34	141
Count Total	5	113	621	204	75	247	923	141	0	176	296	163	0	147	185	79	3,375	
Pk Hr All	**0**	**5**	**84**	**54**	**9**	**55**	**101**	**9**	**0**	**36**	**62**	**29**	**0**	**5**	**31**	**1**	**481**	
Pk Hr HV	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	
Pk Hr HV%	**-**	**0%**	**2%**	**0%**	**0%**	**2%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**3%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	1	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
6:15 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
6:30 AM	0	0	1	1	*2*	0	0	0	0	*0*	2	0	0	0	*2*
6:45 AM	0	0	0	0	*0*	0	1	0	0	*1*	1	0	1	0	*2*
7:00 AM	0	0	0	0	*0*	2	1	0	0	*3*	1	1	0	1	*3*
7:15 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	1	0	2	*3*
7:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
7:45 AM	1	3	0	0	*4*	0	0	0	1	*1*	0	10	3	1	*14*
8:00 AM	**1**	**1**	**0**	**1**	**3**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	**0**	**2**	**7**
8:15 AM	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**	**8**	**10**	**0**	**5**	**0**	**2**	**7**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**9**	**12**
8:45 AM	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**5**	**9**
9:00 AM	0	1	1	0	*2*	0	0	0	0	*0*	2	5	1	7	*15*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	7	*9*
9:30 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 AM	0	0	0	0	*0*	4	6	11	1	*22*	0	5	0	8	*13*
10:00 AM	0	0	1	1	*2*	0	0	0	1	*1*	0	4	0	7	*11*
10:15 AM	0	0	0	0	*0*	0	3	0	0	*3*	0	6	1	13	*20*
10:30 AM	0	1	0	0	*1*	0	0	0	1	*1*	2	15	3	7	*27*
10:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	1	18	0	5	*24*
11:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	1	1	0	1	*3*
11:15 AM	0	0	0	1	*1*	1	0	0	0	*1*	0	1	0	3	*4*
11:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	3	4	0	4	*11*
11:45 AM	0	1	1	0	*2*	0	0	1	0	*1*	3	3	2	2	*10*
12:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	2	3	0	*8*
12:15 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	6	0	1	*7*
12:30 PM	0	2	1	0	*3*	0	0	0	2	*2*	1	2	0	2	*5*
12:45 PM	0	0	0	0	*0*	1	0	0	1	*2*	1	2	0	3	*6*
1:00 PM	0	2	0	0	*2*	1	0	0	0	*1*	0	5	0	4	*9*
1:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	5	1	2	*9*
1:30 PM	0	0	0	3	*3*	0	0	0	2	*2*	2	2	1	0	*5*
1:45 PM	1	0	0	0	*1*	2	0	0	1	*3*	0	17	1	2	*20*
2:00 PM	0	0	0	0	*0*	2	0	0	0	*2*	0	4	1	0	*5*
2:15 PM	0	2	0	0	*2*	0	0	11	0	*11*	5	10	0	6	*21*
2:30 PM	0	1	0	1	*2*	1	0	2	0	*3*	15	16	2	3	*36*
2:45 PM	0	0	0	1	*1*	1	0	2	0	*3*	3	15	0	2	*20*
3:00 PM	0	1	0	1	*2*	2	0	0	0	*2*	5	7	0	9	*21*
3:15 PM	0	0	0	0	*0*	2	0	1	0	*3*	5	3	0	3	*11*
3:30 PM	1	0	0	0	*1*	2	1	0	2	*5*	3	3	0	2	*8*
3:45 PM	0	0	0	0	*0*	2	0	1	0	*3*	4	3	2	4	*13*
4:00 PM	0	0	1	0	*1*	2	1	0	0	*3*	3	2	0	2	*7*
4:15 PM	0	0	0	0	*0*	0	4	0	1	*5*	4	7	3	1	*15*
4:30 PM	0	0	0	0	*0*	0	1	0	2	*3*	7	7	3	4	*21*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	4	*5*
5:00 PM	0	0	0	0	*0*	1	0	0	1	*2*	2	2	1	3	*8*
5:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	1	2	0	*4*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	4	1	2	*8*
5:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	3	0	6	*9*
6:00 PM	0	0	0	0	*0*	1	1	0	0	*2*	1	7	0	1	*9*
6:15 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	4	3	1	*8*
6:30 PM	0	0	0	0	*0*	1	1	0	0	*2*	0	4	0	3	*7*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	0	*2*
7:00 PM	0	0	0	0	*0*	4	0	0	0	*4*	1	4	1	0	*6*
7:15 PM	0	0	0	0	*0*	0	1	0	0	*1*	1	3	1	0	*5*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	3	2	0	*5*
7:45 PM	0	0	0	0	*0*	0	0	0	5	*5*	0	1	0	1	*2*
Count Total	7	19	8	13	*47*	37	22	29	30	*118*	87	243	46	158	*534*
Peak Hour	**2**	**3**	**0**	**1**	***6***	**3**	**1**	**0**	**8**	***12***	**0**	**13**	**4**	**18**	**35**

Count Summaries - Heavy Vehicles

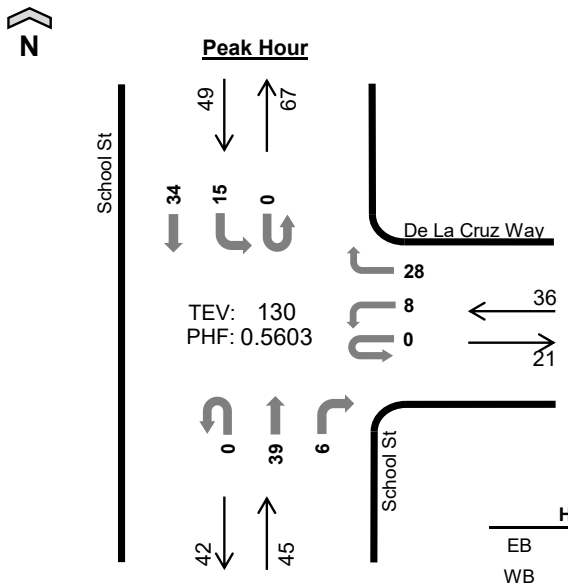
Interval Start	Country Club Dr				Country Club Dr				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
7:45 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	4	6
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**9**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
8:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
9:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	5
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
9:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	3
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
10:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	4
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3
12:30 PM	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	3	6
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	6
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	5
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	6
2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	5
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	7
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	5	2	0	2	10	7	0	1	5	2	0	7	6	0	47	
Pk Hr Heavy	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	

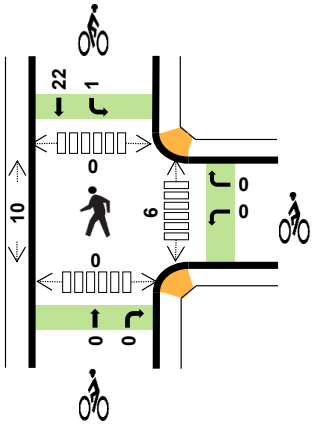
Count Summaries - Bikes

Interval Start	Country Club Dr				Country Club Dr				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
7:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	3	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
8:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
8:15 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**10**	**13**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	4	0	2	0	0	4	0	0	0	11	0	0	1	0	22	22
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	23
10:15 AM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	26
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	27
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	4
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
1:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	6
2:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7
2:15 PM	0	0	0	0	0	0	0	0	0	1	9	1	0	0	0	0	11	18
2:30 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3	19
2:45 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3	19
3:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	19
3:15 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3	11
3:30 PM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	5	13
3:45 PM	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	3	13
4:00 PM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3	14
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	5	16
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	3	14
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	10
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
6:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	4
6:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
6:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	6
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7
7:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	10
Count Total	1	9	20	7	3	3	7	9	0	1	16	12	5	4	19	2	118	
Pk Hr Bike	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**12**	

School St
De La Cruz Way

Date: 4/7/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 7:45 AM to 8:45 AM





	HV%	PHF
EB	--	--
WB	0%	0.56
NB	0%	0.45
SB	6%	0.47
TOTAL	2%	0.56

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		0	0	0	0	0	1	0	3	0	0	4	1	0	2	2	0	13	0
8:00 AM		0	0	0	0	0	3	0	4	0	0	22	3	0	4	22	0	58	0
8:15 AM		0	0	0	0	0	3	0	13	0	0	13	0	0	4	7	0	40	0
8:30 AM		0	0	0	0	0	1	0	8	0	0	0	2	0	5	3	0	19	130
Pk Hr	All	0	0	0	0	0	8	0	28	0	0	39	6	0	15	34	0	130	
	HV	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	
	HV%	-	-	-	-	-	0%	-	0%	-	-	0%	0%	-	13%	3%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	0	0	0	1	*1*	0	0	0	5	*5*	1	0	0	0	*1*
8:00 AM	0	0	0	1	*1*	0	0	0	8	*8*	4	7	0	0	*11*
8:15 AM	0	0	0	1	*1*	0	0	0	10	*10*	0	2	0	0	*2*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
Peak Hour	0	0	0	3	*3*	0	0	0	23	*23*	6	10	0	0	*16*

Count Summaries - All Vehicles

Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1	0	4	0
6:30 AM	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	0
6:45 AM	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	3	10
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	12
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	4	12
7:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	1	0	5	14
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**4**	**1**	**0**	**2**	**2**	**0**	**13**	**24**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**4**	**0**	**0**	**22**	**3**	**0**	**4**	**22**	**0**	**58**	**80**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**13**	**0**	**0**	**13**	**0**	**0**	**4**	**7**	**0**	**40**	**116**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**8**	**0**	**0**	**0**	**2**	**0**	**5**	**3**	**0**	**19**	**130**
8:45 AM	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	3	120
9:00 AM	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	4	66
9:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	28
9:30 AM	0	0	0	0	0	1	0	0	0	0	1	2	0	1	1	0	6	15
9:45 AM	0	0	0	0	0	2	0	1	0	0	3	1	0	1	1	0	9	21
10:00 AM	0	0	0	0	0	0	0	3	0	0	2	1	0	1	2	0	9	26
10:15 AM	0	0	0	0	0	2	0	2	0	0	3	1	0	1	0	0	9	33
10:30 AM	0	0	0	0	0	1	0	1	0	0	2	0	0	1	2	0	7	34
10:45 AM	0	0	0	0	1	1	0	2	0	0	0	2	0	2	3	0	11	36
11:00 AM	0	0	0	0	0	0	0	2	0	0	1	1	0	2	0	0	6	33
11:15 AM	0	0	0	0	1	1	0	3	0	0	1	0	0	1	2	0	9	33
11:30 AM	0	0	0	0	1	4	0	2	0	0	5	1	0	1	1	0	15	41
11:45 AM	0	0	0	0	1	1	0	4	0	0	0	2	0	1	1	0	10	40
12:00 PM	0	0	0	0	1	3	0	2	0	0	1	2	0	0	5	0	14	48
12:15 PM	0	0	0	0	1	2	0	0	0	0	5	3	0	3	3	0	17	56
12:30 PM	0	0	0	0	0	6	0	2	0	0	2	5	0	3	1	0	19	60
12:45 PM	0	0	0	0	0	2	0	2	0	0	1	4	0	3	0	0	12	62
1:00 PM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	4	52
1:15 PM	0	0	0	0	0	0	0	2	0	0	0	3	0	3	1	0	9	44
1:30 PM	0	0	0	0	0	2	0	5	0	0	0	1	0	2	2	0	12	37
1:45 PM	0	0	0	0	0	3	0	2	0	0	1	2	0	2	3	0	13	38
2:00 PM	0	0	0	0	0	6	0	4	0	0	4	0	0	1	16	0	31	65
2:15 PM	0	0	0	0	0	3	0	1	0	0	32	4	2	2	14	0	58	114
2:30 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	3	0	0	6	108
2:45 PM	0	0	0	0	0	1	0	3	0	0	4	0	0	4	2	0	14	109
3:00 PM	0	0	0	0	0	3	0	6	0	0	1	0	0	8	4	0	22	100
3:15 PM	0	0	0	0	0	0	0	5	0	0	2	0	0	1	3	0	11	53
3:30 PM	0	0	0	0	0	2	0	3	0	0	1	0	0	9	0	0	15	62
3:45 PM	0	0	0	0	0	1	0	1	0	0	3	1	0	4	1	0	11	59
4:00 PM	0	0	0	0	0	1	0	2	0	0	3	1	0	1	1	0	9	46
4:15 PM	0	0	0	0	0	2	0	2	0	0	2	0	0	4	1	0	11	46
4:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	5	1	0	10	41
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	5	1	0	9	39
5:00 PM	0	0	0	0	0	2	0	1	0	0	2	2	0	3	2	0	12	42
5:15 PM	0	0	0	0	0	3	0	0	0	0	2	1	0	3	0	0	9	40
5:30 PM	0	0	0	0	0	1	0	1	0	0	2	0	0	3	2	0	9	39
5:45 PM	0	0	0	0	0	1	0	3	0	0	0	0	0	8	2	0	14	44
6:00 PM	0	0	0	0	0	1	0	2	0	0	0	2	0	1	3	0	9	41
6:15 PM	0	0	0	0	0	0	0	4	0	0	1	0	0	5	0	0	10	42
6:30 PM	0	0	0	0	0	1	0	3	0	0	1	0	0	1	1	0	7	40
6:45 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	1	1	0	5	31
7:00 PM	0	0	0	0	0	1	0	3	0	0	1	0	0	1	1	0	7	29
7:15 PM	0	0	0	0	0	1	0	1	0	0	2	1	0	1	0	0	6	25
7:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	20
7:45 PM	0	0	0	0	0	1	0	3	0	0	0	0	0	1	0	0	5	20
Count Total	0	0	0	0	9	77	0	126	0	0	140	57	3	120	121	0	653	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**28**	**0**	**0**	**39**	**6**	**0**	**15**	**34**	**0**	**130**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**0%**	**0%**	**-**	**13%**	**3%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
6:30 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	2	0	0	*2*
6:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	4	1	0	*5*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:45 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**5**	**5**	**1**	**0**	**0**	**0**	**1**
8:00 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**8**	**8**	**4**	**7**	**0**	**0**	**11**
8:15 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**10**	**10**	**0**	**2**	**0**	**0**	**2**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**
8:45 AM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
9:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	3	0	0	*3*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	3	4	0	0	*7*
9:30 AM	0	0	0	0	*0*	0	1	0	0	*1*	4	0	0	0	*4*
9:45 AM	0	0	0	0	*0*	0	11	2	1	*14*	4	0	0	0	*4*
10:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	4	2	0	0	*6*
10:15 AM	0	0	0	0	*0*	0	0	2	2	*4*	0	3	2	0	*5*
10:30 AM	0	1	0	0	*1*	0	0	0	0	*0*	3	0	0	0	*3*
10:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	3	0	1	0	*4*
11:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
11:15 AM	0	0	0	1	*1*	0	1	0	0	*1*	0	0	0	0	*0*
11:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	2	0	0	*2*
11:45 AM	0	0	0	0	*0*	0	0	1	0	*1*	1	5	0	0	*6*
12:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
12:15 PM	0	0	0	1	*1*	0	0	1	0	*1*	1	2	0	0	*3*
12:30 PM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
1:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
1:30 PM	0	0	0	0	*0*	0	0	1	2	*3*	0	0	0	0	*0*
1:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
2:15 PM	0	0	0	0	*0*	0	1	26	0	*27*	16	26	0	0	*42*
2:30 PM	0	0	0	0	*0*	0	0	0	1	*1*	14	3	0	0	*17*
2:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 PM	0	0	0	1	*1*	0	0	0	1	*1*	4	1	0	0	*5*
3:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	1	0	0	*1*
3:30 PM	0	0	0	1	*1*	0	0	0	1	*1*	0	0	0	0	*0*
3:45 PM	0	0	0	0	*0*	0	0	2	1	*3*	0	2	0	0	*2*
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
4:30 PM	0	0	0	0	*0*	0	0	0	4	*4*	2	3	0	0	*5*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
5:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	5	0	0	*5*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	5	0	0	*6*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	2	0	0	*4*
6:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
6:30 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	2	0	*3*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
7:00 PM	0	0	0	0	*0*	0	0	4	1	*5*	1	2	0	0	*3*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	3	1	0	*4*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	2	4	7	*13*	0	15	42	40	*97*	82	111	7	0	*200*
Peak Hour	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**23**	***23***	**6**	**10**	**0**	**0**	**16**

Count Summaries - Heavy Vehicles

Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	2	0	0	3	1	0	3	4	0	13	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**3**	

Count Summaries - Bikes

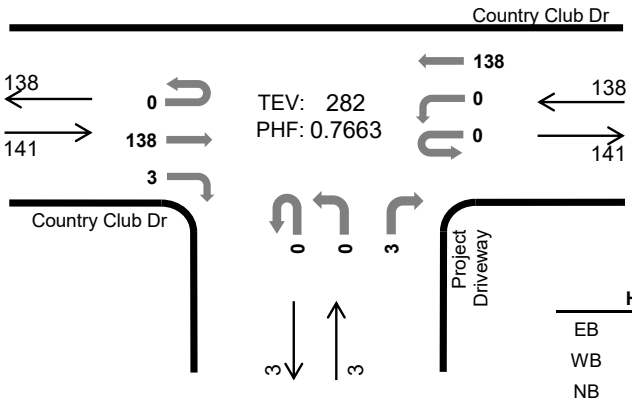
Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**5**	**5**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**8**	**13**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**10**	**23**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	19
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
9:45 AM	0	0	0	0	0	2	0	9	0	0	2	0	0	0	1	0	14	15
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	19
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	3	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:15 PM	0	0	0	0	0	0	0	1	0	0	26	0	0	0	0	0	27	30
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	28
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	29
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	1	0	5	7
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	0	0	0	0	2	0	13	0	0	39	3	0	5	35	0	97	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**22**	**0**	**23**	

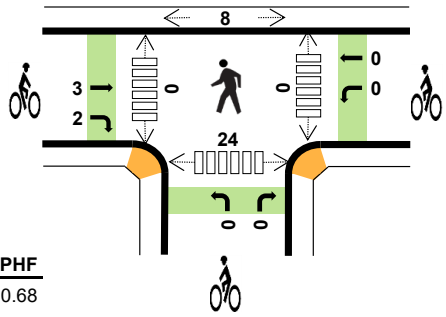
Project Driveway
Country Club Dr

N

Peak Hour

Date: 4/7/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	1%	0.68
WB	1%	0.84
NB	0%	0.38
SB	--	--
TOTAL	1%	0.77

Peak Hour Count Summaries

Peak Hour Interval Start		Country Club Dr Eastbound				Country Club Dr Westbound				Project Driveway Northbound				n/a Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	52	0	0	0	37	0	0	0	0	2	0	0	0	0	91	0
8:15 AM		0	0	49	2	0	0	41	0	0	0	0	0	0	0	0	0	92	0
8:30 AM		0	0	15	1	0	0	33	0	0	0	0	0	0	0	0	0	49	0
8:45 AM		0	0	22	0	0	0	27	0	0	0	0	1	0	0	0	0	50	282
Pk Hr	All	0	0	138	3	0	0	138	0	0	0	0	3	0	0	0	0	282	
	HV	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	
	HV%	-	-	1%	0%	-	-	1%	-	-	-	-	0%	-	-	-	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	1	0	0	*2*	3	0	0	0	*3*	0	0	2	3	*5*
8:15 AM	0	0	0	0	*0*	2	0	0	0	*2*	0	0	4	3	*7*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	14	*16*
8:45 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	4	*4*
Peak Hour	2	2	0	0	*4*	5	0	0	0	*5*	0	0	8	24	*32*

Count Summaries - All Vehicles

Interval Start	Country Club Dr				Country Club Dr				Project Driveway				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
6:15 AM	0	0	5	4	0	0	7	0	0	0	0	1	0	0	0	0	17	0
6:30 AM	0	0	5	1	0	0	2	0	0	0	0	0	0	0	0	0	8	0
6:45 AM	0	0	6	1	0	0	9	0	0	0	0	2	0	0	0	0	18	47
7:00 AM	0	0	8	0	0	0	10	0	0	0	0	1	0	0	0	0	19	62
7:15 AM	0	0	10	0	0	0	9	0	0	0	0	1	0	0	0	0	20	65
7:30 AM	0	0	6	1	0	0	21	0	0	0	0	5	0	0	0	0	33	90
7:45 AM	0	0	22	1	0	0	24	0	0	0	0	1	0	0	0	0	48	120
8:00 AM	**0**	**0**	**52**	**0**	**0**	**0**	**37**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**91**	**192**
8:15 AM	**0**	**0**	**49**	**2**	**0**	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**264**
8:30 AM	**0**	**0**	**15**	**1**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**	**280**
8:45 AM	**0**	**0**	**22**	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**50**	**282**
9:00 AM	0	0	11	0	0	0	18	0	0	0	0	0	0	0	0	0	29	220
9:15 AM	0	0	12	2	0	0	18	0	0	0	0	2	0	0	0	0	34	162
9:30 AM	0	0	7	1	0	0	18	0	0	0	0	0	0	0	0	0	26	139
9:45 AM	0	0	16	0	0	0	24	0	0	0	0	0	0	0	0	0	40	129
10:00 AM	0	0	11	0	0	0	12	0	0	0	0	0	0	0	0	0	23	123
10:15 AM	0	0	14	0	0	0	16	0	0	0	0	0	0	0	0	0	30	119
10:30 AM	0	0	5	0	0	0	19	0	0	0	0	1	0	0	0	0	25	118
10:45 AM	0	0	13	1	0	0	12	0	0	0	0	2	0	0	0	0	28	106
11:00 AM	0	0	16	0	0	0	20	0	0	0	0	0	0	0	0	0	36	119
11:15 AM	0	0	8	0	0	0	16	0	0	0	0	0	0	0	0	0	24	113
11:30 AM	0	0	15	1	0	0	20	0	0	0	0	0	0	0	0	0	36	124
11:45 AM	0	0	11	0	0	0	20	0	0	0	0	1	0	0	0	0	32	128
12:00 PM	0	0	19	0	0	0	19	0	0	0	0	2	0	0	0	0	40	132
12:15 PM	0	0	13	0	0	0	19	0	0	0	0	4	0	0	0	0	36	144
12:30 PM	0	0	12	0	0	0	19	0	0	0	0	0	0	0	0	0	31	139
12:45 PM	0	0	15	0	0	0	13	0	0	0	0	4	0	0	0	0	32	139
1:00 PM	0	0	8	1	0	0	27	0	0	0	0	1	0	0	0	0	37	136
1:15 PM	0	0	14	0	0	0	17	0	0	0	0	0	0	0	0	0	31	131
1:30 PM	0	0	11	1	0	0	23	0	0	0	0	1	0	0	0	0	36	136
1:45 PM	0	0	15	0	0	0	20	0	0	0	0	0	0	0	0	0	35	139
2:00 PM	0	0	25	0	0	0	20	0	0	0	0	1	0	0	0	0	46	148
2:15 PM	0	0	29	1	0	0	42	0	0	0	0	1	0	0	0	0	73	190
2:30 PM	0	0	22	0	0	0	31	0	0	0	0	3	0	0	0	0	56	210
2:45 PM	0	0	21	1	0	0	20	0	0	0	0	0	0	0	0	0	42	217
3:00 PM	0	0	16	0	0	0	35	0	0	0	0	3	0	0	0	0	54	225
3:15 PM	0	0	22	0	0	0	28	0	0	0	0	2	0	0	0	0	52	204
3:30 PM	0	0	27	0	0	0	29	0	0	0	0	2	0	0	0	0	58	206
3:45 PM	0	0	25	0	0	0	34	0	0	0	0	4	0	0	0	0	63	227
4:00 PM	0	0	20	0	0	0	23	0	0	0	0	0	0	0	0	0	43	216
4:15 PM	0	0	10	0	0	0	25	0	0	0	0	1	0	0	0	0	36	200
4:30 PM	0	0	27	1	0	0	31	0	0	0	0	0	0	0	0	0	59	201
4:45 PM	0	0	14	1	0	0	27	0	0	0	0	2	0	0	0	0	44	182
5:00 PM	0	0	22	0	0	0	20	0	0	0	0	2	0	0	0	0	44	183
5:15 PM	0	0	14	1	0	0	27	0	0	0	0	1	0	0	0	0	43	190
5:30 PM	0	0	18	0	0	0	28	0	0	0	0	0	0	0	0	0	46	177
5:45 PM	0	0	25	0	0	0	23	0	0	0	0	0	0	0	0	0	48	181
6:00 PM	0	0	16	0	0	0	22	0	0	0	0	0	0	0	0	0	38	175
6:15 PM	0	0	22	0	0	0	17	0	0	0	0	0	0	0	0	0	39	171
6:30 PM	0	0	19	0	0	0	24	0	0	0	0	1	0	0	0	0	44	169
6:45 PM	0	0	11	0	0	0	19	0	0	0	0	0	0	0	0	0	30	151
7:00 PM	0	0	13	0	0	0	16	0	0	0	0	0	0	0	0	0	29	142
7:15 PM	0	0	7	0	0	0	21	0	0	0	0	0	0	0	0	0	28	131
7:30 PM	0	0	7	0	0	0	15	0	0	0	0	0	0	0	0	0	22	109
7:45 PM	0	0	9	0	0	0	13	0	0	0	0	0	0	0	0	0	22	101
Count Total	0	0	888	23	0	0	1,183	0	0	0	0	55	0	0	0	0	2,149	
Pk Hr All	**0**	**0**	**138**	**3**	**0**	**0**	**138**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**282**	
Pk Hr HV	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	
Pk Hr HV%	**-**	**-**	**1%**	**0%**	**-**	**-**	**1%**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	2	*3*
6:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	1	*2*
6:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	1	*2*
7:00 AM	0	0	0	0	*0*	2	0	0	0	*2*	0	0	1	5	*6*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	3	*3*
7:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	4	*4*
7:45 AM	1	3	0	0	*4*	3	0	0	0	*3*	0	0	2	3	*5*
8:00 AM	**1**	**1**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**3**	**5**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**4**	**3**	**7**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**16**
8:45 AM	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**4**
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	9	*9*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	8	*8*
9:30 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	2	*2*
9:45 AM	0	0	0	0	*0*	4	0	0	0	*4*	0	0	0	5	*5*
10:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	9	*9*
10:15 AM	0	0	0	0	*0*	0	2	0	0	*2*	0	0	1	17	*18*
10:30 AM	0	1	0	0	*1*	0	1	0	0	*1*	0	0	3	12	*15*
10:45 AM	0	1	0	0	*1*	0	0	2	0	*2*	0	0	5	21	*26*
11:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	3	*3*
11:15 AM	0	0	0	0	*0*	1	1	0	0	*2*	0	0	0	6	*6*
11:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	7	*8*
11:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	1	4	*5*
12:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	3	*5*
12:15 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	6	*6*
12:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
12:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	2	*3*
1:00 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	7	*8*
1:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	5	*7*
1:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	4	4	*8*
1:45 PM	1	0	0	0	*1*	0	0	2	0	*2*	0	0	1	4	*5*
2:00 PM	0	0	0	0	*0*	0	0	2	0	*2*	0	0	0	3	*3*
2:15 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	2	5	*7*
2:30 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	4	7	*11*
2:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	3	*5*
3:00 PM	0	1	0	0	*1*	1	0	1	0	*2*	0	0	1	3	*4*
3:15 PM	0	0	0	0	*0*	2	0	0	0	*2*	0	0	2	6	*8*
3:30 PM	1	0	0	0	*1*	1	2	0	0	*3*	0	0	0	4	*4*
3:45 PM	0	0	0	0	*0*	2	0	0	0	*2*	0	0	1	5	*6*
4:00 PM	0	0	0	0	*0*	2	1	0	0	*3*	0	0	0	6	*6*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	0	*3*
4:30 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	3	8	*11*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	4	*4*
5:00 PM	0	0	0	0	*0*	3	0	0	0	*3*	0	0	2	7	*9*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	5	*7*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	9	*12*
5:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	3	5	*8*
6:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	1	9	*10*
6:15 PM	0	0	0	0	*0*	1	1	1	0	*3*	0	0	0	5	*5*
6:30 PM	0	0	0	0	*0*	1	1	0	0	*2*	0	0	0	5	*5*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	3	*3*
7:00 PM	0	0	0	0	*0*	4	0	0	0	*4*	0	0	1	5	*6*
7:15 PM	0	0	0	0	*0*	1	1	0	0	*2*	0	0	1	2	*3*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	0	*3*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
Count Total	7	11	0	0	*18*	38	12	8	0	*58*	0	0	71	287	*358*
Peak Hour	**2**	**2**	**0**	**0**	***4***	**5**	**0**	**0**	**0**	***5***	**0**	**0**	**8**	**24**	**32**

Count Summaries - Heavy Vehicles

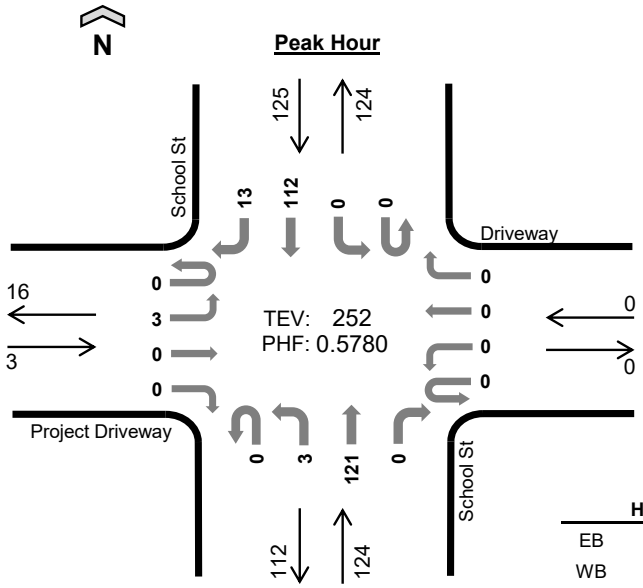
Interval Start	Country Club Dr				Country Club Dr				Project Driveway				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	5
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
8:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
10:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
12:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	7	0	0	0	11	0	0	0	0	0	0	0	0	0	18	
Pk Hr Heavy	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	

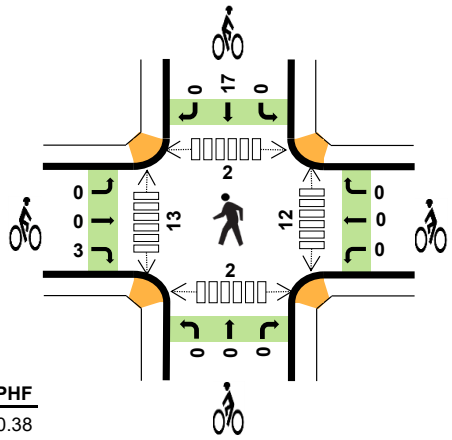
Count Summaries - Bikes

Interval Start	Country Club Dr				Country Club Dr				Project Driveway				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	5
8:00 AM	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**6**
8:15 AM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	6
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	5
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	5
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
2:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	4
3:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5
3:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	7
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9
4:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	10
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
6:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
6:15 PM	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	3	5
6:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	7
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9
7:15 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	8
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	0	0	30	8	0	0	12	0	0	0	0	8	0	0	0	0	58	
Pk Hr Bike	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	

School St
Project Driveway

Date: 4/7/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	0%	0.38
WB	--	--
NB	0%	0.56
SB	2%	0.58
TOTAL	1%	0.58

Peak Hour Count Summaries

Peak Hour Interval Start	Project Driveway				Driveway				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM	0	0	0	0	0	0	0	0	0	0	34	0	0	0	43	2	79	0
8:15 AM	0	0	0	0	0	0	0	0	0	2	53	0	0	0	47	7	109	0
8:30 AM	0	2	0	0	0	0	0	0	0	1	26	0	0	0	10	1	40	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	8	0	0	0	12	3	24	252
Pk Hr All	0	3	0	0	0	0	0	0	0	3	121	0	0	0	112	13	252	
Pk Hr HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
Pk Hr HV%	-	0%	-	-	-	-	-	-	-	0%	0%	-	-	-	2%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	0	1	*1*	3	0	0	5	*8*	2	4	0	0	*6*
8:15 AM	0	0	0	1	*1*	0	0	0	11	*11*	3	2	1	1	*7*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	3	2	0	0	*5*
8:45 AM	0	0	0	0	*0*	0	0	0	1	*1*	4	5	1	1	*11*
Peak Hour	0	0	0	2	*2*	3	0	0	17	*20*	12	13	2	2	*29*

Count Summaries - All Vehicles

Interval Start	Project Driveway				Driveway				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3	7	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	6	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	5	20
7:00 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	4	9	27
7:15 AM	0	2	0	0	0	0	0	0	0	1	3	0	0	0	8	4	18	38
7:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	40
7:45 AM	0	1	0	1	0	0	0	0	0	1	6	0	0	0	11	1	21	56
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**0**	**43**	**2**	**79**	**126**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**53**	**0**	**0**	**0**	**47**	**7**	**109**	**217**
8:30 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**26**	**0**	**0**	**0**	**10**	**1**	**40**	**249**
8:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**12**	**3**	**24**	**252**
9:00 AM	0	0	0	0	0	0	0	0	0	0	8	1	0	0	6	2	17	190
9:15 AM	0	2	0	0	0	0	0	0	0	0	4	0	0	0	0	0	6	87
9:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	4	1	8	55
9:45 AM	0	0	0	1	0	0	0	0	0	0	9	0	2	0	3	2	17	48
10:00 AM	0	1	0	0	0	0	0	0	0	1	6	0	0	0	3	1	12	43
10:15 AM	0	2	0	0	0	0	0	0	0	0	9	0	0	0	3	1	15	52
10:30 AM	0	2	0	0	0	0	0	0	0	0	5	0	0	0	7	3	17	61
10:45 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	5	3	15	59
11:00 AM	0	2	0	0	0	0	0	0	0	0	5	0	2	0	11	0	20	67
11:15 AM	0	1	0	0	0	0	0	0	0	0	7	0	0	0	3	3	14	66
11:30 AM	0	1	0	0	0	0	0	0	0	0	8	0	3	0	5	5	22	71
11:45 AM	0	2	0	0	0	0	0	0	0	0	9	0	0	0	2	3	16	72
12:00 PM	0	2	0	0	0	0	0	0	0	0	6	0	1	0	10	3	22	74
12:15 PM	0	4	0	2	0	0	0	1	0	0	7	0	0	0	4	1	19	79
12:30 PM	0	1	0	0	0	0	0	0	0	0	6	0	0	0	3	3	13	70
12:45 PM	0	1	0	2	0	0	0	0	0	1	2	0	0	0	4	4	14	68
1:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	6	52
1:15 PM	0	0	0	0	0	0	0	0	0	0	5	0	1	0	5	1	12	45
1:30 PM	0	1	0	0	0	0	0	0	0	0	4	0	0	1	4	1	11	43
1:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	9	0	11	40
2:00 PM	0	1	0	0	0	0	0	0	0	0	14	0	0	0	21	1	37	71
2:15 PM	0	1	0	0	0	0	0	0	0	1	37	0	0	0	17	3	59	118
2:30 PM	0	0	0	1	0	0	0	0	0	0	4	0	0	0	6	3	14	121
2:45 PM	0	2	0	0	0	0	0	0	0	0	7	0	0	0	12	4	25	135
3:00 PM	0	2	0	0	0	0	0	0	0	0	23	0	2	0	12	1	40	138
3:15 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	20	1	36	115
3:30 PM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	15	2	39	140
3:45 PM	0	1	0	0	0	0	0	0	0	0	15	1	0	0	12	0	29	144
4:00 PM	0	1	0	0	0	0	0	0	0	0	16	0	0	0	12	0	29	133
4:15 PM	0	2	0	1	0	0	0	0	0	0	10	0	0	0	7	3	23	120
4:30 PM	0	3	0	0	0	0	0	0	0	0	7	0	0	0	8	0	18	99
4:45 PM	0	5	0	0	0	0	0	0	0	0	5	0	0	0	8	1	19	89
5:00 PM	0	1	0	1	0	0	0	0	0	0	6	0	0	0	6	1	15	75
5:15 PM	0	3	0	0	0	0	0	0	0	0	7	0	0	0	8	1	19	71
5:30 PM	0	0	0	1	0	0	0	0	0	0	8	0	1	0	8	0	18	71
5:45 PM	0	2	0	0	0	0	0	0	0	1	6	0	0	0	9	0	18	70
6:00 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	4	0	7	62
6:15 PM	0	2	0	1	0	0	0	0	0	0	2	0	0	0	8	0	13	56
6:30 PM	0	1	0	0	0	0	0	0	0	0	5	0	0	0	5	1	12	50
6:45 PM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	8	1	13	45
7:00 PM	0	0	0	0	0	0	0	0	1	0	5	0	0	0	3	0	9	47
7:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6	40
7:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	0	5	33
7:45 PM	0	1	0	0	0	0	0	2	0	0	2	0	0	0	4	0	9	29
Count Total	0	62	0	12	0	0	0	3	1	9	478	2	12	4	451	93	1,127	
Pk Hr All	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**121**	**0**	**0**	**0**	**112**	**13**	**252**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	
Pk Hr HV%	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**2%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	0	1	*1*	0	0	0	0	*0*	1	1	0	0	*2*
6:30 AM	0	0	1	1	*2*	0	0	1	0	*1*	1	1	0	0	*2*
6:45 AM	0	0	0	0	*0*	0	0	1	0	*1*	0	1	0	0	*1*
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	5	0	0	*7*
7:45 AM	0	0	0	1	*1*	2	0	0	4	*6*	2	1	0	0	*3*
8:00 AM	**0**	**0**	**0**	**1**	**1**	**3**	**0**	**0**	**5**	**8**	**2**	**4**	**0**	**0**	**6**
8:15 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**11**	**11**	**3**	**2**	**1**	**1**	**7**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**5**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**4**	**5**	**1**	**1**	**11**
9:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	2	5	0	0	*7*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	5	2	0	0	*7*
9:30 AM	0	0	0	0	*0*	0	0	1	0	*1*	4	2	0	1	*7*
9:45 AM	0	0	0	0	*0*	0	0	11	1	*12*	3	13	0	0	*16*
10:00 AM	1	0	1	1	*3*	0	0	0	0	*0*	8	1	0	0	*9*
10:15 AM	0	0	0	0	*0*	0	0	0	2	*2*	7	6	0	1	*14*
10:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	9	4	0	0	*13*
10:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	3	3	0	0	*6*
11:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	4	0	0	0	*4*
11:15 AM	0	0	0	1	*1*	0	0	1	0	*1*	2	1	0	0	*3*
11:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
11:45 AM	0	0	1	0	*1*	0	0	1	0	*1*	2	2	0	1	*5*
12:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	6	2	0	0	*8*
12:15 PM	0	0	0	1	*1*	0	0	1	0	*1*	3	4	0	0	*7*
12:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	2	1	0	2	*5*
12:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	0	0	*1*
1:00 PM	0	0	0	0	*0*	0	0	1	0	*1*	3	2	0	1	*6*
1:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	1	5	0	1	*7*
1:30 PM	0	0	0	0	*0*	0	0	0	2	*2*	2	1	0	0	*3*
1:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	2	14	0	0	*16*
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
2:15 PM	0	0	0	0	*0*	0	0	13	0	*13*	12	7	0	0	*19*
2:30 PM	0	0	0	1	*1*	0	0	0	1	*1*	28	19	0	0	*47*
2:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	19	0	0	*19*
3:00 PM	0	0	0	1	*1*	0	0	0	1	*1*	4	21	0	0	*25*
3:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	2	0	0	*2*
3:30 PM	0	0	0	0	*0*	0	0	0	2	*2*	1	3	0	0	*4*
3:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	3	0	0	*4*
4:00 PM	0	0	1	0	*1*	0	0	0	1	*1*	3	2	2	0	*7*
4:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	3	7	0	0	*10*
4:30 PM	0	0	0	0	*0*	0	0	0	2	*2*	3	4	0	0	*7*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
5:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	3	0	0	*3*
5:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	2	5	1	0	*8*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	3	0	0	*6*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	3	0	0	*6*
6:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	2	10	1	1	*14*
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	0	*2*
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	6	0	1	*8*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	4	7	0	1	*12*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	3	0	0	*4*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	8	11	*20*	5	0	34	40	*79*	162	230	6	12	*410*
Peak Hour	**0**	**0**	**0**	**2**	***2***	**3**	**0**	**0**	**17**	***20***	**12**	**13**	**2**	**2**	**29**

Count Summaries - Heavy Vehicles

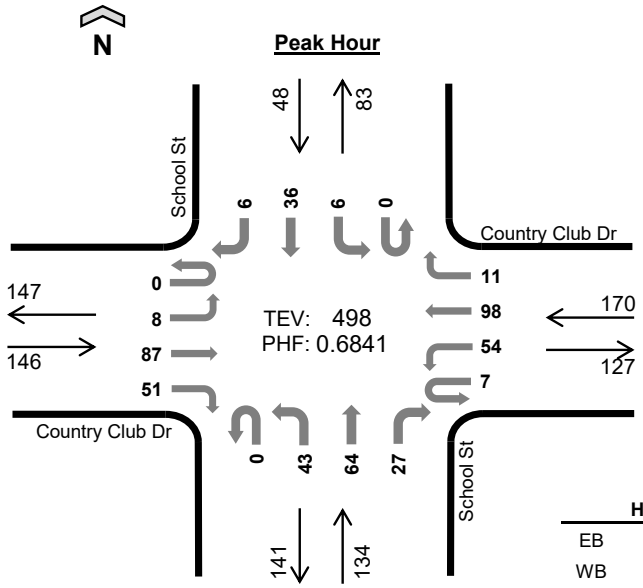
Interval Start	Project Driveway				Driveway				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
9:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	3
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	1	7	0	0	0	9	2	20	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	

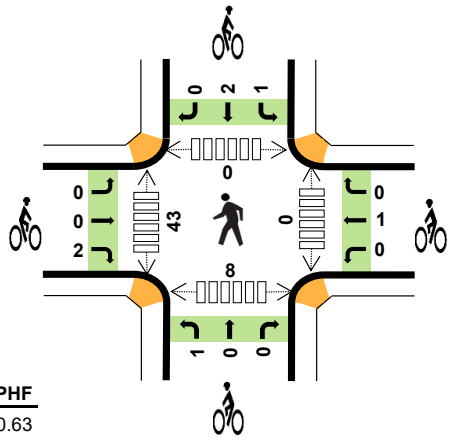
Count Summaries - Bikes

Interval Start	Project Driveway				Driveway				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4	0	6	6
8:00 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**8**	**14**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**11**	**25**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**20**
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	0	12	13
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	15
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:15 PM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13	16
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	15
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	16
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	5	0	0	0	0	0	0	34	0	0	0	40	0	79	
Pk Hr Bike	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**20**	

School St
Country Club Dr

Date: 4/8/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	1%	0.63
WB	2%	0.70
NB	1%	0.74
SB	4%	0.67
TOTAL	1%	0.68

Peak Hour Count Summaries

Peak Hour Interval Start		Country Club Dr Eastbound				Country Club Dr Westbound				School St Northbound				School St Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	3	32	19	2	18	28	2	0	15	13	7	0	0	2	1	142	0
8:15 AM		0	2	37	19	3	24	30	4	0	14	23	8	0	2	16	0	182	0
8:30 AM		0	2	9	7	1	9	20	3	0	7	21	6	0	1	11	3	100	0
8:45 AM		0	1	9	6	1	3	20	2	0	7	7	6	0	3	7	2	74	498
Pk Hr	All	0	8	87	51	7	54	98	11	0	43	64	27	0	6	36	6	498	
	HV	0	0	1	0	0	1	1	1	0	0	0	1	0	0	2	0	7	
	HV%	-	0%	1%	0%	0%	2%	1%	9%	-	0%	0%	4%	-	0%	6%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	1	0	0	*2*	1	1	1	2	*5*	0	12	0	0	*12*
8:15 AM	0	2	0	0	*2*	1	1	0	0	*2*	0	14	0	1	*15*
8:30 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	8	0	4	*12*
8:45 AM	0	0	1	1	*2*	0	0	0	1	*1*	0	9	0	3	*12*
Peak Hour	1	3	1	2	*7*	2	2	1	3	*8*	0	43	0	8	*51*

Count Summaries - All Vehicles

Interval Start	Country Club Dr Eastbound				Country Club Dr Westbound				School St Northbound				School St Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	2	0	0	0	8	0	0	1	0	0	0	0	3	0	14	0
6:15 AM	0	0	4	1	2	3	1	0	0	1	0	1	0	0	0	0	13	0
6:30 AM	0	1	6	1	0	2	8	2	0	0	0	0	1	3	0	0	24	0
6:45 AM	0	0	3	0	1	2	8	0	0	1	1	2	0	0	0	0	18	69
7:00 AM	0	1	9	2	3	3	8	0	0	1	1	1	0	1	0	1	31	86
7:15 AM	0	1	6	3	4	5	11	0	0	1	0	1	0	2	3	1	38	111
7:30 AM	0	0	10	2	1	2	17	1	0	5	1	1	0	3	6	1	50	137
7:45 AM	0	2	14	8	4	5	22	1	0	4	2	3	0	2	5	1	73	192
8:00 AM	**0**	**3**	**32**	**19**	**2**	**18**	**28**	**2**	**0**	**15**	**13**	**7**	**0**	**0**	**2**	**1**	**142**	**303**
8:15 AM	**0**	**2**	**37**	**19**	**3**	**24**	**30**	**4**	**0**	**14**	**23**	**8**	**0**	**2**	**16**	**0**	**182**	**447**
8:30 AM	**0**	**2**	**9**	**7**	**1**	**9**	**20**	**3**	**0**	**7**	**21**	**6**	**0**	**1**	**11**	**3**	**100**	**497**
8:45 AM	**0**	**1**	**9**	**6**	**1**	**3**	**20**	**2**	**0**	**7**	**7**	**6**	**0**	**3**	**7**	**2**	**74**	**498**
9:00 AM	1	2	12	2	3	4	8	6	0	1	4	4	0	0	5	2	54	410
9:15 AM	0	2	13	1	0	5	9	5	0	2	4	1	0	8	3	2	55	283
9:30 AM	0	2	9	4	1	2	16	2	0	1	7	3	0	0	2	0	49	232
9:45 AM	0	1	11	3	0	4	8	5	0	6	4	3	0	4	4	0	53	211
10:00 AM	0	0	9	1	2	4	13	1	0	4	3	3	0	3	7	0	50	207
10:15 AM	0	3	8	2	6	3	8	2	0	3	0	0	0	3	1	1	40	192
10:30 AM	0	0	11	2	1	9	11	3	0	2	4	3	0	2	3	2	53	196
10:45 AM	0	3	3	4	1	10	13	2	0	0	4	2	0	4	9	0	55	198
11:00 AM	0	1	13	3	2	14	15	2	0	0	7	2	0	3	12	2	76	224
11:15 AM	1	3	9	4	2	7	20	4	0	0	2	2	0	1	6	0	61	245
11:30 AM	0	2	10	3	2	5	10	2	0	2	6	4	0	3	5	3	57	249
11:45 AM	0	3	12	2	4	1	17	2	0	1	4	3	1	1	1	0	52	246
12:00 PM	1	3	6	1	0	3	25	1	0	2	3	2	0	6	2	6	61	231
12:15 PM	0	0	9	0	0	2	17	2	0	4	3	2	1	4	1	2	47	217
12:30 PM	0	2	9	3	2	4	10	1	0	2	8	1	0	2	3	3	50	210
12:45 PM	0	1	10	3	0	8	18	0	0	2	7	8	0	3	2	1	63	221
1:00 PM	0	2	6	3	3	2	19	1	0	0	10	3	0	0	4	1	54	214
1:15 PM	0	1	5	1	1	4	19	1	0	8	24	12	0	3	3	0	82	249
1:30 PM	0	2	15	0	1	5	13	3	0	5	7	4	0	3	0	5	63	262
1:45 PM	0	2	13	5	1	3	20	2	0	4	3	2	0	2	4	5	66	265
2:00 PM	0	1	11	6	2	6	14	2	0	2	3	7	0	5	4	0	63	274
2:15 PM	0	3	11	1	1	5	9	3	0	2	5	5	1	7	3	2	58	250
2:30 PM	0	2	13	3	3	2	20	6	0	1	1	2	2	6	2	1	64	251
2:45 PM	0	4	19	14	4	10	20	4	0	2	3	2	0	2	8	2	94	279
3:00 PM	0	2	18	24	3	4	32	3	0	15	33	5	0	4	7	3	153	369
3:15 PM	0	4	14	8	2	8	29	6	0	7	8	2	2	8	4	3	105	416
3:30 PM	0	8	15	6	2	6	28	9	0	6	14	15	0	3	6	5	123	475
3:45 PM	1	1	24	3	0	2	27	6	0	4	3	3	0	4	2	0	80	461
4:00 PM	0	1	13	0	1	5	20	4	0	2	3	3	1	0	4	2	59	367
4:15 PM	0	3	20	2	2	5	28	4	0	9	7	5	1	2	4	4	96	358
4:30 PM	0	6	17	4	0	4	27	5	0	3	10	4	3	6	4	6	99	334
4:45 PM	0	1	17	4	3	3	31	4	0	0	3	6	0	4	0	3	79	333
5:00 PM	0	2	16	4	1	2	21	3	0	3	6	1	0	6	2	1	68	342
5:15 PM	0	4	20	1	0	4	24	7	0	2	8	3	1	4	2	1	81	327
5:30 PM	0	10	22	1	1	5	17	11	0	4	6	2	0	6	0	10	95	323
5:45 PM	0	1	19	5	0	1	20	2	0	2	2	1	0	4	1	2	60	304
6:00 PM	2	3	14	1	0	1	19	2	0	1	4	3	0	0	3	1	54	290
6:15 PM	0	3	11	3	1	6	16	6	0	4	1	0	0	5	1	3	60	269
6:30 PM	0	6	6	3	1	2	19	7	0	1	2	0	0	4	2	7	60	234
6:45 PM	0	1	8	1	0	1	17	1	0	3	1	2	0	1	2	1	39	213
7:00 PM	0	1	12	2	1	3	22	0	0	0	2	1	1	0	0	1	46	205
7:15 PM	0	4	7	3	1	2	23	4	0	1	1	0	0	0	0	0	46	191
7:30 PM	1	3	10	1	1	1	9	1	0	1	1	1	0	2	3	3	38	169
7:45 PM	1	0	11	3	0	2	7	0	0	0	2	0	1	4	0	0	31	161
Count Total	8	122	682	218	84	265	969	162	0	181	312	173	16	159	194	106	3,651	
Pk Hr All	**0**	**8**	**87**	**51**	**7**	**54**	**98**	**11**	**0**	**43**	**64**	**27**	**0**	**6**	**36**	**6**	**498**	
Pk Hr HV	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**7**	
Pk Hr HV%	**-**	**0%**	**1%**	**0%**	**0%**	**2%**	**1%**	**9%**	**-**	**0%**	**0%**	**4%**	**-**	**0%**	**6%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	0	0	*0*	0	0	1	1	*2*	0	0	0	1	*1*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	1	*1*
6:45 AM	0	0	0	0	*0*	0	0	1	0	*1*	0	1	0	1	*2*
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	7	1	0	*8*
7:15 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	4	0	1	*5*
7:30 AM	0	0	0	0	*0*	0	0	0	1	*1*	0	2	3	6	*11*
7:45 AM	0	1	0	0	*1*	0	0	0	2	*2*	0	20	0	2	*22*
8:00 AM	**1**	**1**	**0**	**0**	**2**	**1**	**1**	**1**	**2**	**5**	**0**	**12**	**0**	**0**	**12**
8:15 AM	**0**	**2**	**0**	**0**	**2**	**1**	**1**	**0**	**0**	**2**	**0**	**14**	**0**	**1**	**15**
8:30 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**4**	**12**
8:45 AM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**9**	**0**	**3**	**12**
9:00 AM	0	2	1	1	*4*	0	0	0	0	*0*	0	3	0	5	*8*
9:15 AM	0	0	2	1	*3*	0	0	0	0	*0*	0	2	0	2	*4*
9:30 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	6	0	4	*10*
9:45 AM	0	0	0	1	*1*	0	0	1	0	*1*	0	2	0	1	*3*
10:00 AM	0	0	1	0	*1*	1	0	3	0	*4*	0	1	0	6	*7*
10:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	3	0	3	*8*
10:30 AM	0	0	0	0	*0*	0	0	1	0	*1*	3	0	0	4	*7*
10:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	1	0	0	9	*10*
11:00 AM	0	1	0	0	*1*	0	0	11	1	*12*	0	4	1	3	*8*
11:15 AM	0	0	0	0	*0*	0	0	3	2	*5*	1	5	2	1	*9*
11:30 AM	0	0	0	0	*0*	0	0	2	0	*2*	0	3	0	8	*11*
11:45 AM	0	0	0	0	*0*	1	0	2	3	*6*	2	5	0	4	*11*
12:00 PM	0	0	0	0	*0*	1	2	0	2	*5*	1	5	2	1	*9*
12:15 PM	0	0	0	0	*0*	2	1	0	0	*3*	0	3	0	2	*5*
12:30 PM	0	0	0	0	*0*	0	1	2	0	*3*	0	6	0	2	*8*
12:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	4	0	6	*10*
1:00 PM	0	0	0	0	*0*	0	1	0	1	*2*	0	0	1	4	*5*
1:15 PM	0	1	1	1	*3*	2	0	0	0	*2*	0	1	0	2	*3*
1:30 PM	0	1	0	0	*1*	1	0	1	2	*4*	0	0	0	0	*0*
1:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	2	0	0	*2*
2:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
2:15 PM	1	0	1	1	*3*	0	0	1	0	*1*	4	0	1	1	*6*
2:30 PM	0	1	1	0	*2*	0	3	0	0	*3*	0	3	0	4	*7*
2:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	1	3	*5*
3:00 PM	0	1	0	0	*1*	0	1	2	0	*3*	2	6	4	2	*14*
3:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	13	6	1	7	*27*
3:30 PM	0	0	0	0	*0*	2	0	0	2	*4*	3	10	6	5	*24*
3:45 PM	1	0	0	0	*1*	0	2	1	0	*3*	0	5	3	2	*10*
4:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	4	1	0	*5*
4:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	6	5	0	*12*
4:30 PM	0	0	0	0	*0*	0	0	2	0	*2*	0	7	1	1	*9*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	1	*3*
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	4	1	0	*5*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	3	0	*5*
5:30 PM	0	0	0	0	*0*	0	0	2	0	*2*	0	6	4	4	*14*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	5	1	1	*7*
6:00 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	1	1	*2*
6:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	5	3	2	*10*
6:30 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	2	*3*
6:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	5	0	3	*8*
7:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	1	3	0	*5*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	1	*3*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	7	1	0	*8*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
Count Total	4	14	8	7	*33*	13	15	40	23	*91*	34	220	52	127	*433*
Peak Hour	**1**	**3**	**1**	**2**	***7***	**2**	**2**	**1**	**3**	***8***	**0**	**43**	**0**	**8**	**51**

Count Summaries - Heavy Vehicles

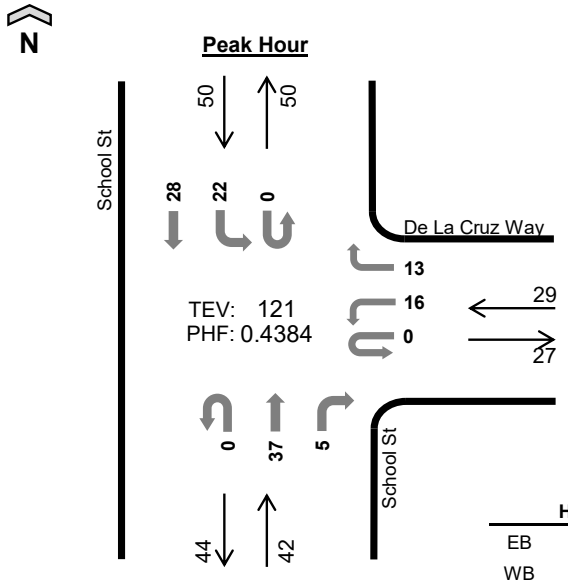
Interval Start	Country Club Dr				Country Club Dr				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**5**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**6**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**7**
9:00 AM	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	4	9
9:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	3	10
9:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	10
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	9
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	6
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
11:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	3	3
1:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5
2:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3	5
2:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	6
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	6
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	2	2	0	2	8	4	0	3	2	3	0	2	5	0	33	
Pk Hr Heavy	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**7**	

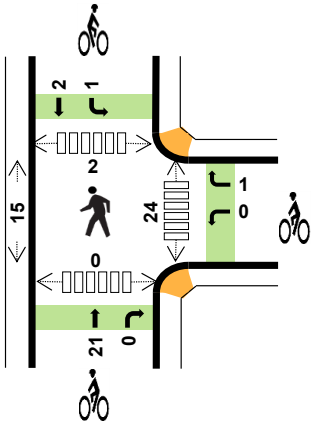
Count Summaries - Bikes

Interval Start	Country Club Dr				Country Club Dr				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4
8:00 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**9**
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**8**
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:00 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	4	5
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00 AM	0	0	0	0	0	0	0	0	0	8	0	3	0	0	1	0	12	13
11:15 AM	0	0	0	0	0	0	0	0	0	1	1	1	0	0	2	0	5	18
11:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	19
11:45 AM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0	6	25
12:00 PM	0	1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	5	18
12:15 PM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	16
12:30 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	3	17
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12
1:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	9
1:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8
1:30 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	4	9
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	9
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	6
2:30 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	5
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3:00 PM	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	3	7
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	4	7
3:45 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3	10
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	8
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
6:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	2	1	7	3	2	2	10	1	0	20	13	7	0	3	19	1	91	
Pk Hr Bike	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**8**	

School St
De La Cruz Way

Date: 4/8/2026
Count Period: 6:00 AM to 8:00 PM
Peak Hour: 2:45 PM to 3:45 PM





	HV%	PHF
EB	--	--
WB	3%	0.73
NB	0%	0.28
SB	4%	0.48
TOTAL	2%	0.44

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:45 PM		0	0	0	0	0	6	0	4	0	0	2	1	0	3	9	0	25	0
3:00 PM		0	0	0	0	0	6	0	0	0	0	34	3	0	8	18	0	69	0
3:15 PM		0	0	0	0	0	3	0	6	0	0	1	1	0	4	1	0	16	0
3:30 PM		0	0	0	0	0	1	0	3	0	0	0	0	0	7	0	0	11	121
Pk Hr	All	0	0	0	0	0	16	0	13	0	0	37	5	0	22	28	0	121	
	HV	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3	
	HV%	-	-	-	-	-	0%	-	8%	-	-	0%	0%	-	5%	4%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
2:45 PM	0	1	0	0	*1*	0	1	0	0	*1*	0	0	0	0	*0*
3:00 PM	0	0	0	1	*1*	0	0	12	0	*12*	13	12	1	0	*26*
3:15 PM	0	0	0	0	*0*	0	0	5	0	*5*	4	2	1	0	*7*
3:30 PM	0	0	0	1	*1*	0	0	4	3	*7*	7	1	0	0	*8*
Peak Hour	0	1	0	2	*3*	0	1	21	3	*25*	24	15	2	0	*41*

Count Summaries - All Vehicles

Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	4
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	4	6
7:45 AM	0	0	0	0	0	1	0	1	0	0	3	1	1	2	2	0	11	17
8:00 AM	0	0	0	0	0	2	0	5	0	0	19	0	0	7	12	0	45	62
8:15 AM	0	0	0	0	0	3	0	15	0	0	5	1	0	9	5	0	38	98
8:30 AM	0	0	0	0	0	1	0	9	0	0	2	0	0	4	2	0	18	112
8:45 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	5	3	0	12	113
9:00 AM	0	0	0	0	0	1	0	0	0	0	1	1	0	2	0	0	5	73
9:15 AM	0	0	0	0	0	2	0	1	0	0	4	1	0	2	1	0	11	46
9:30 AM	0	0	0	0	1	3	0	0	0	0	3	0	0	0	2	0	9	37
9:45 AM	0	0	0	0	0	0	0	5	0	0	1	2	0	4	0	0	12	37
10:00 AM	0	0	0	0	0	1	0	2	0	0	0	0	0	3	0	0	6	38
10:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	5	32
10:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3	26
10:45 AM	0	0	0	0	0	0	0	4	0	0	1	1	0	0	1	0	7	21
11:00 AM	0	0	0	0	0	1	0	7	0	0	3	0	0	2	1	0	14	29
11:15 AM	0	0	0	0	0	2	0	3	0	0	0	0	0	1	0	0	6	30
11:30 AM	0	0	0	0	0	0	0	2	0	0	1	1	0	2	1	0	7	34
11:45 AM	0	0	0	0	1	0	0	1	0	0	0	1	0	0	1	0	4	31
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	4	21
12:15 PM	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	4	19
12:30 PM	0	0	0	0	0	0	0	5	0	0	1	1	1	0	2	0	10	22
12:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	3	1	0	8	26
1:00 PM	0	0	0	0	0	2	0	2	0	0	0	2	1	3	3	0	13	35
1:15 PM	0	0	0	0	0	1	0	1	0	0	0	4	0	9	1	0	16	47
1:30 PM	0	0	0	0	0	1	0	3	0	0	2	0	0	1	0	0	7	44
1:45 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	0	5	41
2:00 PM	0	0	0	0	0	2	0	4	0	0	3	3	0	2	0	0	14	42
2:15 PM	0	0	0	0	0	1	0	2	0	0	0	1	0	4	1	0	9	35
2:30 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	1	0	7	35
2:45 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**4**	**0**	**0**	**2**	**1**	**0**	**3**	**9**	**0**	**25**	**55**
3:00 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**34**	**3**	**0**	**8**	**18**	**0**	**69**	**110**
3:15 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**6**	**0**	**0**	**1**	**1**	**0**	**4**	**1**	**0**	**16**	**117**
3:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**11**	**121**
3:45 PM	0	0	0	0	0	1	0	1	0	0	0	1	0	6	0	0	9	105
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	2	0	6	42
4:15 PM	0	0	0	0	0	0	0	2	0	0	4	1	1	3	0	0	11	37
4:30 PM	0	0	0	0	0	2	0	4	0	0	0	1	0	7	2	0	16	42
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	1	0	6	0	0	9	42
5:00 PM	0	0	0	0	0	1	0	3	0	0	5	1	0	3	1	0	14	50
5:15 PM	0	0	0	0	0	2	0	8	0	0	1	2	0	1	0	0	14	53
5:30 PM	0	0	0	0	0	5	0	3	0	0	2	1	0	1	2	0	14	51
5:45 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	2	0	0	8	50
6:00 PM	0	0	0	0	0	1	0	4	0	0	1	0	0	1	0	0	7	43
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	4	1	0	6	35
6:30 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	1	2	0	6	27
6:45 PM	0	0	0	0	0	0	0	4	0	0	0	1	0	2	0	0	7	26
7:00 PM	0	0	0	0	0	0	0	6	0	0	0	4	0	3	0	0	13	32
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	29
7:30 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	1	0	7	30
7:45 PM	0	0	0	0	0	1	0	2	0	0	0	0	0	1	1	0	5	28
Count Total	0	0	0	0	3	63	0	143	0	0	108	50	6	142	84	0	599	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**13**	**0**	**0**	**37**	**5**	**0**	**22**	**28**	**0**	**121**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**8%**	**-**	**-**	**0%**	**0%**	**-**	**5%**	**4%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
6:00 AM	0	0	1	1	*2*	0	1	0	0	*1*	3	0	0	0	*3*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	0	0	0	*0*	0	1	0	1	*2*	0	3	0	0	*3*
6:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:00 AM	0	0	0	0	*0*	0	0	0	1	*1*	1	3	1	0	*5*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	1	*1*	2	2	0	0	*4*
8:00 AM	0	0	0	0	*0*	0	1	0	6	*7*	4	6	0	0	*10*
8:15 AM	0	1	0	1	*2*	0	0	0	2	*2*	3	0	0	0	*3*
8:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
8:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	2	0	0	0	*2*
9:00 AM	0	1	0	0	*1*	0	0	2	0	*2*	1	2	0	0	*3*
9:15 AM	0	1	2	0	*3*	0	0	0	0	*0*	2	2	0	0	*4*
9:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	2	0	0	0	*2*
9:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	3	0	0	*3*
10:00 AM	0	0	0	0	*0*	0	3	1	0	*4*	2	0	0	0	*2*
10:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	3	1	0	0	*4*
10:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
10:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	1	0	0	*3*
11:00 AM	0	0	0	0	*0*	0	10	0	1	*11*	0	3	0	0	*3*
11:15 AM	0	0	0	0	*0*	0	0	0	1	*1*	1	1	0	0	*2*
11:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
11:45 AM	0	1	0	0	*1*	0	0	3	1	*4*	2	2	0	1	*5*
12:00 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	2	0	0	*2*
12:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	2	0	0	*4*
12:30 PM	0	1	1	0	*2*	0	0	0	0	*0*	3	5	0	1	*9*
12:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	1	0	0	*3*
1:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 PM	0	1	1	1	*3*	0	0	0	1	*1*	0	0	0	0	*0*
1:30 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
1:45 PM	0	0	0	0	*0*	0	0	1	1	*2*	1	0	1	0	*2*
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
2:15 PM	0	1	1	1	*3*	0	0	0	0	*0*	1	3	0	0	*4*
2:30 PM	0	1	0	0	*1*	0	0	2	0	*2*	0	0	0	0	*0*
2:45 PM	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
3:00 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**12**	**0**	**12**	**13**	**12**	**1**	**0**	**26**
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**5**	**4**	**2**	**1**	**0**	**7**
3:30 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**4**	**3**	**7**	**7**	**1**	**0**	**0**	**8**
3:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
4:00 PM	0	0	0	0	*0*	0	0	3	0	*3*	0	6	1	0	*7*
4:15 PM	0	0	0	0	*0*	0	1	1	1	*3*	3	2	0	0	*5*
4:30 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	2	0	0	*2*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	1	0	*4*
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	3	0	*3*	0	1	0	0	*1*
5:45 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	3	0	0	*3*
6:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
6:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	1	0	0	*1*
6:30 PM	0	0	0	0	*0*	0	0	1	0	*1*	1	4	0	0	*5*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	4	0	0	*7*
7:00 PM	0	4	3	0	*7*	0	0	0	1	*1*	5	0	4	0	*9*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	1	0	*2*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	4	0	0	*4*
Count Total	0	13	11	9	*33*	0	20	38	27	*85*	85	90	11	2	*188*
Peak Hour	**0**	**1**	**0**	**2**	***3***	**0**	**1**	**21**	**3**	***25***	**24**	**15**	**2**	**0**	**41**

Count Summaries - Heavy Vehicles

Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	5
9:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	6
9:15 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3	7
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	7
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	3	5
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	3	3
2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	4
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**6**
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**
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4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Count Total	0	0	0	0	1	3	0	9	0	0	4	7	0	4	5	0	33	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**3**	

Count Summaries - Bikes

Interval Start	n/a				De La Cruz Way				School St				School St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6	0	7	8
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	10
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
9:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	4
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00 AM	0	0	0	0	0	0	0	10	0	0	0	0	0	1	0	0	11	11
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	12
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
11:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	16
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12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
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1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	4
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**2**	**0**	**7**	**25**
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4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3	13
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	6
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
6:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	5
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	20	0	0	37	1	0	9	18	0	85	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**21**	**0**	**0**	**1**	**2**	**0**	**25**	

Appendix B – Trip Generation and Distribution Diagrams

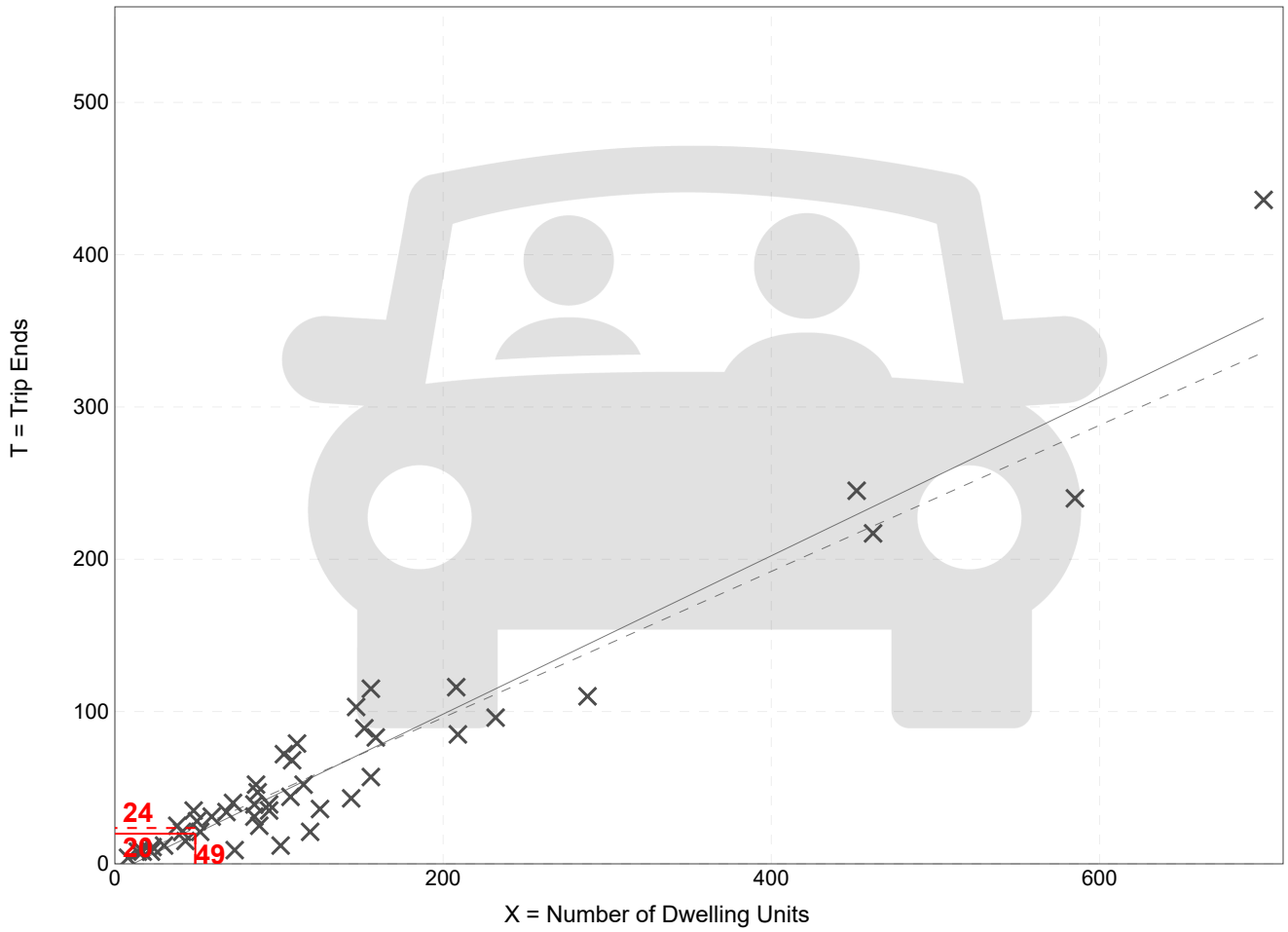
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	46
Avg. Num. of Dwelling Units:	135
Directional Distribution:	25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Fitted Curve Equation: T = 0.52(X) - 5.70

R^2= 0.92

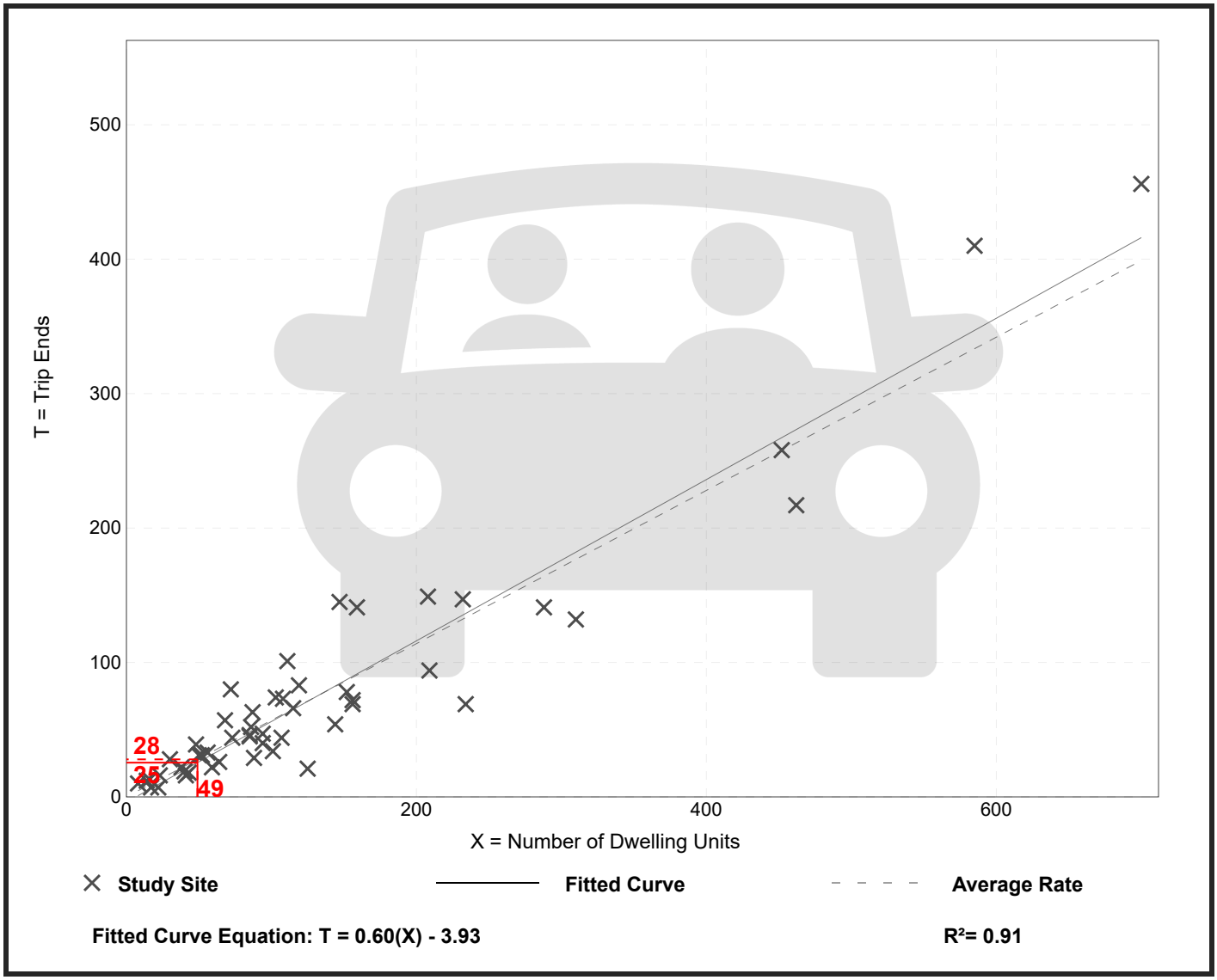
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	51
Avg. Num. of Dwelling Units:	136
Directional Distribution:	59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Appendix C – Architect's Title Sheet with Parking Calculations

1600-1660 SCHOOL STREET SITE

Town of Moraga, California 94556
February 27, 2026

View at Corner at School Street and Country Club Drive

Project Information:

Building Type: VB
Occupancy: R3
Address: 1600-1660 School Street, Moraga California 94556
Parcel Numbers: 257-190-049, 257-190-050, 257-190-051, 257-190-052

Vicinity Map

Sheet Index

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Project Summary ..... PS

Civil
Vesting Tentative Map for Condominium Purposes TM 1.0
Existing Conditions & Demolition Plans ..... TM 2.0
Preliminary Site Plan ..... TM 3.0
Preliminary Grading and Drainage Plan ..... TM 4.0
Preliminary Utility Plan ..... TM 5.0
Preliminary Stormwater Control Plan ..... TM 6.0
Fire Access Plan ..... TM 7.0
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Preliminary Landscape Plan L-2

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Project Team:

OUTDO COUNTRY CLUB DRIVE, LLC
Applicant: OUTDO Country Club Drive, LLC
1620 School Street, Suite 110
Moraga, CA 94556
Contact: Jeff Stone

WHA
Architect: WHA Architects
6101 Bollinger Canyon Road, Suite 210
San Ramon, CA 94583
Contact: Robert Lee
925.463.1700

cbg CARLSON, BARBEE & GIBSON, Inc.
Civil Engineering: CBG
2633 Camino Ramon, Suite 350
San Ramon, CA 94583
Contact: Ryan Hansen
925.866.0322

ENVIRONMENTAL FORESIGHT, INC. Landscape Architecture
Landscape Architecture: Environmental Foresight
2065 N. Broadway, Suite 203
Walnut Creek, CA 94596
Contact: Kevin Proctor
925.945.0300

SITE INFORMATION

Street Addresses	1600,1620, 1640, 1660 School Street
Current Zone	MCSP-OR
Minimum Density	12 du/ac
Maximum Density	24 du/ac
APN / Parcel ID	257-190-049, 257-190-050, 257-190-051, 257-190-052

6th Cycle Housing Element Update (Draft)

General Plan 2040 Designation	MC Mixed Use - Moraga Center
Zone	MCSP Moraga Center Specific Plan
Town of Moraga Special District	PDA Priority Development Area

SUMMARY: PROPOSED PROJECT

Site Area (Gross)	2.95	Acres	128,474 Gross Lot Area
Total Number of Base Units	49	Townhomes	
Market Rate	44		
Affordable Units (10%) of Base Units	5	Moderate Income Level	
Unit Type		Townhouse Style Condominiums	
Density (gross)	16.61	Dwelling Units/Acre	

BUILDING CODE SUMMARY

Reference	2022 CALIFORNIA RESIDENTIAL CODE, TITLE 24, PART 2.5
Occupancy	R-3
Fire Sprinkler System	NFPA - 13D (sprinklers will be added in attics and garages per MOFD)
Type of Construction	VB NON-RATED
Allowable Height	3 STORIES
Allowable Area	PER C.R.C
Accessibility	PER 2022 C.B.C CHAPTER 11A
Aerial fire apparatus access roads	None required - 32' max eave height per building (approval by MOFD)
California Wildlife Urban Interface	Project construction will comply with CWUIC Chapter 5

MIXED OFFICE / RESIDENTIAL DISTRICT REGULATIONS (MCSP MU-OR) MMC Chapter 8.42 - Mixed Office / Residential District				
DESCRIPTION	**REQUIRED**			**PROPOSED**
Density (Chapter 8.42.040)	Min. 12	Max. 24		16.6
Minimum Lot Area	10,000 square feet			128,474 square feet
Minimum Lot Width	30 feet			437 feet
Minimum Lot Depth	100 feet			259 feet
Minimum Frontage	30 feet			437 feet (School St) 363 feet (Country Club Dr)
Setbacks (feet)				
Front-yard [2]	0			10
Side-yard				
Interior Side	0			15
Street Side	0			10
Rear-yard (to trail)	N/A			1.9
Rear-yard (to PL)	0			66
Max. Height	Limited to three stories (not to exceed 45 feet)			Three Stories (40'-8" max height)
Private Outdoor Space				
Balconies may be provided to fullfill this standard.	>=5% of each unit's floor area (min. 50SF, 5' min. dimension)		**Plan**	**SF** / **5% min**
			Plan 1	50* / 71.9
			Plan 2	208 / 94.05
			Plan 3	126 / 103.75
			Plan 3X	107 / 106.35
Minimum building separation				
3 stories	35 feet			10 feet*
Max. Lot Coverage	60%			35.04%
Maximum Floor Area Ratio	0.85 (garages only - residential exempt)			0.19 (garages only - residential exempt)
PARKING (Chapter 8.76.100)	REQUIRED			PROPOSED
Parking Ratio	2.0 covered spaces / unit	98 total		2.0 covered spaces / unit 98 total 2 on site parking spaces 14 street parking on School St & Country Club Dr.
Guest Parking	1 space per 4 units	13 total		>1 space per 4 units 16 total
Total Parking		111 total		114 total

*Waiver request from Townhome Building Development Regulations

Building Configurations and Sizes											Site Coverage	
Building Type	Units	Net Living SF (per Bldg.)	Garage SF (per Bldg.)	Open Space (Porch/Decks SF per Bldg.)	Gross SF (per Bldg.)	Number of Bldgs.	Total Living SF.	Total Garage SF	Total Open Space SF	Total Gross SF	Area per Bldg.	Total Bldg. Coverage
100	3X- 2- 3X	6,135	1,501	422	7,804	1	6,135	1,501	422	7,804	2,843	2,843
200	3X-2-2-3X	8,016	2,024	630	10,250	4	32,064	8,096	2,520	41,000	3,748	14,992
300	3X-1-2-3X	7,573	2,046	422	10,050	3	22,719	6,138	1,266	30,150	3,551	10,653
400	3X-2-2-2-3X	9,897	2,547	838	12,696	2	19,794	5,094	1,676	25,392	4,710	9,420
500	3X-1-2-3-3-1-3X	15,042	4,092	882	20,016	1	15,042	4,092	882	20,016	7,103	7,103
Total						11	95,754	24,921		124,362		45,011

UNIT SUMMARY

Plan Types	QTY	Percentage	Bdrm / Bath	Garage Type	Number of Levels	Net Sq. Ft.*	Total Net Sq. Ft.	Garage Sq. Ft	Total Garage Sq Ft.	Private Open Space Sq. Ft.***	Gross Sq. Ft.**	Total Gross Sq. Ft.
Plan 1	5	10%	3 bdrm / 3 bath	Tandem 2-Car	3	1438	7,190	545	2,725	0	2,246	11,230
Plan 2	20	41%	3 bdrm / 2.5 bath	STD. 2-Car	3	1881	37,620	523	10,460	208	2,446	48,920
Plan 3	2	4%	4 bdrm / 3.5 bath	STD. 2-Car	3	2075	4,150	489	978	126	2,637	5,274
Plan 3X	22	45%	4 bdrm / 3.5 bath	STD. 2-Car	3	2127	46,794	489	10,758	107	2,679	58,938
TOTAL	49	100%	-		-		95,754		24,921			124,362

*Net SF: Measured to outside face of stud, excludes garage area, deck, and porches. Includes air gap per unit.
**Gross SF: Measured to outside face of stud, includes garage area. Includes air gap per unit. Excludes porches and balconies.
***Open Space includes porches and decks only, with minimum of 5' dimension.
Note: Average market rate unit size: 2013SF; 70% of 2013SF = 1410SF min. affordable unit size (actual: 1438SF)

PROJECT SUMMARY

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

PS

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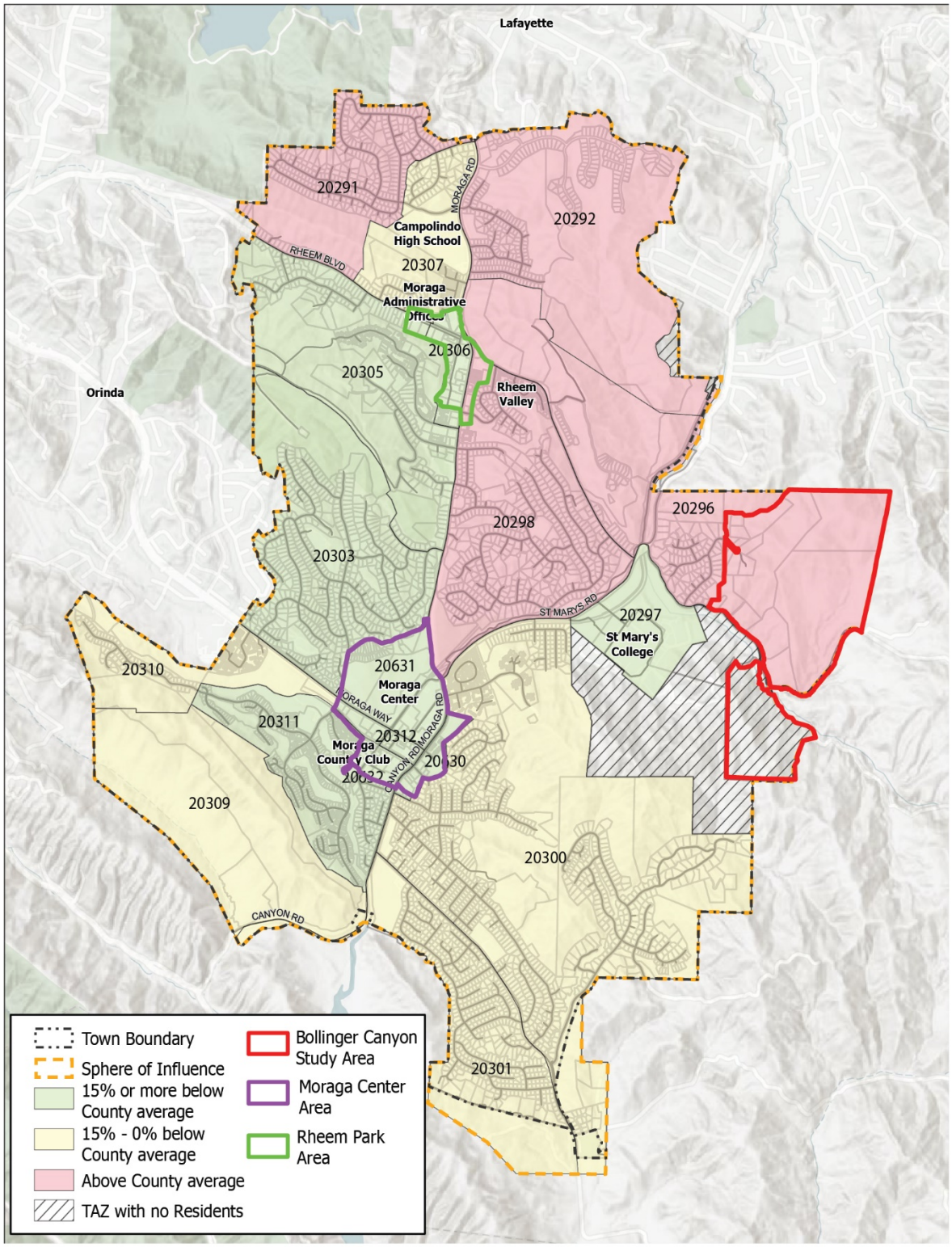
ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Appendix D – Vehicle Miles Traveled Screening Map

Figure 4.14-4 TAZs within the Town of Moraga

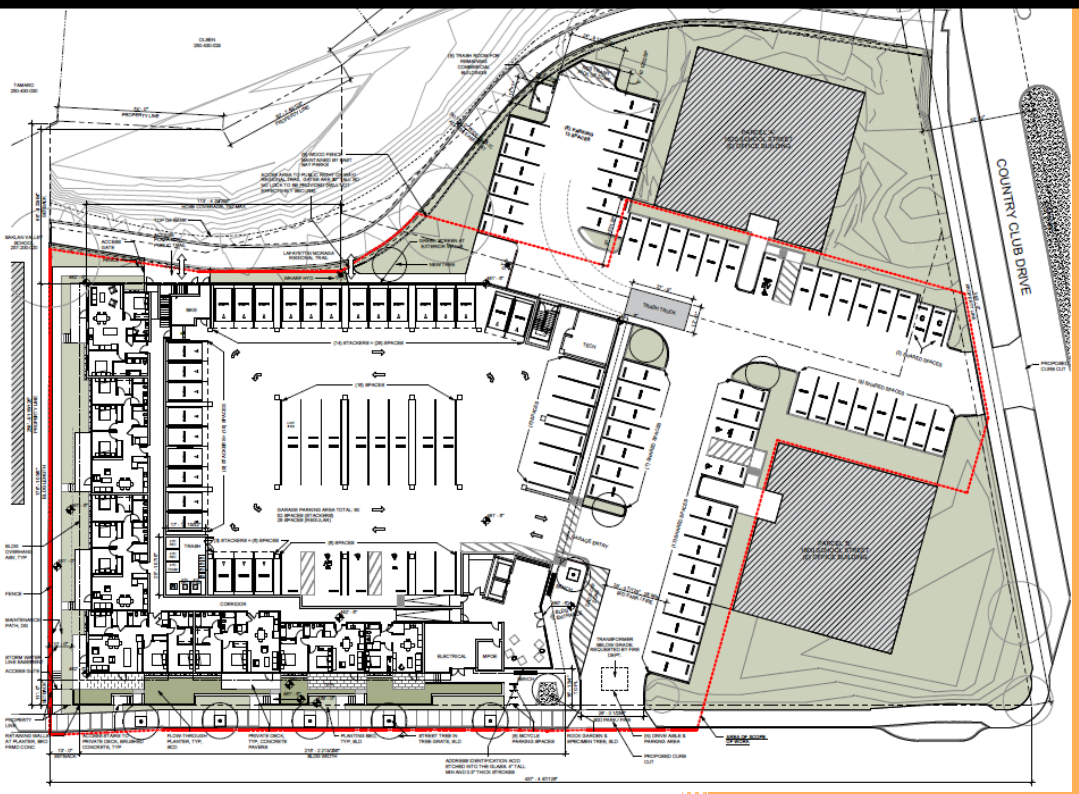


Note: TAZ 20301 is not included as a Moraga Town TAZ because it falls largely outside Town limits.

Source: City of Moraga, 2002.

Traffic Impact Study

1600 School Street Residential
Moraga, CA



TJKM

August 9, 2024

Traffic Impact Study

1600 School Street Residential

Moraga, California

Submitted May 31, 2024

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TJKM

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EXECUTIVE SUMMARY

This report summarizes the results of a Traffic Impact Study (TIS) that was conducted for the proposed 1600 School Street residential development (Project), located at the southwest corner of Country Club Drive & School Street in the Town of Moraga, California.

This TIS was conducted consistent with State and Town of Moraga guidelines and standards. This document was prepared in accordance with best professional practices and standards that assess the impacts of a proposed development on the transportation system, and as appropriate, recommends improvements to lessen or negate those impacts. Transportation analyses, as presented in this TIS, involve the evaluation of existing and anticipated future roadway conditions, including with and without the proposed development, and recommend transportation improvements to offset both the impacts of the increase in future traffic volumes and the changes in traffic operations due to the development. The analysis herein is intended to assist public officials and developers to balance interrelations between efficient traffic movements with necessary lane access.

Project Overview

The Project is located at the southwest corner of Country Club Drive & School Street in the Town of Moraga, California. The Project site currently has four single-story office buildings. The Project would demolish two of the office buildings and construct a 66-unit apartment building. The Project site will be accessible via one existing driveway on Country Club Drive and one relocated driveway on School Street.

The purpose of this TIS is to evaluate the impacts on the transportation infrastructure due to the addition of the traffic from the proposed Project. The report includes a vehicle miles traveled (VMT) analysis, intersection level of service (LOS) capacity analyses of key intersections, a queuing analysis, and evaluations and recommendations concerning Project site access and on-site circulation for vehicles, bicycles, and pedestrians.

To evaluate the impacts on the transportation infrastructure due to the addition of traffic from the proposed Project, two study intersections and two access points were identified with input from Town staff and evaluated during the weekday morning (a.m.) peak hour and weekday afternoon (p.m.) peak hour under two study scenarios. The study intersections were evaluated under:

- Existing Conditions, without and with the project.

Project Trip Summary

Using published trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (TGM), the number of trips generated by the proposed Project was approximated using a "Conservative Alternative" following a discussion with Town of Moraga staff and a "Standard Alternative" following the methodology published in ITE's Trip Generation Handbook, 3rd Edition (TGH). Under the Conservative Alternative, the proposed Project would generate approximately 300 trips new trips during a typical weekday, including 24 (6 in, 18 out) in the a.m. peak hour and 26 (16 in, 10 out) in the p.m. peak

hour. Under the Standard Alternative, the proposed Project would generate approximately 140 trips net new trips during a typical weekday, including two (-8 in, 10 out) in the a.m. peak hour and 15 (12 in, 3 out) in the p.m. peak hour. Note that negative trips indicates a decrease in the number of trips generated by the Project site after Project construction compared to that of existing land uses at the Project site.

Moraga Intermediate School Children

The proposed Project would thus potentially generate up to 20 (10 inbound, 10 outbound) school-related peak hour vehicular trips per day if each child was individually dropped off and picked up from school. This is however unlikely given that children have the options of walking, biking, or carpooling to school and that the estimates used by Town of Moraga staff to generate the number of school-related peak hour vehicular trips per day are conservative.

As discussed in Section 4.3, 20 percent of Project trips were assigned to Canyon Road to the south via De La Cruz Way, equivalent to four a.m. and five p.m. peak hour trips under the Conservative Analysis, and zero a.m. and three p.m. peak hour trips under the Standard Analysis. This is the most direct route to the school, although parents may choose to take other routes such as Country Club Drive to Canyon Road.

These small numbers of new students are unlikely to have any noticeable effect on drop-off and pick-up operations at Moraga Intermediate School.

Furthermore, drop-off and pick-up trips by parents would likely be combined with their trips commuting to work (i.e., the trips would already occur from the proposed Project). Thus, the new school-related trips are unlikely to have any noticeable effect on traffic conditions on the local roadway network.

Vehicle Miles Traveled Summary

As part of the *Comprehensive Advance Planning Initiative Environmental Impact Report* (2022) for the Town of Moraga, a screening map for the Town was developed. The Project is located in transportation analysis zone (TAZ) #20632, which has existing home-based VMT at least 15 percent below the countywide average. Thus, the Project is presumed to have a **less-than-significant impact** on VMT.

Level of Service Summary

Existing Conditions

Under this scenario, all intersections operate at acceptable LOS A or B during both peak hours.

Existing plus Project Conditions

Under this scenario, all intersections are expected to continue to operate at acceptable LOS B or better during both peak hours. Thus, the proposed development **would be consistent** with applicable jurisdictional standards for the surrounding road network under Existing plus Project Conditions.

Additional Transportation Analyses Summary

Pedestrian Impacts

A significant impact occurs if a proposed project conflicts with applicable or adopted policies, plans, or programs related to pedestrian facilities or otherwise decreases the performance or safety of pedestrian facilities.

Although the Project would add a modest number of trips to the roadway network surrounding the project site, these trips would not create any new hazards to pedestrians.

Additionally, a discussion with Town of Moraga staff indicated that the proposed Project would be required to install a 50- to 75-foot right-turn lane pocket for the eastbound-right movement of Country Club Drive & School Street (Study Intersection 1) via a conditions of approval. The new right-turn lane pocket would be built in place of the existing "wedge" between the existing eastbound-through lane and the existing channelized eastbound-right turn lane. Further improvements to Country Club Drive & School Street (Study Intersection 1) include the following:

- Installation of a curb extension (bulb-out) at the southwest corner;
- Installation of a median refuge on the west leg marked crosswalk;
- Installation of a marked crosswalk on the south leg;
- Installation of a Class I pedestrian-bike facility along Country Club Drive from School Street to the head of the existing Lafayette-Moraga Regional Trail on Country Club Drive.

The improvements would shorten the pedestrian crossing distance on the west leg and increase safety on the west and south legs for both pedestrians and cyclists.

Thus, the proposed Project would not result in any such pedestrian conflicts; therefore, the impact to pedestrian facilities is expected to be **less-than-significant**.

Bicycle Impacts

A significant impact occurs if a proposed project conflicts with applicable or adopted policies, plans, or programs related to bicycle facilities or otherwise decreases the performance or safety of bicycle facilities. Although the project would add a modest number of trips to the roadway network surrounding the project site, these trips would not create any new hazards to bicyclists. The proposed Project would not result in any such conflicts but would improve existing facilities by installing a Class I pedestrian-bike facility along Country Club Drive from School Street to the Lafayette-Moraga Regional Trail; therefore, the impact to bicycle facilities is expected to be **less-than-significant**.

Transit Impacts

A proposed project is considered to have a significant impact on transit if it conflicts with existing or planned transit facilities, or if it is expected to generate additional transit trips and it does not provide adequate facilities for additional pedestrians and bicyclists to access transit routes and stops. While the Project is not expected to generate any substantial increases in transit ridership, any increases resulting from the Project

could easily be accommodated by the surrounding bus services. Therefore, the impact to transit facilities is expected to be **less-than-significant**.

Site Access Management

The proposed Project would be accessed via one existing driveway on Country Club Drive and one relocated driveway on School Street, as shown in **Figure 2**. The Country Club Drive driveway is right-in/right-out only and has clear sight lines. Based on the site plan, no sight distance obstructions are expected at the relocated full access driveway on School Street.

The Saklan School staff observed during a survey of The Saklan School pick-up/drop-off operations on-street parking inventory along School Street becoming fully occupied to Country Club Drive. While the proposed Project would move the existing School Street Driveway on the Project site north by approximately 100 feet, the observation by The Sakland School staff indicates that the School Street Driveway of the proposed Project could become blocked by illegally parked vehicles. As such, it is recommended that red curb paint be applied for 20 feet on both sides of the School Street Driveway of the proposed Project.

Access management impacts of the proposed development are considered to be **insignificant** provided that red curb is applied on both sides of the School Street Driveway of the proposed Project.

Internal Circulation

Internal circulation of the site would be via 28-foot two-way drive aisles with right-angle parking on both sides, as shown in **Figure 1**. Within the parking garage, most parking is provided via two-vehicle stackers, with adequate aisle width to maneuver in and out. Project plans show turning templates for both fire trucks and garbage trucks, demonstrating that there is adequate room for both to maneuver on-site and access all buildings and dumpsters. The proposed Project would thus **not result in any significant impacts** to internal circulation.

Parking

A significant impact would occur if the off-street parking facilities of a proposed project conflicts with or creates inconsistencies with adopted plans, guidelines, or policies or does not provide adequate access within the site.

The total required number of vehicular spaces is thus 107 spaces.

The Project proposes 80 garage spaces and 13 shared spaces, for a total of 93 proposed residential spaces. The Project additionally proposes 16 shared spaces for office use. The total number of spaces proposed by the Project equates to 109 spaces, which satisfies the vehicular parking requirements.

Of note, the Project would provide one accessible vehicle space, one accessible van space, and one accessible electric vehicle/van space for residential uses, as well as one accessible vehicle space, one accessible van space, and one accessible electric vehicle/van space on a neighboring parcel for office uses.

In addition to vehicle parking, the California Green Building Code Section 5.106.4.1.2 specifies that residential uses of 10 or more units require long-term bicycle parking in the amount of five percent of automobile parking. Short-term bicycle parking for uses attracting visitors must also be provided in the amount of five percent of automobile parking. For the residential use, this comes out to five long-term spaces, and for the office use this comes out to one short-term space, for a total of six spaces required. The Project proposes to provide a bike room in the apartment building's garage with space for eight bikes. TJKM recommends that bike racks be installed near the entrance of the existing office buildings to provide short term bicycle parking. Although this may be proposed, it is not shown on the site plan in **Figure 2**.

With these additions, parking impacts of the proposed Project would be **less-than-significant**.

The Saklan School Drop-Off and Pick-Up Operations

The proposed Project would thus potentially generate up to eight (four inbound, four outbound) school-related peak hour vehicular trips per day if each child was individually dropped off and picked up from school.

This is however unlikely given that children have the options of walking, biking, or carpooling to school considering the close proximity of the proposed Project to The Saklan School and that the estimates used by Town of Moraga staff to generate the number of school-related peak hour vehicular trips per day are conservative. Additionally, The Saklan School staff observed high levels of congestion of on-street parking (along School Street) and off-street parking facilities (e.g., Holy Trinity parking lot) during school start and release times, which would further discourage parents who live close by to pick-up/drop-off children in vehicles.

Thus, the proposed Project is **not likely to have a significant adverse effect** on existing drop-off and pick-up operations at The Saklan School.

Recommendations

TJKM recommends the following:

- Provide bike racks near the entrance to the existing office buildings to provide short-term bicycle parking;
- Replace the existing channelized eastbound-right turn lane and corresponding wedge with an eastbound-right turn lane pocket at Country Club Drive at Country Club Drive & School Street (Study Intersection 1);
- Install a bulb-out on the southwest corner and a median refuge on the west leg marked crosswalk to shorten existing pedestrian crossing distances across Country Club Drive at Country Club Drive & School Street (Study Intersection 1);
- Install a Class I pedestrian-bicycle facility along Country Club Drive from School Street to the head of the Lafayette-Moraga Regional Trail

- Install a high-visibility marked crosswalk on the south leg of Country Club Drive & School Street (Study Intersection 1);
- Add red curb paint 20 feet on each side of the School Street Project Driveway

1.0 INTRODUCTION

This report summarizes the results of a Traffic Impact Study (TIS) conducted for the proposed 1600 School Street residential development (Project) located at the southwest corner of Country Club Drive & School Street in the Town of Moraga, California. The Project would demolish two single-story office buildings of a four office-building complex and construct a 66-unit apartment building. The Project site will be accessible via one existing driveway on Country Club Drive and one relocated driveway on School Street.

This chapter discusses the TIS purpose, the Project study area, and the scenarios analyzed. **Figure 1** shows the Project study area and the Project site location. **Figure 2** shows the Project's site plan.

1.1 Study Purpose

The purpose of this report is to provide summaries of changes in vehicle miles traveled (VMT) and traffic impacts on the surrounding roadway network as a result of the proposed Project. The VMT analysis is based on the methodology outlined in the Contra Costa Transportation Authority (CCTA) Technical Procedures (Procedures), dated November 2022. An LOS analysis was conducted to determine the proposed Project's impacts on the surrounding roadway network and consistency with Town of Moraga plans and standards.

1.2 Study Locations

Study Intersections

TJKM evaluated traffic conditions at two study intersections and two driveways during the a.m. and p.m. peak hours on Wednesday, April 10, 2024, which represents a typical weekday. The study intersections were selected based on TJKM's working knowledge of the area and with input and approval from Town of Moraga staff. The peak periods observed were 7:00– 9:00 a.m. and 4:00– 6:00 p.m.

The study intersections and their corresponding traffic controls are as follows:

1. School Street & Country Club Drive (All-Way Stop)
2. School Street & De La Cruz Way (One-Way Stop)
3. School Street & Project Driveway (One-Way Stop)
4. Country Club Drive & Project Driveway (One-Way Stop)

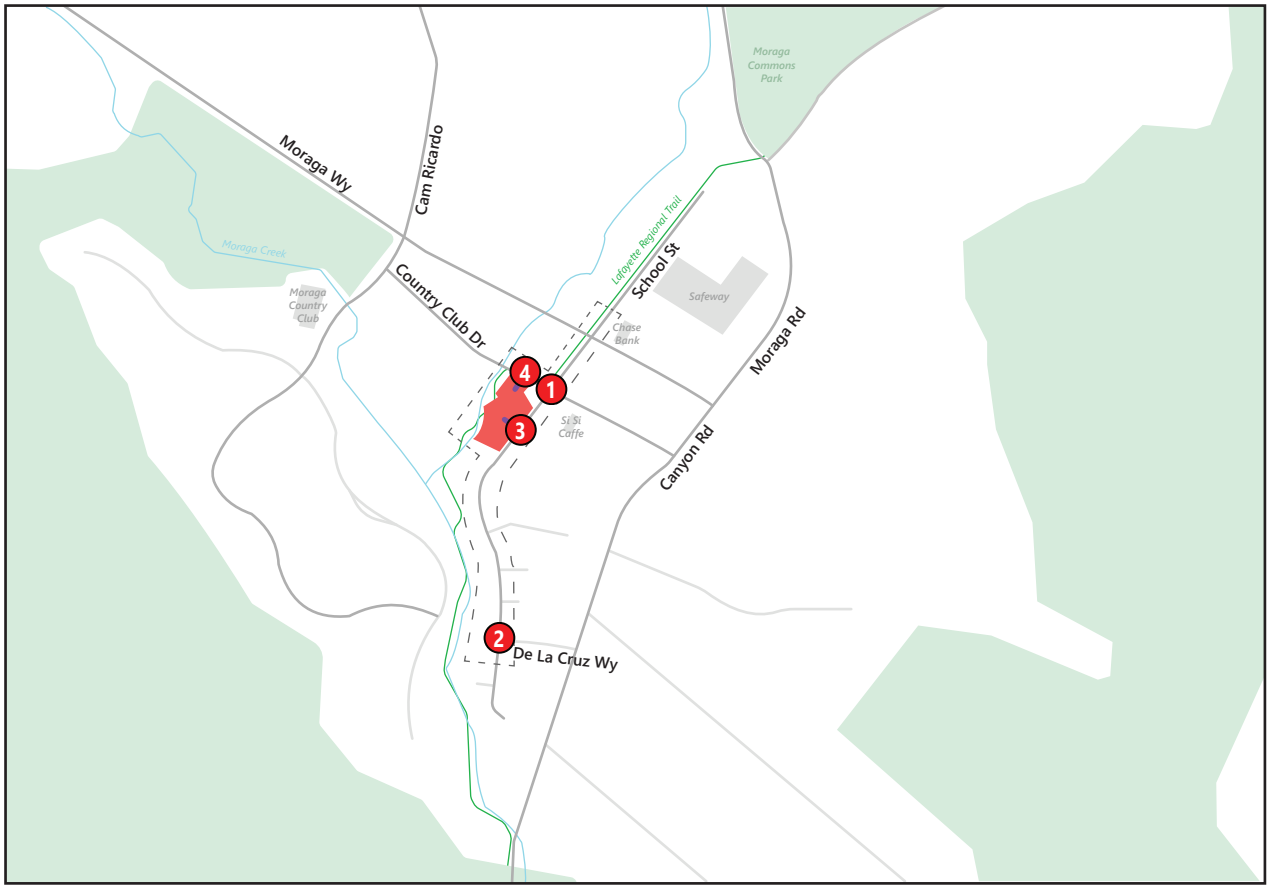
Figure 1 shows the locations of the study intersections.

1.3 Study Scenarios

The roadway network operations within the Project study area were analyzed under the following scenarios:

1. **Existing Conditions** – This scenario evaluates the study locations based on existing traffic volumes, lane geometry, and traffic controls.
2. **Existing plus Project Conditions** – This scenario is identical to Existing Conditions but with the addition of traffic from the proposed Project.

Figure 1: Vicinity Map

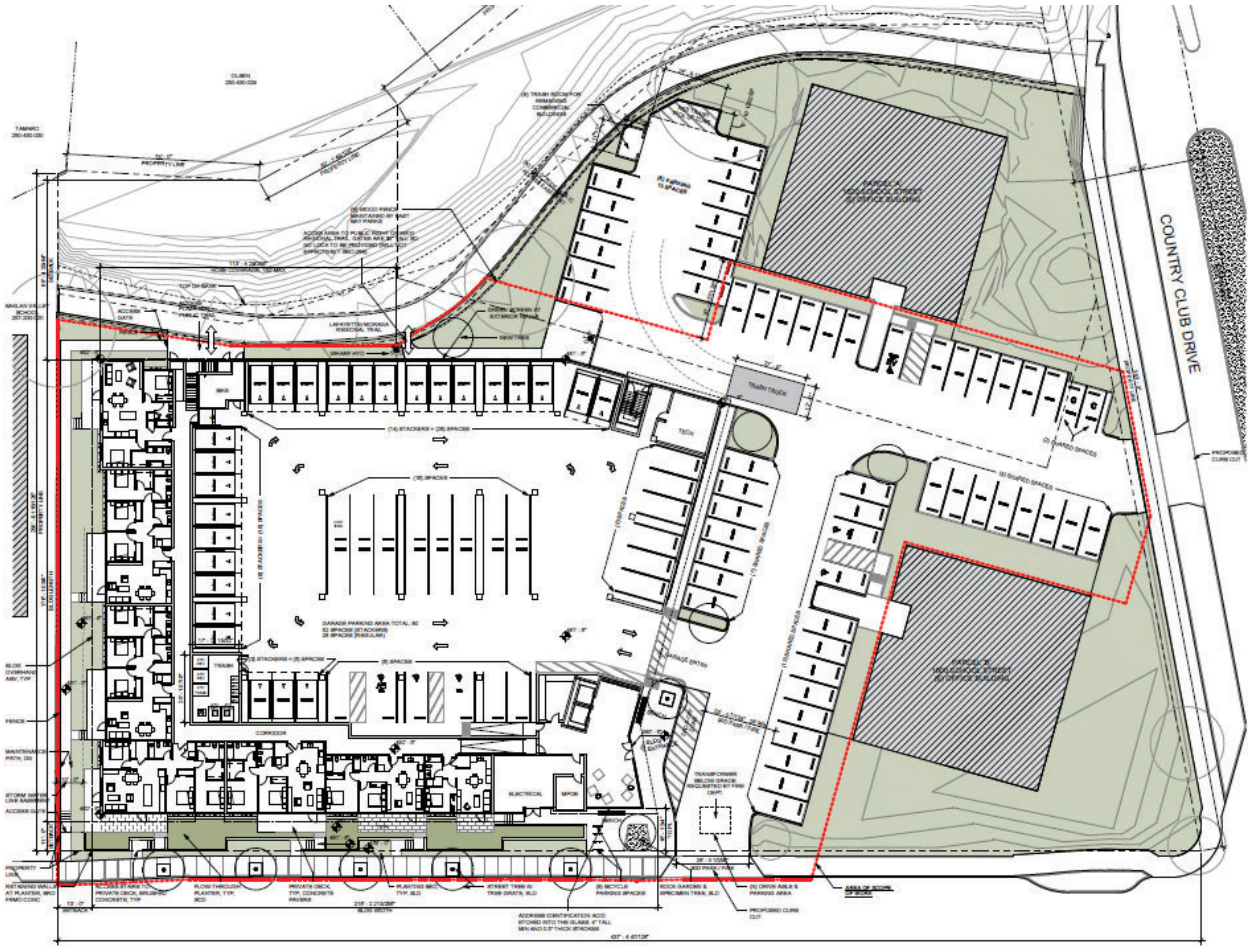


LEGEND

Project Location | Study Area | Study Intersection | Project Driveway

N

Figure 2: Site Plan



2.0 STUDY METHODOLOGY

Traffic impacts related to the proposed Project were evaluated for both compliance with applicable regulatory documents and environmental significance as defined in the California Environmental Quality Act (CEQA). In accordance with the Technical Advisory published by the Governor's Office of Planning and Research (OPR), a quantitative Vehicle Miles Traveled (VMT) assessment forms the basis of the CEQA analysis for the proposed Project. Effective as of July 1, 2020, intersection Level of Service (LOS) can no longer be used to determine significant impacts for CEQA purposes. However, the CEQA guidelines do not exclude the use of LOS analyses when determining consistency with plans and standards for jurisdictions or agencies, such as with Contra Costa County, the Town of Moraga, or the Contra Costa Transportation Authority (CCTA).

2.1 Vehicle Miles Traveled Methodology

This study includes a quantitative analysis of VMT generated by the proposed Project. California Senate Bill (SB) No. 743 is intended to reduce greenhouse gas emissions and particulates, encourage infill development and a diversity of uses instead of sprawl, and promote multi-modal transportation networks. The VMT analysis uses methodology published in the CCTA *Technical Procedures* (2022), as the Town of Moraga has elected to utilize CCTA methodology for evaluating VMT impacts.

2.1.1 VMT Screening Criteria

The adopted Procedures include the following screening criteria for identifying projects that can be presumed to have a less-than-significant impact:

- Project is exempt from CEQA
- Small projects up to 10,000 sq. ft. of non-residential space, up to 20 housing units, or otherwise generating less than 836 VMT per day
- Local-serving uses
- Within a Transit Priority Area, depending on applicability
- Projects that are located in areas with low VMT

"Low VMT" is defined by CCTA as transportation analysis zones (TAZs) with existing VMT at least 15 percent below the countywide or citywide average. (The lead agency has discretion on which threshold to apply.) For housing projects, this is based on the home-based VMT per capita of the TAZ. Based on the above criteria, this Project is screened out, and thus does not require a full VMT analysis.

2.2 Level of Service Methodology

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.

Typically, LOS C is considered as an ideal condition as it represents stable flow and efficient use of the transportation facility. Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets. The following sections provide detailed study methodology based on the type of intersections.

Each of the study intersections was analyzed using *Synchro,* Version 12, software using methodology outlined in the Transportation Research Board's (TRB) Highway Capacity Manual, 6th Edition (HCM 6). The LOS assessment under all scenarios is based on current traffic controls unless otherwise noted.

2.2.1 Stop-Controlled Intersections

The study intersections under one/two-way stop control (OWSC / TWSC) and all-way stop control (AWSC) are analyzed using the HCM 6 methodology described in Chapters 20 and 21, respectively. 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. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Synchro 12 reports OWSC/TWSC delay by approach. The weighted average delay for the entire intersections is presented for all-way stop controlled intersections.

Table 1 summarizes the relationship between delay and LOS for stop-controlled intersections. The delay ranges for stop-controlled intersections are lower than those for signalized intersection, as drivers expect less delay at stop-controlled intersections. The LOS methodology for stop-controlled intersections is described in detail in **Appendix A**.

Table 1: Level of Service Definitions for Stop Controlled Intersections

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

Source: Transportation Research Board's (TRB) Highway Capacity Manual, 6th Edition

2.2.2 Level of Service Standards

Town of Moraga

Per the Town of Moraga *General Plan*, a standard of LOS C has been established for all Moraga roads. Any intersection operating worse than LOS C would be considered inconsistent with this standard.

Lamorinda Action Plan

The *Lamorinda Action Plan* (2017) establishes multimodal transportation service objectives (MTSOs) for intersections and roadways within the Lamorinda subarea of Contra Costa County, consisting of Lafayette, Moraga, and Orinda. However, no MTSOs have been established that apply to the study area.

Note however that the *Lamorinda Action Plan* includes a recommendation to convert the section of the Lafayette-Moraga Regional Trail between School Street and the existing Regional Trail head at Country Club Road to an off-street Class I pedestrian-bicycle facility.

Moraga Walk/Bike Plan

The Moraga Walk/Bike Plan contains recommendations for pedestrian and bicycle intersection crossing improvements based on an assessment of existing conditions and community feedback. The Moraga Walk/Bike Plan does not contain standards that pertain to intersection operating standards.

However, the Moraga Walk/Bike Plan includes a longer-term recommendation to improve pedestrian and bicycle infrastructure along Country Club Drive from School Street to Moraga Creek.

2.3 Multimodal Assessment Methodology

Under CEQA, a significant impact occurs if the project conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As the Town of Moraga has not adopted specific thresholds for bicycle, pedestrian, or transit impacts, the following general criteria have been applied for the purpose of this analysis:

> ***Transit Facilities*** *A project is defined to have a significant impact to the transit system if implementation of the project would:*
>
> - *Eliminate existing or planned transit service.*
> - *Remove an existing bus stop.*
> - *Cause a substantial rerouting of existing or planned bus service.*
>
> ***Bicycle Facilities*** *A project is defined to have a significant impact to the bicycle facilities if implementation of the project would:*
>
> - *Eliminate existing or planned bike paths, lanes, or routes.*
> - *Result in an unsafe condition for bicycles, including but not limited to, unsafe bicycle/vehicle or bicycle/pedestrian conflicts or bicycle facility pavement degradation.*
>
> ***Pedestrian Facilities*** *A project is defined to have a significant impact to the pedestrian facilities if implementation of the project would:*
>
> - *Eliminate existing or planned pedestrian facilities.*

- *Degrade existing or planned pedestrian facilities. Examples of degradation include, but are not limited to, reduction of sidewalk/path width to less than the standards shown in the City's standard plans, removal of a crosswalk, or removal of a landscape buffer.*
- *Create a highly circuitous pedestrian circulation pattern that would discourage walking to local destinations or transit facilities.*
- *Result in unsafe conditions for pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts.*

3.0 EXISTING CONDITIONS

This section describes existing conditions in the immediate Project site vicinity, including roadway facilities, operations are presented for the study intersections, including the results of LOS calculations.

3.1 Existing Setting and Roadway System

Relevant roadways in the Project's vicinity are discussed below.

Moraga Way is a two- to four-lane minor arterial roadway that runs generally east-west through the study area. Moraga Way connects the Town of Moraga to the City of Orinda to the northwest. Within the study area, the posted speed limit on Moraga Way is 35 miles per hour (mph). Moraga Way is identified as an interjurisdictional route in the Lamorinda Action Plan.

Moraga Road/Canyon Road is a four-lane divided minor arterial roadway that runs generally north-south through the study area. The roadway is designated Moraga Road north of Moraga Way and Canyon Road south of Moraga Way. Moraga Road connects the Town of Moraga to the City of Lafayette to the north. Within the study area, the posted speed limit on Moraga Road/Canyon Road is 35 mph. Moraga Road north of Moraga Way is identified as an interjurisdictional route in the Lamorinda Action Plan.

Country Club Drive is a two- to four- lane divided local roadway that runs generally east-west through the study area. The posted speed limit on Country Club Drive is 25 mph. Country Club Drive provides direct access to the site via a right-in/right-out driveway.

School Street is a two-lane local roadway that runs generally north-south through the study area. The prima facie speed limit on School Street is 25 mph, and a marked school zone with a 25 mph limit is posted to the south of the Project site.

De La Cruz Way is a short two-lane local roadway that runs east-west between School Street and Canyon Road. The prima facie speed limit on De La Cruz Way is 25 mph.

3.2 Existing Pedestrian Facilities

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal "walkable" community includes wider sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, and easy access to transit facilities and services.

Pedestrian facilities consist of marked crosswalks, concrete sidewalks, pedestrian signals, and off-street paths that provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreational facilities.

In the vicinity of the Project, there are consistent concrete sidewalks on both sides of all roadways described above. There is one marked crosswalk across the western leg of the study intersection of Country Club Drive & School Street (Intersection 1). The pedestrian crossing distance at the marked crosswalk across the western leg is relatively long (approximately 100 feet) given the presence of two travel lanes, a raised

median, an eastbound left-turn lane, a channelized eastbound right-turn lane and a broad southbound right-turning radius.

Additionally, the Project site is bordered to the west by the Lafayette-Moraga Regional Trail, which serves as an off-street Class I pedestrian-bicycle facility.

A graphic illustrating existing pedestrian facilities is provided in **Figure 3**.

It should be noted that the proposed project would add a new crosswalk across the southern leg of the intersection of Country Club Drive & School Street (Intersection 1). This would enhance pedestrian connectivity within the neighborhood.

3.3 Existing Bicycle Facilities

Bicycle paths, lanes, and routes are typical examples of bicycle transportation facilities, which are defined by Caltrans as being in one of the following four classes:

- **Multi-Use Paths (Class I)** – A path physically separated from motor vehicle traffic by an open space or barrier, and either within a highway or an independent right-of-way (ROW), used by bicyclists, pedestrians, joggers, skaters, and other non-motorized travelers. Class I paths are the most popular type of facility. Because the availability of uninterrupted ROW is limited, this type of facility may be difficult to locate and expensive to build, relative to other types of bicycle facilities, but inexpensive compared to new roadways. Ideal locations for bike paths are areas such as powerline easements, utility easements, canal banks, river levees, drainage easements, railroad or highway ROW, or regional community parks.
- **Bike Lanes (Class II)** – A portion of a roadway designated by striping and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are intended to promote an orderly flow of bicycle and vehicle traffic. This type of facility is established by using the appropriate striping, pavement legends, and signs.
- **Bike Routes (Class III)** – Bike routes are shared facilities between bicycle and motor vehicle traffic. They provide for specific bicycle demand and may be used to connect discontinuous segments of bike lanes. In addition, bike routes are located on residential streets and rural roads. If the pavement width is sufficient, and traffic volume/speeds warrant, an edge line may be painted to further delineate the bike route. Bike routes are signed with the G-93 Bike Route marker but no striping or legends are required.
- **Separated Bikeways (Class IV)** – Separated bikeways are separated from the motor vehicle traffic. A bikeway for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

The Lafayette/Moraga regional trail runs along the western side of the Project site and then extends northward along School Street. The Town of Moraga Walk Bike Plan (2020) and the Contra Costa County Active Transportation Plan (2016) both propose new bicycle facilities to be constructed in the future,

including bike routes on Country Club Drive and School Street within the Project's vicinity. A graphic illustrating existing and proposed bicycle facilities is provided in **Figure 4**.

3.4 Existing Transit Facilities

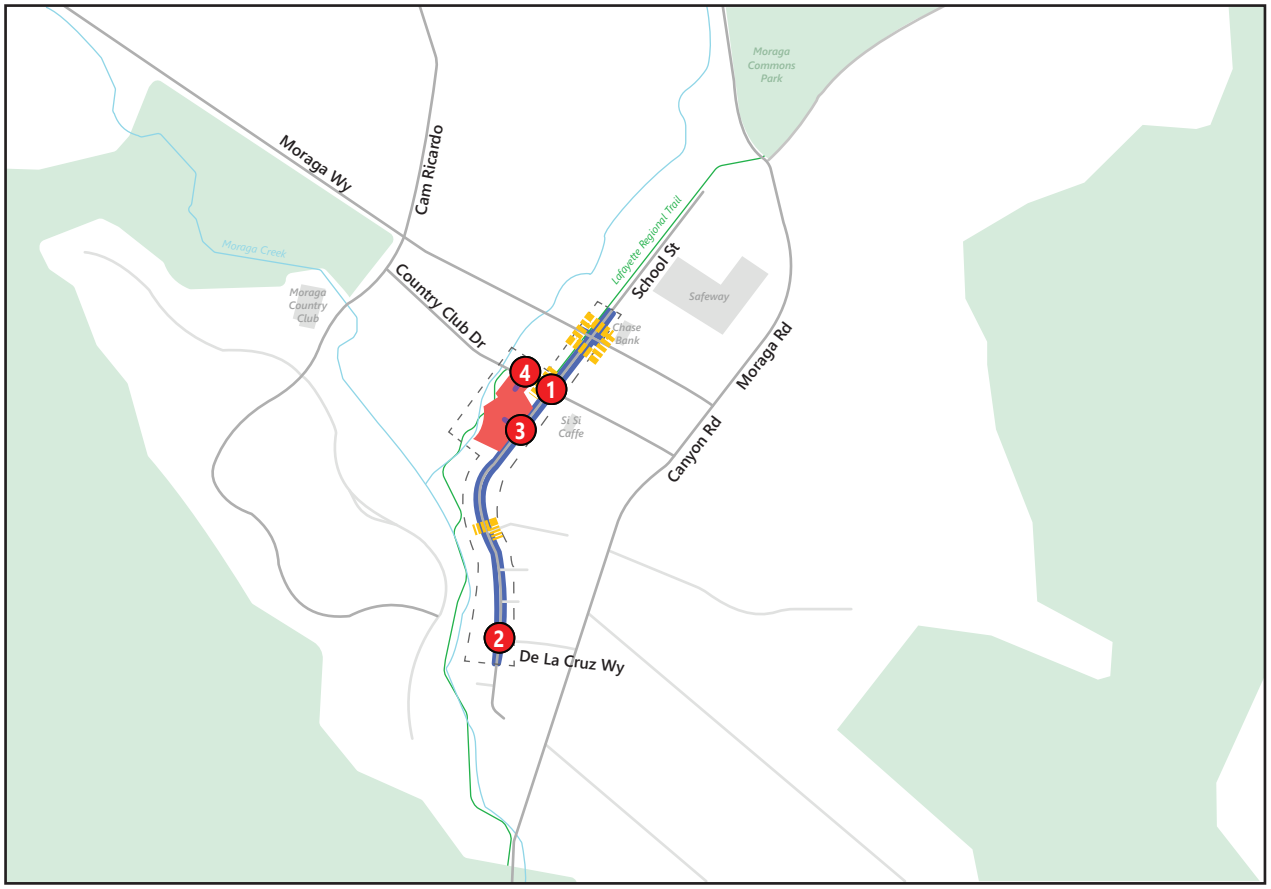
Within the study area, transit service is provided by the County Connection. Route 6 connects to the Orinda and Lafayette BART stations, passing through downtown Moraga. The nearest bus stops to the site are located on Moraga Way to the east of School Street. **Table 2** summarizes the service and frequency for this route. A graphic illustrating existing transit facilities is provided in **Figure 5**.

Table 2: Existing Transit Facilities

Route	From	To	Weekdays		Weekend	
			Hours	Headway (min)	Hours	Headway (min)
6	Orinda BART	Lafayette BART	6:23 a.m. – 8:00 p.m.	30-60	10:10 a.m. – 4:48 p.m.	80

Source: https://countyconnection.com/

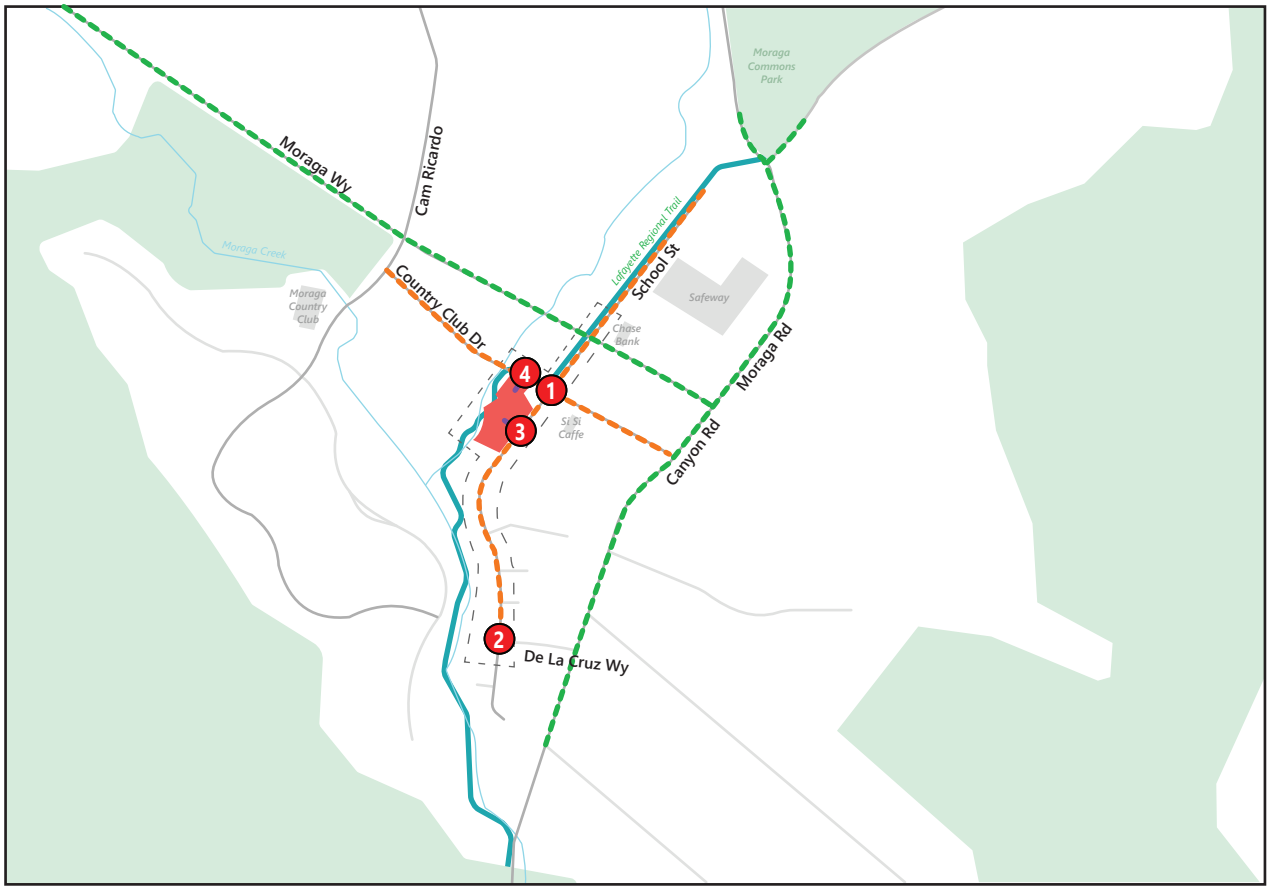
Figure 3: Existing Pedestrian Facilities



LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- Concrete Sidewalk
- Marked Crosswalk
- Ped-Bike Trail

Figure 4: Existing Bicycle Facilities



LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- Proposed Class II Bike Lanes
- Proposed Class III Sharrow
- Class I Multi-Use Trail

N

Figure 5: Existing Transit Facilities

LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- CCCTA Route 6
- Bus Stop

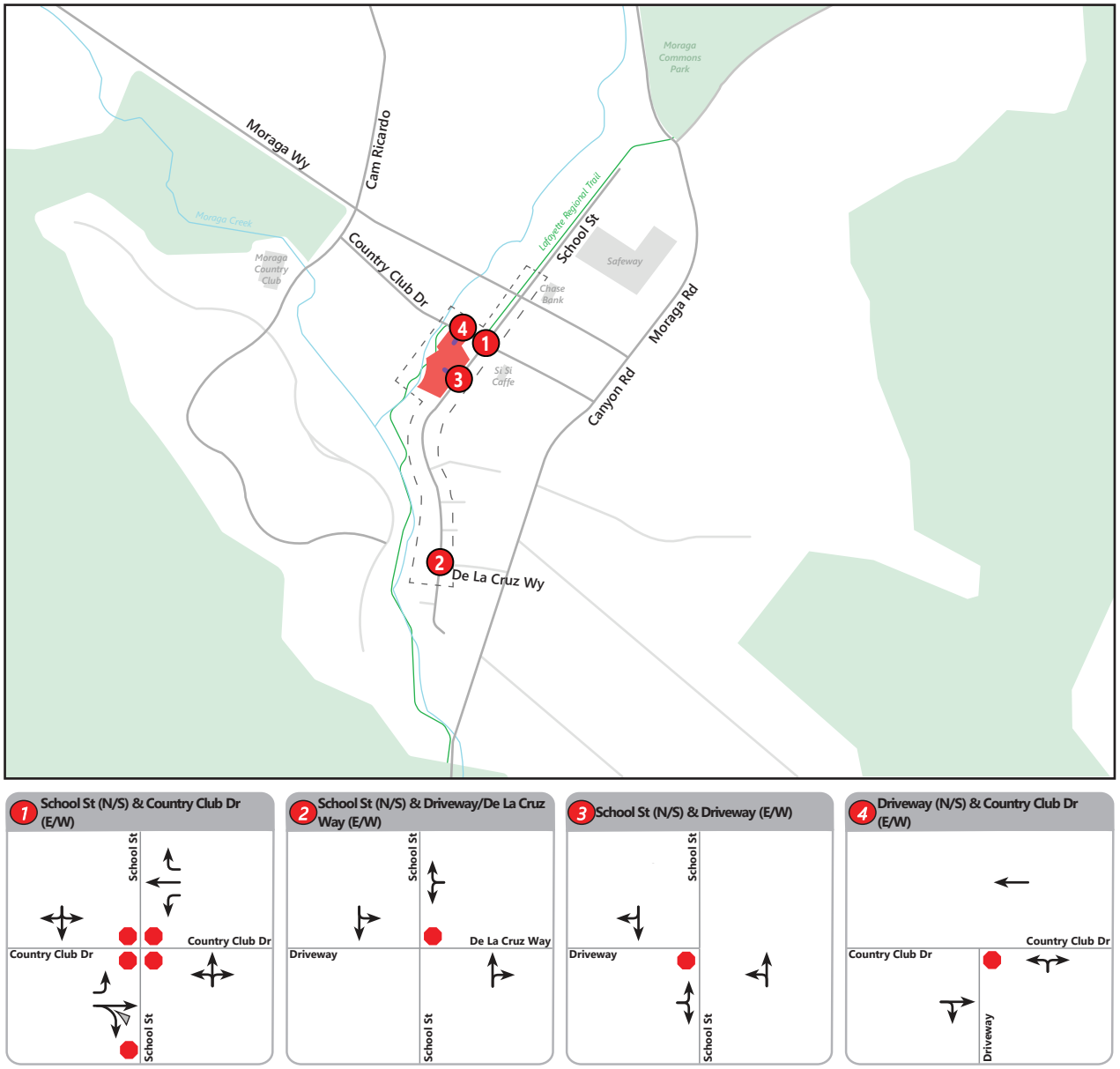
3.5 Existing Traffic Volumes and Lane Configuration

In order to determine the weekday morning (a.m.) and the weekday afternoon (p.m.) turning movement traffic volumes, intersection turning movement counts (TMC) of vehicles, bicycles, and pedestrians were collected at the study intersections on Wednesday, April 10, 2024, during the weekday morning and weekday afternoon peak periods (7:00 – 9:00 a.m. and 4:00 – 6:00 p.m., respectively). The raw turning movement count data is included in **Appendix B.**

The existing lane geometries and traffic control at each study intersection are illustrated on **Figure 6**, and intersection turning movement volumes at each study intersection are illustrated on **Figure 7**.

Note that an eastbound-right turn pocket exists at School Street & Country Club Drive (Study Intersection 1). As the eastbound-right turn pocket is approximately 30 feet, it can fit approximately only vehicle and would have a negligible effect on intersection operations.

Figure 6: 2024 Existing Conditions - Lane Configuration and Control

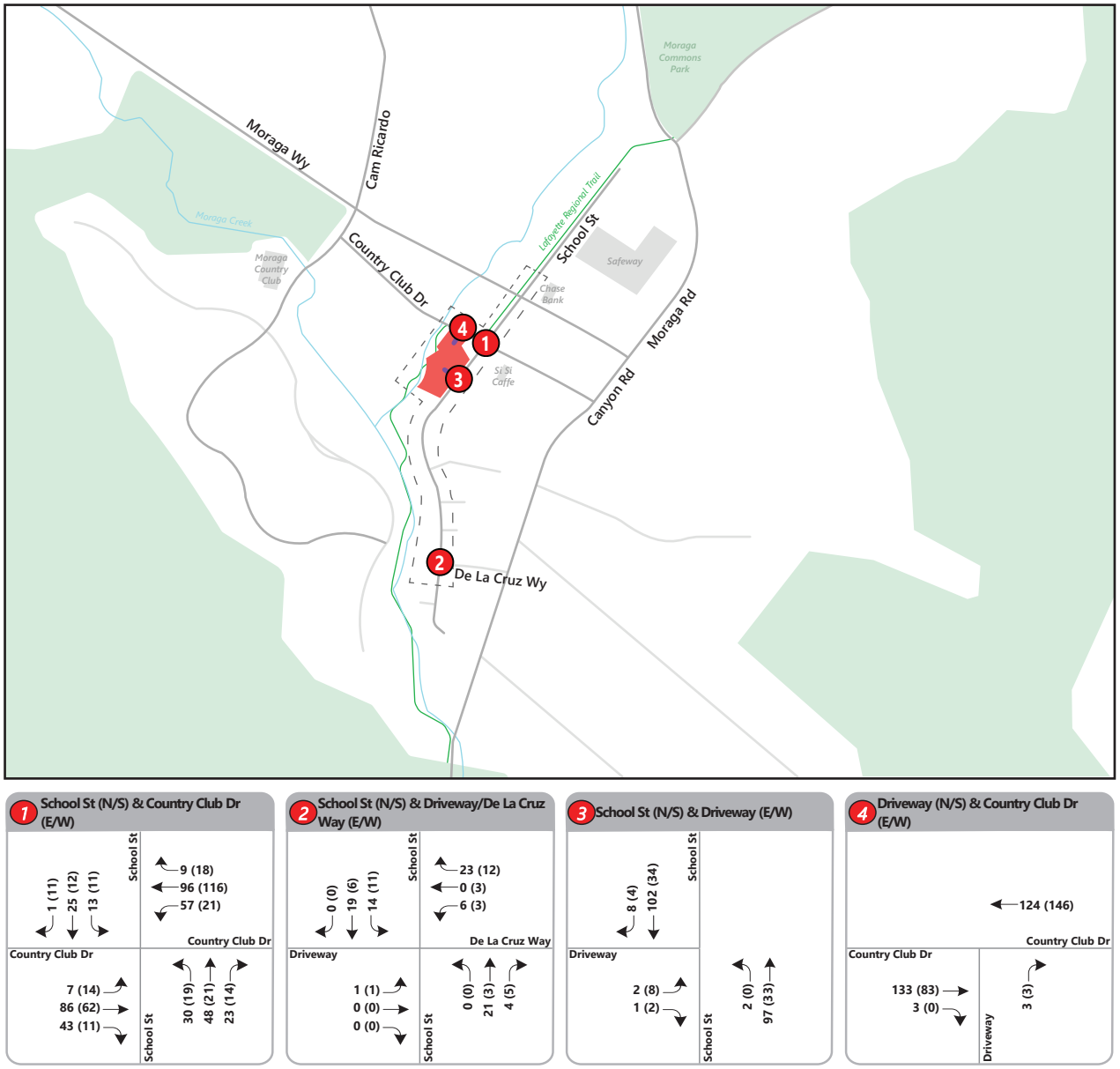


LEGEND

- Project Location
- Study Area
- X Study Intersection
- Project Driveway
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes
- Stop Sign

N

Figure 7: 2024 Existing Conditions - Intersection Peak Hour Traffic Volumes



LEGEND

- Project Location
- Study Area
- X Study Intersection
- Project Driveway
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

3.6 Intersection Level of Service Analysis

Existing intersection lane configurations and turning movement volumes were used to calculate the level of service for the study intersections during each peak hour. The results of the level of service analysis for Existing Conditions are summarized in **Table 3**. Intersections that operated at unacceptable LOS are shown in red. Detailed calculation sheets for the Existing Conditions scenario are contained in **Appendix C.**

Under this scenario, all intersections operate at acceptable LOS A or B during both peak hours. Note additionally that the delays at all intersections are higher during the a.m. peak hour compared to those of the p.m. peak hour. This indicates that the a.m. peak hour is the critical peak hour.

Table 3: Existing Conditions – Intersection Level of Service Analysis Results

No.	Intersection	Control Type[1]	Peak Hour[2]	Existing Conditions	
				Delay[3] (sec / veh)	Delay-Based LOS[4]
1	School St. & Country Club Dr.	AWSC	a.m.	9.6	A
			p.m.	8.3	A
2	School St. & De La Cruz Wy.[5]	TWSC	a.m.	8.8	A (WB)
			p.m.	8.7	A (WB)
3	School St. & Project Dwy.	TWSC	a.m.	10.3	B (EB)
			p.m.	9.0	A (EB)
4	Country Club Dr. & Project Dwy.	TWSC	a.m.	9.1	A (NB)
			p.m.	8.8	A (NB)

Notes:
1. AWSC = All-Way Stop Control; OWSC = One-Way Stop Control
2. a.m. = a.m. Peak Hour; p.m. = p.m. Peak Hour
3. Delay measured in seconds per vehicle. For signalized and all-way stop controlled intersections, the delay represents the average control delay for all turning movements. For one- and two-way stop controlled intersections, the delay represents the worse average control delay for a given approach.
4. LOS = Level of Service
Red indicates unacceptable LOS.
"-" indicates not applicable.
5. A residential driveway opposite of De La Cruz Way incurred a higher delay of 9.4 seconds and 8.9 seconds in the a.m. and p.m. peak hours, respectively, compared to De La Cruz Way. These delays, however, equate to LOS A and do not indicate any accessibility issues for the users of the driveway.

4.0 EXISTING PLUS PROJECT CONDITIONS

This section describes the impacts of the proposed Project at the study intersections and the surrounding roadway system. The Existing plus Project Conditions consist of existing traffic volumes (and roadway facilities) plus new traffic generated by the proposed Project. Lane geometry and traffic control for Existing plus Project Conditions are identical to Existing Conditions.

This section consists of two analysis components:

- A vehicle-miles traveled (VMT) assessment of the proposed Project (Section 4.1), and
- A level-of-service (LOS) and queuing assessment of study intersections (Sections 4.2 to 4.5).

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process:

- Trip Generation (Section 4.2) – Estimates the amount of traffic added to the roadway network,
- Trip Distribution (Section 4.3)– Estimates the direction of travel to and from the Project site, and
- Trip Assignment (Section 4.3) – The new trips are assigned to specific street segments and intersection turning movements.

4.1 Vehicle Miles Traveled

As part of the *Comprehensive Advance Planning Initiative Environmental Impact Report* (2022) for the Town of Moraga, a screening map for the Town was developed. The Project is located in TAZ #20632, which has existing home-based VMT at least 15 percent below the countywide average. Thus, the Project is presumed to have a **less-than-significant impact** on VMT. The screening map is attached in **Appendix D**.

4.2 Project Trip Generation

Following discussions with Town of Moraga staff, TJKM conducted two alternatives of Project trip generation and subsequent LOS analyses, hereafter referred to as the "Conservative Alternative" and the "Standard Alternative."

4.2.1 Conservative Alternative

TJKM utilized published trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (TGM). Trip generation of the proposed development was estimated for the weekday morning (a.m.) peak period, weekday afternoon (p.m.) peak period, and weekday daily trips using conservative weighted average trip rates after discussions with Town of Moraga staff to accommodate the semi-rural nature of the Project study area.

TJKM used published trip rates from the ITE Land Use Code (LUC) 221 (Multifamily Housing (Mid-Rise)) to estimate the trips generated by the proposed Project's land use.

The results of the trip generation analysis are shown in **Table 4**. The proposed Project would generate approximately 300 trips new trips during a typical weekday, including 24 (6 in, 18 out) in the a.m. peak hour and 26 (16 in, 10 out) in the p.m. peak hour.

Table 4: Project Trip Generation – Conservative Alternative

Land Use (ITE Code)	Size		Daily		A.M. Peak					P.M. Peak				
			Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Proposed Use														
Multifamily Housing (Mid-Rise) (221)	66	DU	4.54	300	0.37	23:77	6	18	24	0.39	61:39	16	10	26

Note: ITE Trip Generation Manual 11th Ed. weighted average rates were used in place of fitted curve equations to conservatively calculate higher Project trips following discussions with Town of Moraga staff.

4.2.2 Standard Alternative

Under the Standard Alternative TJKM utilized published trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (TGM). Trip generation of the proposed development was estimated for the weekday morning (a.m.) peak period, weekday afternoon (p.m.) peak period, and weekday daily trips in a manner that is consistent with the methodology published in ITE's Trip Generation Handbook, 3rd Edition (TGH).

TJKM used published trip rates from the ITE Land Use Code (LUC) 221 (Multifamily Housing (Mid-Rise)) to estimate the trips generated by the proposed Project's land use. Additionally, the published trip rates from the ITE LUC 712 (Small Office Building) were used to represent trips generated by the existing office buildings that would be removed as part of the proposed Project. The office buildings to be removed are both approximately 5,558 square feet in size and are approximately 80 percent occupied (i.e., approximately 8,893 square feet of occupied office space). The total net new trips generated by the proposed Project were computed by subtracting the trips generated by the existing office buildings to be removed from the gross trips generated by the proposed Project.

The results of the trip generation analysis are shown in **Table 5**. The proposed Project would generate approximately 140 trips net new trips during a typical weekday, including two (-8 in, 10 out) in the a.m. peak hour and 15 (12 in, 3 out) in the p.m. peak hour.

Table 5: Project Trip Generation – Standard Alternative

Land Use (ITE Code)	Size		Daily		A.M. Peak					P.M. Peak				
			Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Proposed Use														
Multifamily Housing (Mid-Rise) (221)	66	DU	EQ	268	EQ	23:77	4	13	17	EQ	61:39	16	10	26
Existing Use														
Small Office Building (712)	8.89	ksf	14.39	128	1.67	82:18	12	3	15	1.26	34:66	4	7	11
Total Trips				**140**			**-8**	**10**	**2**			**12**	**3**	**15**

Note: : ITE Trip Generation Manual 11th Ed. fitted curve equations and weighted average rates were used consistent with the methodology published in ITE's TGH, 3rd Edition.

4.3.1 Moraga Intermediate School Children and School Trips Generated by the Project

Recent data by the National Association of Home Builders[1] evaluated the number of school children (K-12) expected to occupy units of housing, by dwelling type (multifamily vs. single family) and tenure (rent vs. own), as well as other factors such as the number of total units in a development. The data indicates that multifamily developments over 20 units have, on average, 0.14 school children per unit. This works out to approximately nine school age children in the proposed 66-unit development.

To account for the attractiveness of the local school district, however, Town of Moraga staff conducted a survey of the Moraga Town Center development nearby the proposed Project along Country Club Drive. Based on the Moraga Town Center survey, Town of Moraga staff estimated that approximately 60 percent of the 66 units in the proposed Project would have school-age children. This works out to approximately 40 school-age children in the proposed Project.

Additionally, Town of Moraga staff estimated that approximately 25 percent of school-age children in the proposed Project would attend Moraga Intermediate School based on data from the Moraga Town Center development survey and data from the California Department of Education (**Appendix F**). This results in approximately 10 school-age children from the proposed Project attending Moraga Intermediate School.

The proposed Project would thus potentially generate up to 20 (10 inbound, 10 outbound) school-related peak hour vehicular trips per day if each child was individually dropped off and picked up from school. This is however unlikely given that children have the options of walking, biking, or carpooling to school and that the estimates used by Town of Moraga staff to generate the number of school-related peak hour vehicular trips per day are conservative.

As discussed in Section 4.3, 20 percent of Project trips were assigned to Canyon Road to the south via De La Cruz Way, equivalent to four a.m. and five p.m. peak hour trips under the Conservative Analysis (**Figure 9**), and zero a.m. and three p.m. peak hour trips under the Standard Analysis (**Figure 10**). This is the most direct route to the school, although parents may choose to take other routes such as Country Club Drive to Canyon Road.

These small numbers of new students are unlikely to have any noticeable effect on drop-off and pick-up operations at Moraga Intermediate School.

Furthermore, drop-off and pick-up trips by parents would likely be combined with their trips commuting to work (i.e., the trips would already occur from the proposed Project). Thus, the new school-related trips are unlikely to have any noticeable effect on traffic conditions on the local roadway network.

[1] https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2020/special-study-one-public-school-child-for-every-three-homes-may-2020.pdf

4.3 Project Trip Distribution and Assignment

Trip distribution is a process of developing study assumptions that estimates the direction that vehicular trips would arrive at and depart from the study site. Trip assignment estimates specific streets and turning movements at study intersections for Project-related traffic.

Trip distribution and assignment assumptions for the proposed Project were developed based on TJKM's familiarity with the study area and consultation with Town of Moraga staff. Trip distribution for vehicles is as follows:

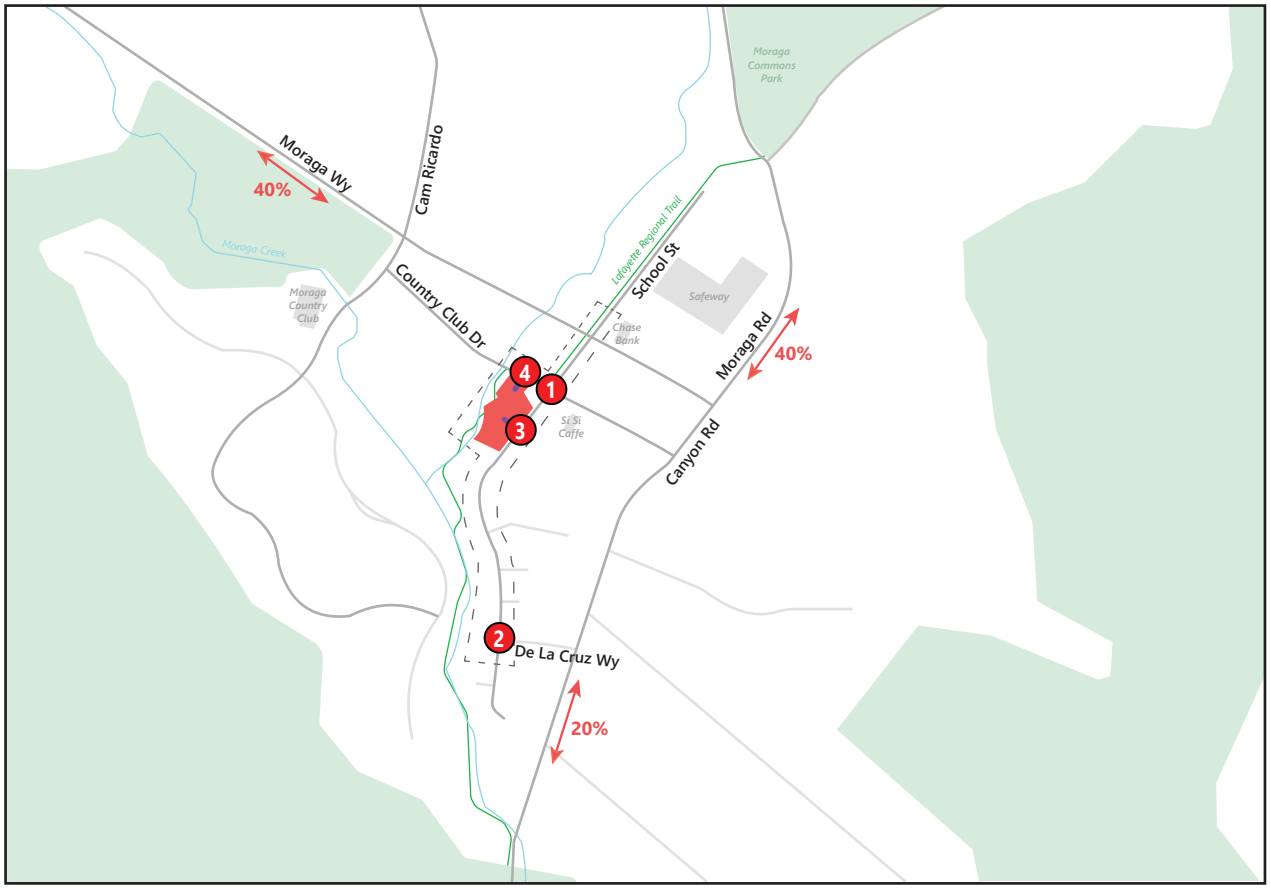
- 40 percent to/from Moraga Way to the west
- 40 percent to/from Moraga Road to the north
- 20 percent to/from Canyon Road to the south (via De La Cruz Way)

Both the Conservative Alternative and the Standard Alternative used the same trip distribution.

Figure 8 illustrates the Project trip distribution. **Figure 9** and **Figure 10** show the Project trip assignment for the Conservative Alternative and the Standard Alternative, respectively.

The Existing plus Project peak hour traffic volumes were estimated by combining the Existing Conditions peak hour traffic volumes and the Project's trip assignment, as illustrated in **Figure 11** and **Figure 12** for the Conservative Alternative and the Standard Alternative, respectively.

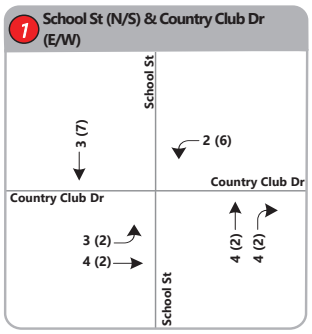
Figure 8: Project Trip Distribution

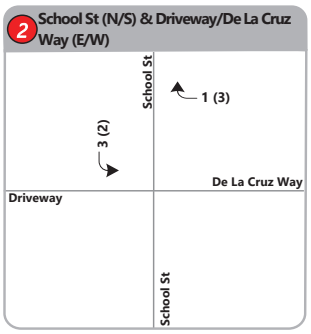


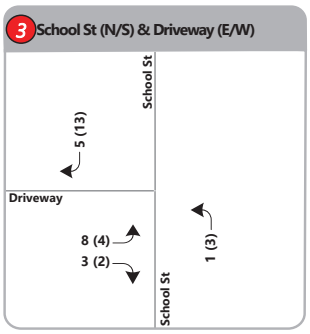
LEGEND

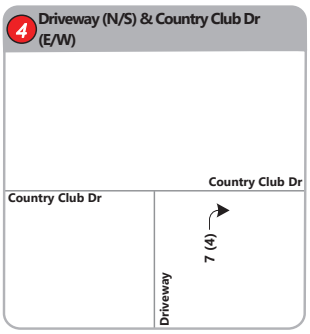
- Project Location
- Study Area
- X Study Intersection
- Project Driveway
- XX% Trip Distribution

Figure 9: Project Trip Assignment (Conservative Analysis)





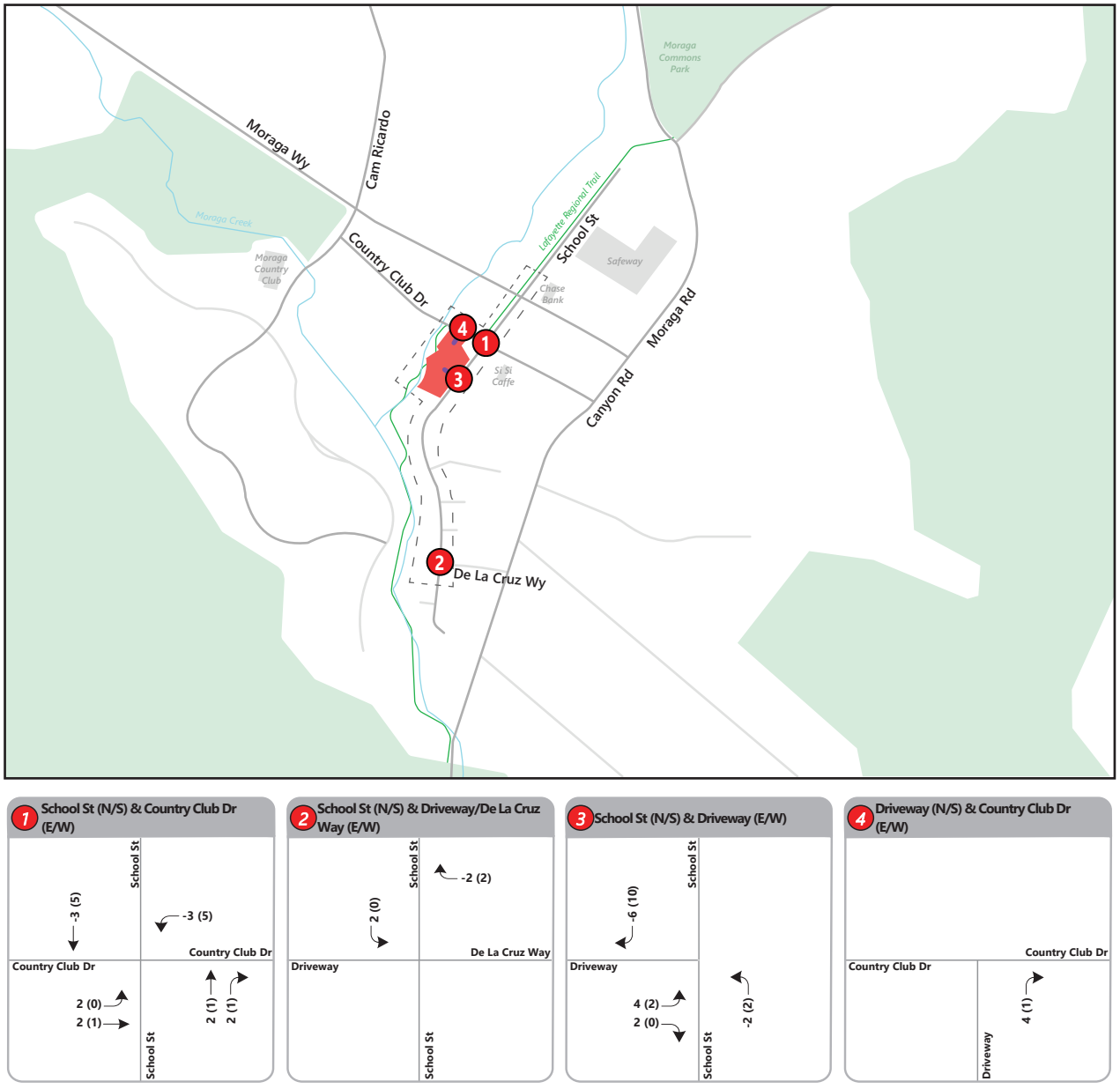




LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- XX AM Peak Hour Trips
- (XX) PM Peak Hour Trips

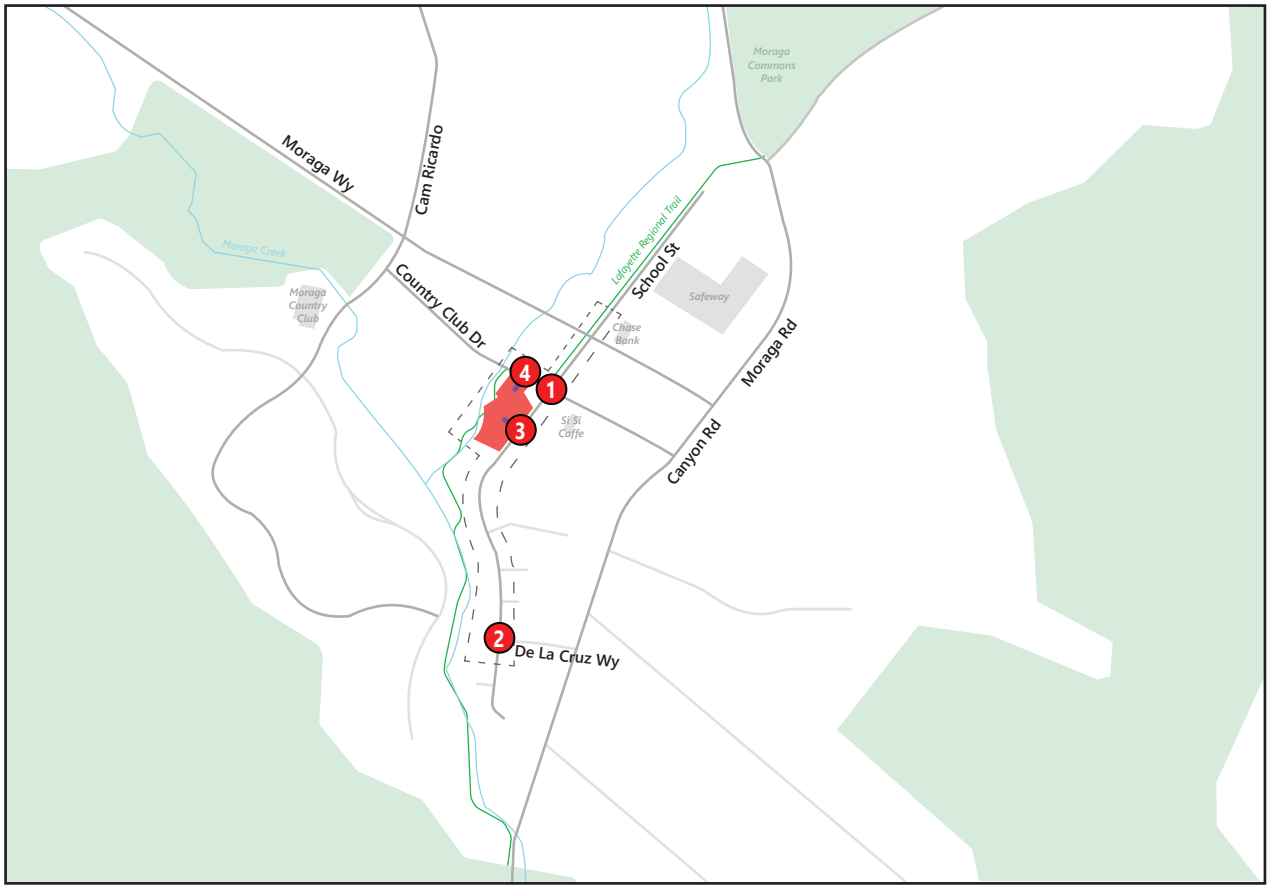
Figure 10: Project Trip Assignment (Standard Analysis)

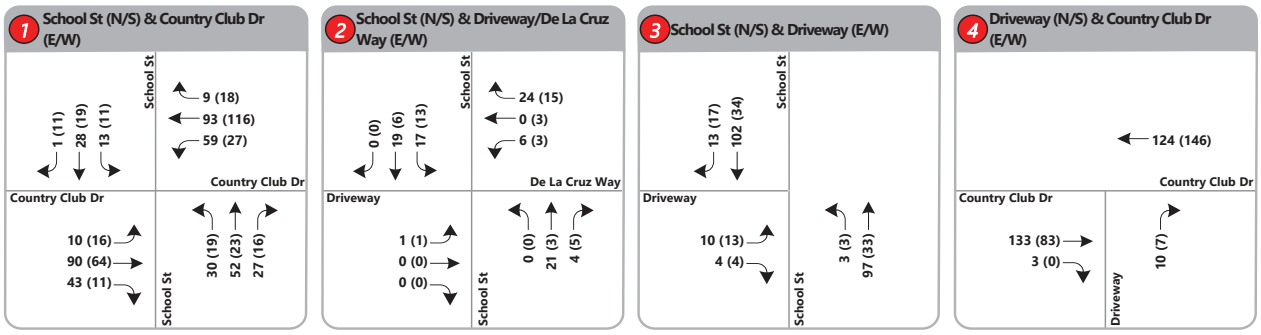


LEGEND

- Project Location
- Study Area
- X Study Intersection
- Project Driveway
- XX AM Peak Hour Trips
- (XX) PM Peak Hour Trips

Figure 11: 2024 Existing Conditions plus Project - Intersection Peak Hour Traffic Volumes (Conservative Analysis)

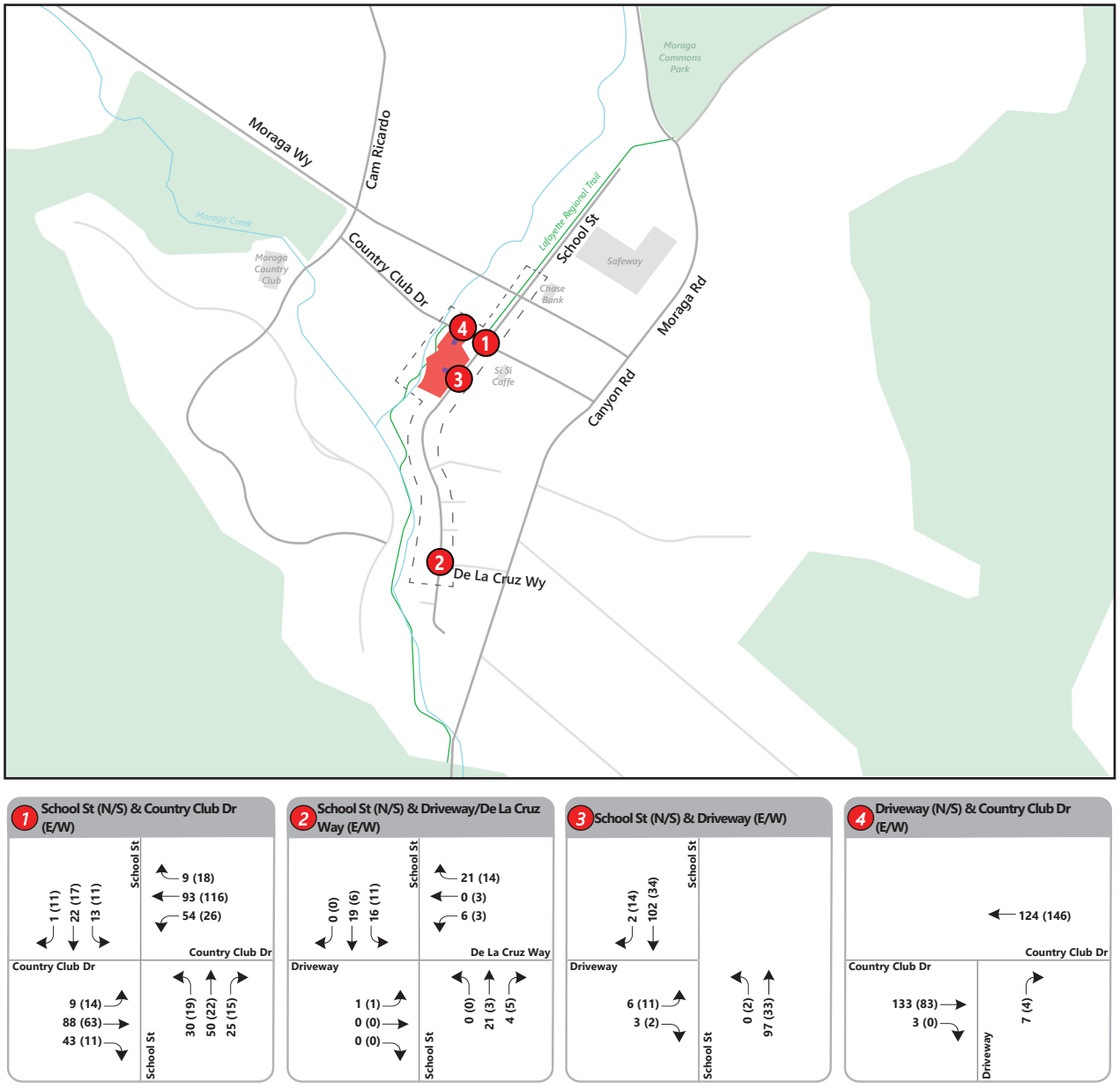




LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

Figure 12: 2024 Existing Conditions plus Project - Intersection Peak Hour Traffic Volumes (Standard Analysis)



LEGEND

- Project Location
- Study Area
- Study Intersection
- Project Driveway
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

4.4 Intersection Level of Service Analysis

4.4.1 Conservative Alternative

The intersection level of service analysis results for the Existing plus Project Conditions scenario under the Conservative Alternative are summarized in **Table 6**. The results for Existing Conditions are included for comparison purposes. Intersections that operate at unacceptable thresholds are shown in red, and intersections that degraded between "No Project" conditions to "Plus Project" conditions per the applicable thresholds are likewise shown in red. Detailed calculation sheets for Existing plus Project Conditions are contained in **Appendix E**.

Under this scenario, all intersections are expected to continue to operate at acceptable LOS B or better during both peak hours. Thus, the proposed development **would be consistent** with applicable jurisdictional standards for the surrounding road network under Existing plus Project Conditions.

Table 6: Existing plus Project Conditions – Intersection Level of Service Analysis Results (Conservative Alternative)

No.	Intersection	Existing Conditions				Existing Plus Project Conditions			Change in Delay (sec / veh)
		Control Type[1]	Peak Hour[2]	Delay[3] (sec / veh)	Delay-Based LOS[4]	Control Type[1]	Delay[2] (sec / veh)	Delay-Based LOS[4]	
1	School St. & Country Club Dr.	AWSC	a.m. p.m.	9.6 8.3	A A	AWSC	9.8 8.4	A A	+0.2 +0.1
2	School St. & De La Cruz Wy.	TWSC	a.m. p.m.	8.8 8.7	A (WB) A (WB)	TWSC	8.9 8.7	A (WB) A (WB)	+0.1 0.0
3	School St. & Project Dwy.	TWSC	a.m. p.m.	10.3 9.0	B (EB) A (EB)	TWSC	10.6 9.1	B (EB) A (EB)	+0.3 +0.1
4	Country Club Dr. & Project Dwy.	TWSC	a.m. p.m.	9.1 8.8	A (NB) A (NB)	TWSC	9.2 8.8	A (NB) A (NB)	+0.1 0.0

Notes:
1. AWSC = All-Way Stop Control; OWSC = One-Way Stop Control
2. a.m. = a.m. Peak Hour; p.m. = p.m. Peak Hour
3. Delay measured in seconds per vehicle. For signalized and all-way stop controlled intersections, the delay represents the average control delay for all turning movements. For one- and two-way stop controlled intersections, the delay represents the worse average control delay for a given approach.
4. LOS = Level of Service
Red indicates unacceptable LOS.
"-" indicates not applicable.
5..A residential driveway opposite of De La Cruz Way incurred a higher delay of 9.5 seconds and 9.0 seconds in the a.m. and p.m. peak hours, respectively, compared to De La Cruz Way under Existing plus Project Conditions. These delays, however, equate to LOS A and do not indicate any accessibility issues for the users of the driveway.

4.4.2 Standard Alternative

The intersection level of service analysis results for the Existing plus Project Conditions scenario under the Standard Alternative are summarized in **Table 7**. The results for Existing Conditions are included for comparison purposes. Intersections that operate at unacceptable thresholds are shown in red, and intersections that degraded between "No Project" conditions to "Plus Project" conditions per the applicable thresholds are likewise shown in red. Detailed calculation sheets for Existing plus Project Conditions are contained in **Appendix E**.

Under this scenario, all intersections are expected to continue to operate at acceptable LOS B or better during both peak hours. Thus, the proposed development **would be consistent** with applicable jurisdictional standards for the surrounding road network under Existing plus Project Conditions.

Table 7: Existing plus Project Conditions – Intersection Level of Service Analysis Results (Standard Alternative)

No.	Intersection	Existing Conditions				Existing Plus Project Conditions			Change in Delay (sec / veh)
		Control Type[1]	Peak Hour[2]	Delay[3] (sec / veh)	Delay-Based LOS[4]	Control Type[1]	Delay[2] (sec / veh)	Delay-Based LOS[4]	
1	School St. & Country Club Dr.	AWSC	a.m.	9.6	A	AWSC	9.7	A	+0.1
			p.m.	8.3	A		8.4	A	+0.1
2	School St. & De La Cruz Wy.	TWSC	a.m.	8.8	A (WB)	TWSC	8.9	A (WB)	+0.1
			p.m.	8.7	A (WB)		8.7	A (WB)	0.0
3	School St. & Project Dwy.	TWSC	a.m.	10.3	B (EB)	TWSC	10.4	B (EB)	+0.1
			p.m.	9.0	A (EB)		9.1	A (EB)	+0.1
4	Country Club Dr. & Project Dwy.	TWSC	a.m.	9.1	A (NB)	TWSC	9.2	A (NB)	+0.1
			p.m.	8.8	A (NB)		8.8	A (NB)	0.0

Notes:
1. AWSC = All-Way Stop Control; OWSC = One-Way Stop Control
2. a.m. = a.m. Peak Hour; p.m. = p.m. Peak Hour
3. Delay measured in seconds per vehicle. For signalized and all-way stop controlled intersections, the delay represents the average control delay for all turning movements. For one- and two-way stop controlled intersections, the delay represents the worse average control delay for a given approach.
4. LOS = Level of Service
Red indicates unacceptable LOS.
"-" indicates not applicable.
5..A residential driveway opposite of De La Cruz Way incurred a higher delay of 9.5 seconds and 8.9 seconds in the a.m. and p.m. peak hours, respectively, compared to De La Cruz Way under Existing plus Project Conditions. These delays, however, equate to LOS A and do not indicate any accessibility issues for the users of the driveway.

5.0 ADDITIONAL ANALYSIS

The following sections provide additional analyses of other transportation issues associated with the Project site, including:

- Alternative Modes of Transportation
- Site Access, Internal Circulation, and Parking

Unlike the VMT or LOS impact methodology, the analyses in these sections are generally based on professional judgment in accordance with the standards and methods employed by traffic engineers and planners.

5.1 Alternative Modes of Transportation

5.1.1 Pedestrian Impacts

A significant impact occurs if a proposed project conflicts with applicable or adopted policies, plans, or programs related to pedestrian facilities or otherwise decreases the performance or safety of pedestrian facilities.

Although the Project would add a modest number of trips to the roadway network surrounding the project site, these trips would not create any new hazards to pedestrians.

Additionally, a discussion with Town of Moraga staff indicated that the proposed Project would be required to install a 50- to 75-foot right-turn lane pocket for the eastbound-right movement of Country Club Drive & School Street (Study Intersection 1) via a conditions of approval. The new right-turn lane pocket would be built in place of the existing "wedge" between the existing eastbound-through lane and the existing channelized eastbound-right turn lane. Further improvements to Country Club Drive & School Street (Study Intersection 1) include the following:

- Installation of a curb extension (bulb-out) at the southwest corner;
- Installation of a median refuge on the west leg marked crosswalk;
- Installation of a marked crosswalk on the south leg;
- Installation of a Class I pedestrian-bike facility along Country Club Drive from School Street to the head of the existing Lafayette-Moraga Regional Trail on Country Club Drive.

The improvements would shorten the pedestrian crossing distance on the west leg and increase safety on the west and south legs for both pedestrians and cyclists.

Thus, the proposed Project would not result in any such pedestrian conflicts; therefore, the impact to pedestrian facilities is expected to be **less-than-significant**.

5.1.2 Bicycle Impacts

A significant impact occurs if a proposed project conflicts with applicable or adopted policies, plans, or programs related to bicycle facilities or otherwise decreases the performance or safety of bicycle facilities. Although the project would add a modest number of trips to the roadway network surrounding the project

site, these trips would not create any new hazards to bicyclists. The proposed Project would not result in any such conflicts but would improve existing facilities by installing a Class I pedestrian-bike facility along Country Club Drive from School Street to the Lafayette-Moraga Regional Trail; therefore, the impact to bicycle facilities is expected to be **less-than-significant**.

5.1.3 Transit Impacts

A proposed project is considered to have a significant impact on transit if it conflicts with existing or planned transit facilities, or if it is expected to generate additional transit trips and it does not provide adequate facilities for additional pedestrians and bicyclists to access transit routes and stops. While the Project is not expected to generate any substantial increases in transit ridership, any increases resulting from the Project could easily be accommodated by the surrounding bus services. Therefore, the impact to transit facilities is expected to be **less-than-significant**.

5.2 Site Access, Internal Circulation, and Parking

5.2.1 Site Access

The proposed Project would be accessed via one existing driveway on Country Club Drive and one relocated driveway on School Street, as shown in **Figure 2**. The Country Club Drive driveway is right-in/right-out only and has clear sight lines. Based on the site plan, no sight distance obstructions are expected at the relocated full access driveway on School Street.

The Saklan School staff observed during a survey of The Saklan School pick-up/drop-off operations on-street parking inventory along School Street becoming fully occupied to Country Club Drive. While the proposed Project would move the existing School Street Driveway on the Project site north by approximately 100 feet, the observation by The Saklan School staff indicates that the School Street Driveway of the proposed Project could become blocked by illegally parked vehicles. As such, it is recommended that red curb paint be applied for 20 feet on both sides of the School Street Driveway of the proposed Project.

Access management impacts of the proposed development are considered to be **insignificant** provided that red curb is applied on both sides of the School Street Driveway of the proposed Project.

5.2.2 Internal Circulation

Internal circulation of the site would be via 28-foot two-way drive aisles with right-angle parking on both sides, as shown in **Figure 2**. Within the parking garage, most parking is provided via two-vehicle stackers, with adequate aisle width to maneuver in and out. Project plans show turning templates for both fire trucks and garbage trucks, demonstrating that there is adequate room for both to maneuver on-site and access all buildings and dumpsters. The proposed Project would **not result in any significant impacts**.

5.2.3 Parking

A significant impact would occur if the off-street parking facilities of a proposed project conflicts with or creates inconsistencies with adopted plans, guidelines, or policies or does not provide adequate access within the site.

The project Proposes to utilize reduced residential parking based on the State density bonus law, and shared parking between the office and residential uses based on Section 8.76.080 of the Town of Moraga Municipal Code (**Appendix G**). While some of the existing parking to remain would be designated for office use only, the areas outside of the parking garage that would be reconstructed are to be designated as entirely shared parking. Of the two existing office buildings to remain, parking for one would remain undisturbed/unshared, and parking for the other (5,558 sq. ft.) would share parking with the residential use.

The density bonus law specifies the maximum amount of parking that can be required based on the size of each residential unit: 1.0 space per studio or one-bedroom unit, 1.5 spaces per two-to-three bedroom unit, and 2.5 spaces per four-bedroom unit. Based on the unit mix proposed on site, this comes out to a maximum of 91 spaces for the 66 proposed units. Two additional spaces are required as accessible spaces. 50 percent of these spaces are required to be covered.

The shared parking code specifies that minimum required parking for each use should be divided by the appropriate weighting factor to identify the total number of spaces required. These factors include 1.0 for residential (i.e., no reduction) and 1.4 for office uses. The base required rate for office uses is one space per 250 sq. ft. This results in a base requirement of 22.2 spaces, or 16 spaces required when using the shared parking factor.

The total required number of vehicular spaces is thus 107 spaces.

The Project proposes 80 garage spaces and 13 shared spaces, for a total of 93 proposed residential spaces. The Project additionally proposes 16 shared spaces for office use. The total number of spaces proposed by the Project equates to 109 spaces, which satisfies the vehicular parking requirements.

Of note, the Project would provide one accessible vehicle space, one accessible van space, and one accessible electric vehicle/van space for residential uses, as well as one accessible vehicle space, one accessible van space, and one accessible electric vehicle/van space on a neighboring parcel for office uses.

In addition to vehicle parking, the California Green Building Code Section 5.106.4.1.2 specifies that residential uses of 10 or more units require long-term bicycle parking in the amount of five percent of automobile parking. Short-term bicycle parking for uses attracting visitors must also be provided in the amount of five percent of automobile parking. For the residential use, this comes out to five long-term spaces, and for the office use this comes out to one short-term space, for a total of six spaces required. The Project proposes to provide a bike room in the apartment building's garage with space for eight bikes. TJKM recommends that bike racks be installed near the entrance of the existing office buildings to provide short term bicycle parking. Although this may be proposed, it is not shown on the site plan in **Figure 2**.

With these additions, parking impacts of the proposed Project would be **less-than-significant**.

5.3 The Saklan School Drop-Off and Pick-Up Operations

The Saklan School staff conducted a survey in June 2024 of pick-up and drop-off operations of The Saklan School located next door south of the Project site. The Saklan School currently enrolls approximately 140 children. The Saklan School staff observed the following during the survey:

- Approximately 20 students use the school bus;
- Approximately six to eight students use a school van;
- Approximately a dozen students bike to school;
- Approximately 50 parents were observed picking-up and dropping-off students at multiple locations, including The Saklan School parking lot, the Holy Trinity Serbian Orthodox Church parking lot, and on-street parking along School Street;
- Virtually no students walked to/from school.

The Town of Moraga staff estimates that approximately 20 percent of The Saklan School students live in the Town of Moraga. As such, the Town of Moraga staff conservatively estimated that 10 percent of school-age children in the proposed Project (40 children) would attend The Saklan School. This works out to approximately four school-age children.

The proposed Project would thus potentially generate up to eight (four inbound, four outbound) school-related peak hour vehicular trips per day if each child was individually dropped off and picked up from school.

This is however unlikely given that children have the options of walking, biking, or carpooling to school considering the close proximity of the proposed Project to The Saklan School and that the estimates used by Town of Moraga staff to generate the number of school-related peak hour vehicular trips per day are conservative. Additionally, The Saklan School staff observed high levels of congestion of on-street parking (along School Street) and off-street parking facilities (e.g., Holy Trinity parking lot) during school start and release times, which would further discourage parents who live close by to pick-up/drop-off children in vehicles.

Thus, the proposed Project is **not likely to have a significant adverse effect** on existing drop-off and pick-up operations at The Saklan School.

5.4 Recommendations

TJKM recommends the following:

- Provide bike racks near the entrance to the existing office buildings to provide short-term bicycle parking;
- Replace the existing channelized eastbound-right turn lane and corresponding wedge with an eastbound-right turn lane pocket at Country Club Drive at Country Club Drive & School Street (Study Intersection 1);

- Install a bulb-out on the southwest corner and a median refuge on the west leg marked crosswalk to shorten existing pedestrian crossing distances across Country Club Drive at Country Club Drive & School Street (Study Intersection 1);
- Install a Class I pedestrian-bicycle facility along Country Club Drive from School Street to the head of the Lafayette-Moraga Regional Trail
- Install a high-visibility marked crosswalk on the south leg of Country Club Drive & School Street (Study Intersection 1);
- Add red curb paint 20 feet on each side of the School Street Project Driveway

Appendix A: HCM Methodology

TECHNICAL MEMORANDUM

Subject: Highway Capacity Manual – Level of Service Definitions

The purpose of this memorandum is to define level of service (LOS) and the procedures for its calculation.

LOS is commonly used as a measure of effectiveness (MOE) / quality of service (QOS) for traffic. The procedures for LOS determination and calculation are found within the Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM), 6th Edition. MOE / QOS generally consist of quantitative metrics to characterize operational conditions within a traffic stream. LOS is a measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each facility type that has procedures available. Alphabetical letters designated each grade from A to F. LOS A represents the best operating conditions; LOS F represents the worst operating conditions. Each LOS represents a range of operating conditions and drivers' perceptions of those conditions. Safety is not included in the measure to establish service level.

A general description of LOS for every types of roadway facilities is shown in **Table 1**.

Table 1: General LOS by Facility Type

	Uninterrupted Flow	Interrupted Flow
Facility Example Types		
	Freeways	Signalized intersections
	Multi-lane highways	Two-way stop controlled intersections
	Two-lane highways	All-way stop controlled intersections
	Urban Streets	Roundabouts
LOS Character		
A	Free flow.	Very low delay.
B	Stable flow. Presence of other users noticeable.	Low delay.
C	Stable flow. Comfort and convenience starts to decline.	Moderate delay
D	High density stable flow.	Acceptable delay
E	Unstable flow.	Limit of acceptable delay,
F	Forced or breakdown flow.	Unacceptable delay.

Signalized Intersections

Signalized intersection LOS is based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay experienced by each vehicle. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control; it is also a surrogate measure of driver discomfort and fuel consumption. The v/c ratio quantifies the degree to which a phase's capacity is utilized by a lane group. A v/c ratio of 1.0 or more indicates cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective). The detailed methodology for determining LOS at signalized intersection is presented in Chapter 19 of the HCM. The LOS for signalized intersections are defined in **Table 2**.

Table 2: Signalized LOS Summary

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Very low control delay. This level is typically assigned when the v/c ratio is low and either progression is exceptionally favorable or the cycle length is short. Most vehicles arrive during the green phase. Many vehicles do not stop at all.	≤ 10	≤ 1.0
B	The v/c ratio is low. There is good progression, short cycle lengths, or both. More vehicles stop, causing higher levels of delay.	≤ 20	≤ 1.0
C	Higher delays occur in favorable progression or a due to a moderate cycle length, or both. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during a given cycle) may begin to appear. The number of vehicles stopping is still considered low-to-moderate, though many vehicles still pass through the intersection without stopping.	≤ 35	≤ 1.0
D	The influence of congestion becomes more apparent. Longer delays may result from some combination of a high v/c ratio, ineffective progression, long cycle length, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	≤ 55	≤ 1.0
E	Typically considered the limit of acceptable delay. High delays usually indicate a very high v/c ratio, poor progression, long cycle lengths, and high volumes. Most cycles fail to clear the queue.	≤ 80	≤ 1.0
F	Delays are unacceptable to most drivers. Conditions are considered oversaturated. Arrival flow rates exceed the capacity of the intersection (v/c in excess of 1.0). Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.	> 80	> 1.0

Two-Way Stop Controlled Intersections

At two-way stopped controlled (TWSC) intersections, LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons:

1. The major-street through and right-turning traffic are assumed to experience zero delay as traffic progression operates unimpeded;
2. The disproportionate number of major-street through traffic at a typical TWSC intersection skews the weighted average of all movements, resulting in very low overall average delay for all vehicles, and
3. The resulting low delay can mask LOS deficiencies for minor movements.

The LOS for the minor street and the mainline left-turn traffic are dependent on the volume and capacity of the available lanes, and the number and frequency of acceptable gaps in the major street traffic to make a conflicting turn. The LOS grade is provided for all conflicting movements at an intersection and is based on the total average control delay experienced by each vehicle and the lane group volume-to-capacity (v/c) ratios. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. The detailed methodology for determining LOS at TWSC intersection is presented in Chapter 20 of the HCM. The TWSC LOS descriptions are provided in **Table 3.**

Table 3: TWSC LOS Summary

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

All-Way Stop Controlled and Roundabout Intersections

All-way stopped controlled (AWSC) intersections and roundabout intersections are based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. A v/c ratio of 1.0 represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective).

The detailed methodology for determining LOS at AWSC and roundabout intersection are presented in Chapter 21 and Chapter 22 respectively in the HCM. The AWSC and roundabout LOS descriptions are shared and are provided in **Table 4**.

Table 4: AWSC and Roundabout LOS Summary

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

Appendix B: Intersection Turning Movement Counts

Prepared by National Data & Surveying Services

School St & Country Club Dr

Peak Hour Turning Movement Count

ID: 24-080076-001
City: Moraga

Day: Wednesday
Date: 4/10/2024

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (School St)

AM	1	25	13	0	64	AM
NOON	0	0	0	0	0	NOON
PM	11	12	10	1	54	PM

EASTBOUND (Country Club Dr)

AM	NOON	PM	
124	0	146	⇦
0	0	0	0 ↶
7	0	14	1 ↱
86	0	62	1 →
43	0	11	1 ↳

WESTBOUND (Country Club Dr)

PM	NOON	AM	
18	0	9	1 ↰
116	0	93	1 ←
14	0	48	1 ↰
7	0	9	0 ↶
93	0	131	⇨

NORTHBOUND (School St)

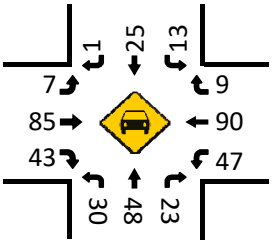
PM	37	0	19	21	14	PM
NOON	0	0	0	0	0	NOON
AM	116	0	30	48	23	AM

CONTROL

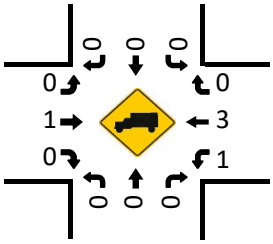
4-Way Stop

TEV	435	0	330
	AM	NOON	PM
PHF	0.72		0.96

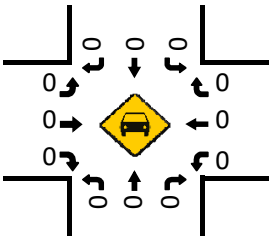
Cars (AM)



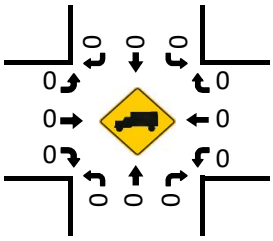
HT (AM)



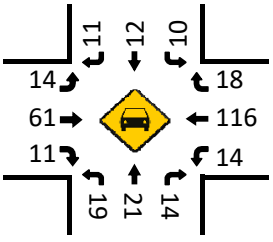
Cars (NOON)



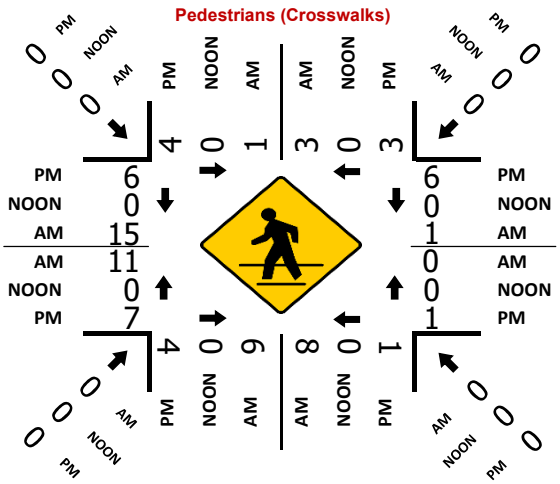
HT (NOON)



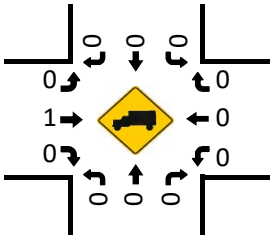
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Country Club Dr
City: Moraga
Control: 4-Way Stop

Project ID: 24-080076-001
Date: 4/10/2024

Data - Total

NS/EW Streets:	School St				School St				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	1	0	0	0	0	5	2	0	1	13	1	4	28
7:15 AM	1	0	1	0	0	2	0	0	0	6	0	0	1	12	2	1	26
7:30 AM	2	1	2	0	4	5	2	0	1	14	4	0	4	13	0	1	53
7:45 AM	5	3	1	0	3	3	1	0	0	15	5	0	4	26	1	3	70
8:00 AM	12	9	9	0	2	3	0	0	4	33	12	0	11	24	2	1	122
8:15 AM	10	21	7	0	4	6	0	0	2	25	16	0	28	27	3	3	152
8:30 AM	3	15	6	0	4	13	0	0	1	13	10	0	5	16	3	2	91
8:45 AM	3	5	2	0	1	8	1	0	1	15	1	0	4	18	0	4	63
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	37	54	28	0	19	40	4	0	9	126	50	0	58	149	12	19	605
APPROACH %'s :	31.09%	45.38%	23.53%	0.00%	30.16%	63.49%	6.35%	0.00%	4.86%	68.11%	27.03%	0.00%	24.37%	62.61%	5.04%	7.98%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	30	48	23	0	13	25	1	0	7	86	43	0	48	93	9	9	435
PEAK HR FACTOR :	0.625	0.571	0.639	0.000	0.813	0.481	0.250	0.000	0.438	0.652	0.672	0.000	0.429	0.861	0.750	0.750	0.715
	0.664				0.574				0.694				0.652				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	6	2	0	2	2	2	0	3	13	5	0	3	34	4	2	86
4:15 PM	5	6	3	0	1	2	3	0	5	16	1	0	1	32	6	1	82
4:30 PM	3	4	4	0	5	5	3	0	3	17	3	0	2	25	5	3	82
4:45 PM	3	5	5	0	2	3	3	1	3	16	2	0	8	25	3	1	80
5:00 PM	4	5	5	0	0	4	0	1	4	16	2	0	2	32	2	3	80
5:15 PM	6	2	1	0	1	2	4	1	3	18	5	0	2	20	3	0	68
5:30 PM	0	7	4	0	2	3	1	1	5	15	6	0	3	23	3	0	73
5:45 PM	1	3	1	0	2	1	3	0	2	19	0	0	2	24	1	0	59
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	30	38	25	0	15	22	19	4	28	130	24	0	23	215	27	10	610
APPROACH %'s :	32.26%	40.86%	26.88%	0.00%	25.00%	36.67%	31.67%	6.67%	15.38%	71.43%	13.19%	0.00%	8.36%	78.18%	9.82%	3.64%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	19	21	14	0	10	12	11	1	14	62	11	0	14	116	18	7	330
PEAK HR FACTOR :	0.594	0.875	0.700	0.000	0.500	0.600	0.917	0.250	0.700	0.912	0.550	0.000	0.438	0.853	0.750	0.583	0.959
	0.844				0.654				0.946				0.901				

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Country Club Dr
City: Moraga
Control: 4-Way Stop

Project ID: 24-080076-001
Date: 4/10/2024

Data - Cars

NS/EW Streets:	School St				School St				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	1	0	0	0	0	4	2	0	1	13	1	4	27
7:15 AM	1	0	0	0	0	2	0	0	0	6	0	0	1	12	2	1	25
7:30 AM	2	1	2	0	4	5	2	0	1	14	4	0	4	13	0	1	53
7:45 AM	5	3	1	0	3	3	1	0	0	15	5	0	4	25	1	3	69
8:00 AM	12	9	9	0	2	3	0	0	4	33	12	0	11	23	2	1	121
8:15 AM	10	21	7	0	4	6	0	0	2	24	16	0	27	26	3	3	149
8:30 AM	3	15	6	0	4	13	0	0	1	13	10	0	5	16	3	2	91
8:45 AM	3	5	2	0	1	7	1	0	1	14	1	0	4	18	0	4	61
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	37	54	27	0	19	39	4	0	9	123	50	0	57	146	12	19	596
APPROACH %'s :	31.36%	45.76%	22.88%	0.00%	30.65%	62.90%	6.45%	0.00%	4.95%	67.58%	27.47%	0.00%	24.36%	62.39%	5.13%	8.12%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	30	48	23	0	13	25	1	0	7	85	43	0	47	90	9	9	430
PEAK HR FACTOR :	0.625	0.571	0.639	0.000	0.813	0.481	0.250	0.000	0.438	0.644	0.672	0.000	0.435	0.865	0.750	0.750	0.721
	0.664				0.574				0.689				0.657				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	6	2	0	2	2	2	0	3	13	5	0	3	34	4	2	86
4:15 PM	5	6	3	0	1	2	3	0	5	16	1	0	1	32	6	1	82
4:30 PM	3	4	4	0	5	5	3	0	3	17	3	0	2	25	5	3	82
4:45 PM	3	5	5	0	2	3	3	1	3	15	2	0	8	25	3	1	79
5:00 PM	4	5	5	0	0	4	0	1	4	16	2	0	2	32	2	3	80
5:15 PM	6	2	1	0	1	2	4	1	3	18	5	0	2	20	3	0	68
5:30 PM	0	7	4	0	2	3	1	1	5	15	6	0	3	23	3	0	73
5:45 PM	1	3	1	0	2	1	3	0	2	19	0	0	2	24	1	0	59
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	30	38	25	0	15	22	19	4	28	129	24	0	23	215	27	10	609
APPROACH %'s :	32.26%	40.86%	26.88%	0.00%	25.00%	36.67%	31.67%	6.67%	15.47%	71.27%	13.26%	0.00%	8.36%	78.18%	9.82%	3.64%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	19	21	14	0	10	12	11	1	14	61	11	0	14	116	18	7	329
PEAK HR FACTOR :	0.594	0.875	0.700	0.000	0.500	0.600	0.917	0.250	0.700	0.897	0.550	0.000	0.438	0.853	0.750	0.583	0.956
	0.844				0.654				0.935				0.901				

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Country Club Dr
City: Moraga
Control: 4-Way Stop

Project ID: 24-080076-001
Date: 4/10/2024

Data - HT

NS/EW Streets:	School St				School St				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	1	0	0	0	3	0	0	1	3	0	0	9
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.750	0.000	0.000	0.417
										0.250				0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
										0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Country Club Dr
City: Moraga
Control: 4-Way Stop

Project ID: 24-080076-001
Date: 4/10/2024

Data - Bikes

NS/EW Streets:	School St				School St				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	1	2	2	0	1	0	10	0	0	1	0	0	18
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	20.00%	40.00%	40.00%	0.00%	9.09%	0.00%	90.91%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	2	2	0	1	0	7	0	0	0	0	0	13
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.500	0.250	0.000	0.250	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.650
					0.625				0.500								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	0	0	2	0	0	0	0	1	0	0	3	1	0	0	10
4:15 PM	1	0	1	0	0	0	0	0	1	0	0	0	2	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	4
5:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	4	1	0	3	0	1	0	5	5	1	0	5	3	0	0	31
APPROACH %'s :	37.50%	50.00%	12.50%	0.00%	75.00%	0.00%	25.00%	0.00%	45.45%	45.45%	9.09%	0.00%	62.50%	37.50%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	1	3	1	0	3	0	1	0	4	2	0	0	5	2	0	0	22
PEAK HR FACTOR :	0.250	0.250	0.250	0.000	0.375	0.000	0.250	0.000	0.500	0.500	0.000	0.000	0.417	0.500	0.000	0.000	0.550
		0.417				0.500				0.750				0.438			

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Country Club Dr
City: Moraga

Project ID: 24-080076-001
Date: 4/10/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	School St		School St		Country Club Dr		Country Club Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	0	0	0	0	0	1	2
7:15 AM	1	0	1	0	0	0	1	2	5
7:30 AM	1	0	0	0	0	0	2	2	5
7:45 AM	1	2	0	0	0	0	6	4	13
8:00 AM	0	1	0	1	0	1	0	2	5
8:15 AM	0	0	0	0	0	0	1	4	5
8:30 AM	0	0	6	7	0	0	4	5	22
8:45 AM	0	0	0	0	0	0	3	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	4	7	8	0	1	17	20	60
APPROACH %'s :	42.86%	57.14%	46.67%	53.33%	0.00%	100.00%	45.95%	54.05%	
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	1	3	6	8	0	1	11	15	45
PEAK HR FACTOR :	0.250	0.375	0.250	0.286		0.250	0.458	0.750	0.511
	0.333		0.269		0.250		0.650		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	1	0	1	1	1	2	0	1	7
4:15 PM	0	1	0	0	0	4	1	1	7
4:30 PM	3	0	1	0	0	0	2	2	8
4:45 PM	0	2	2	0	0	0	4	2	10
5:00 PM	0	0	0	2	4	0	0	0	6
5:15 PM	0	0	2	0	0	0	1	3	6
5:30 PM	0	1	0	0	0	0	1	1	3
5:45 PM	0	0	0	1	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	4	4	6	4	5	6	9	10	48
APPROACH %'s :	50.00%	50.00%	60.00%	40.00%	45.45%	54.55%	47.37%	52.63%	
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	4	3	4	1	1	6	7	6	32
PEAK HR FACTOR :	0.333	0.375	0.500	0.250	0.250	0.375	0.438	0.750	0.800
	0.583		0.625		0.438		0.542		

Prepared by National Data & Surveying Services

School St & De La Cruz Wy

Peak Hour Turning Movement Count

ID: 24-080076-002
City: Moraga

Day: Wednesday
Date: 4/10/2024

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (School St)

AM	0	19	14	0	45	AM
NOON	0	0	0	0	0	NOON
PM	0	6	11	0	16	PM

EASTBOUND (De La Cruz Wy)

AM	NOON	PM	
0	0	3	⇦
0	0	0	↶ 0
1	0	1	↱ 0
0	0	0	→ 0
0	0	0	↴ 0
AM	NOON	PM	

WESTBOUND (De La Cruz Wy)

PM	NOON	AM	
12	0	23	0 ↰
3	0	0	1 ←
2	0	6	0 ↙
1	0	0	0 ↶
17	0	18	⇨
PM	NOON	AM	

NORTHBOUND (School St)

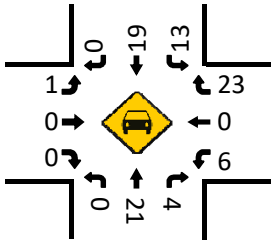
PM	8	0	0	3	5	PM
NOON	0	0	0	0	0	NOON
AM	25	0	0	21	4	AM

CONTROL

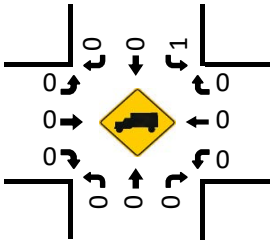
No Control

TEV	88 AM	0 NOON	44 PM
PHF	0.67		0.79

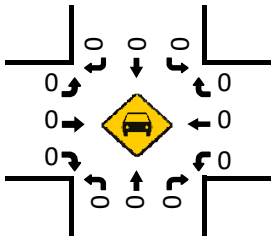
Cars (AM)



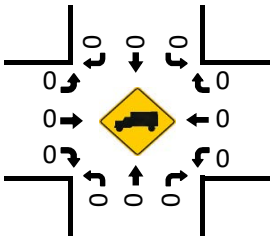
HT (AM)



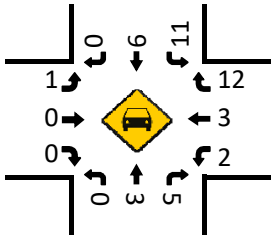
Cars (NOON)



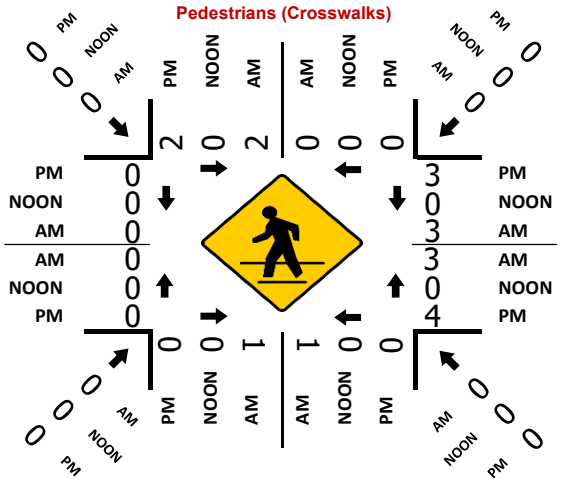
HT (NOON)



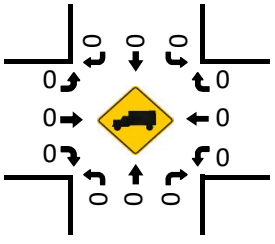
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & De La Cruz Wy
City: Moraga
Control: No Control

Project ID: 24-080076-002
Date: 4/10/2024

Data - Total

NS/EW Streets:	School St				School St				De La Cruz Wy				De La Cruz Wy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	3	2	0	1	3	0	0	1	0	0	0	0	0	3	0	13
8:00 AM	0	13	1	0	4	9	0	0	0	0	0	0	2	0	4	0	33
8:15 AM	0	5	0	0	7	5	0	0	0	0	0	0	2	0	14	0	33
8:30 AM	0	0	1	0	2	2	0	0	0	0	0	0	2	0	2	0	9
8:45 AM	0	1	0	0	4	0	0	0	0	0	0	0	1	0	2	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	24	5	0	18	19	0	0	1	0	0	0	8	0	29	0	104
APPROACH %'s :	0.00%	82.76%	17.24%	0.00%	48.65%	51.35%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	21.62%	0.00%	78.38%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	21	4	0	14	19	0	0	1	0	0	0	6	0	23	0	88
PEAK HR FACTOR :	0.000	0.404	0.500	0.000	0.500	0.528	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.411	0.000	0.667
	0.446				0.635				0.250				0.453				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	6	0	0	0	0	0	0	0	1	0	1	0	10
4:15 PM	0	2	1	0	2	0	0	0	0	0	0	0	0	0	2	0	7
4:30 PM	0	1	2	0	2	3	0	0	0	0	0	0	0	1	4	1	14
4:45 PM	0	1	1	0	3	1	0	0	0	0	0	0	0	0	4	0	10
5:00 PM	0	0	2	0	2	1	0	0	1	0	0	0	0	1	2	0	9
5:15 PM	0	1	0	0	4	1	0	0	0	0	0	0	2	1	2	0	11
5:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	1	0	1	0	6
5:45 PM	0	1	1	0	2	0	0	0	0	0	0	0	1	0	1	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	7	0	23	8	0	0	1	0	0	0	5	3	17	1	73
APPROACH %'s :	0.00%	53.33%	46.67%	0.00%	74.19%	25.81%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	19.23%	11.54%	65.38%	3.85%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	5	0	11	6	0	0	1	0	0	0	2	3	12	1	44
PEAK HR FACTOR :	0.000	0.750	0.625	0.000	0.688	0.500	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.750	0.750	0.250	0.786
	0.667				0.850				0.250				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & De La Cruz Wy
City: Moraga
Control: No Control

Project ID: 24-080076-002
Date: 4/10/2024

Data - Cars

NS/EW Streets:	School St				School St				De La Cruz Wy				De La Cruz Wy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	3	2	0	1	3	0	0	1	0	0	0	0	0	3	0	13
8:00 AM	0	13	1	0	4	9	0	0	0	0	0	0	2	0	4	0	33
8:15 AM	0	5	0	0	6	5	0	0	0	0	0	0	2	0	14	0	32
8:30 AM	0	0	1	0	2	2	0	0	0	0	0	0	2	0	2	0	9
8:45 AM	0	1	0	0	3	0	0	0	0	0	0	0	1	0	2	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	24	5	0	16	19	0	0	1	0	0	0	8	0	28	0	101
APPROACH %'s :	0.00%	82.76%	17.24%	0.00%	45.71%	54.29%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	22.22%	0.00%	77.78%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	21	4	0	13	19	0	0	1	0	0	0	6	0	23	0	87
PEAK HR FACTOR :	0.000	0.404	0.500	0.000	0.542	0.528	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.411	0.000	0.659
		0.446				0.615				0.250				0.453			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	6	0	0	0	0	0	0	0	1	0	1	0	10
4:15 PM	0	2	1	0	2	0	0	0	0	0	0	0	0	0	2	0	7
4:30 PM	0	1	2	0	2	3	0	0	0	0	0	0	0	1	4	1	14
4:45 PM	0	1	1	0	3	1	0	0	0	0	0	0	0	0	4	0	10
5:00 PM	0	0	2	0	2	1	0	0	1	0	0	0	0	1	2	0	9
5:15 PM	0	1	0	0	4	1	0	0	0	0	0	0	2	1	2	0	11
5:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	1	0	1	0	6
5:45 PM	0	1	1	0	2	0	0	0	0	0	0	0	1	0	1	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	7	0	23	8	0	0	1	0	0	0	5	3	17	1	73
APPROACH %'s :	0.00%	53.33%	46.67%	0.00%	74.19%	25.81%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	19.23%	11.54%	65.38%	3.85%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	5	0	11	6	0	0	1	0	0	0	2	3	12	1	44
PEAK HR FACTOR :	0.000	0.750	0.625	0.000	0.688	0.500	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.750	0.750	0.250	0.786
		0.667				0.850				0.250				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & De La Cruz Wy
City: Moraga
Control: No Control

Project ID: 24-080076-002
Date: 4/10/2024

Data - HT

NS/EW Streets:	School St				School St				De La Cruz Wy				De La Cruz Wy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	3
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & De La Cruz Wy
City: Moraga
Control: No Control

Project ID: 24-080076-002
Date: 4/10/2024

Data - Bikes

NS/EW Streets:	School St				School St				De La Cruz Wy				De La Cruz Wy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
8:00 AM	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	25	0	0	1	0	0	0	0	0	0	0	27
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	23	0	0	1	0	0	0	0	0	0	0	24
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.442	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.462
					0.442				0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	9
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
		0.375															

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & De La Cruz Wy
City: Moraga

Project ID: 24-080076-002
Date: 4/10/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	School St		School St		De La Cruz Wy		De La Cruz Wy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	2
7:15 AM	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	3	0	0	4
8:15 AM	0	0	1	1	0	0	0	0	2
8:30 AM	1	0	0	0	3	0	0	0	4
8:45 AM	0	0	0	0	2	1	0	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	1	1	7	5	0	0	16
APPROACH %'s :	100.00%	0.00%	50.00%	50.00%	58.33%	41.67%			
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	2	0	1	1	3	3	0	0	10
PEAK HR FACTOR :	0.500		0.250	0.250	0.250	0.250			0.625
	0.500		0.250		0.500				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	1	0	1	1	0	0	3
4:15 PM	0	0	0	0	2	0	0	0	2
4:30 PM	0	0	0	0	0	3	0	0	3
4:45 PM	1	0	0	0	0	0	0	0	1
5:00 PM	1	0	0	0	4	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	1	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	1	0	8	5	0	0	16
APPROACH %'s :	100.00%	0.00%	100.00%	0.00%	61.54%	38.46%			
PEAK HR :	**04:30 PM - 05:30 PM**								TOTAL
PEAK HR VOL :	2	0	0	0	4	3	0	0	9
PEAK HR FACTOR :	0.500				0.250	0.250			0.450
	0.500				0.438				

Prepared by National Data & Surveying Services

School St & Pacific Groves Dwy

Peak Hour Turning Movement Count

ID: 24-080076-003
City: Moraga

Day: Wednesday
Date: 4/10/2024

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (School St)

AM	8	101	0	1	100	AM
NOON	0	0	0	0	0	NOON
PM	4	34	1	0	42	PM

EASTBOUND (Pacific Groves Dwy)

AM	NOON	PM	
10	0	5	
0	0	1	0
2	0	8	0
0	0	0	1
1	0	2	0

WESTBOUND (Pacific Groves Dwy)

	PM	NOON	AM
0	1	0	0
1	0	0	0
0	0	0	0
0	0	0	0
	1	0	0

NORTHBOUND (School St)

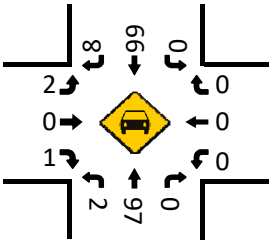
PM	36	0	0	33	0	PM
NOON	0	0	0	0	0	NOON
AM	102	0	2	97	0	AM

CONTROL

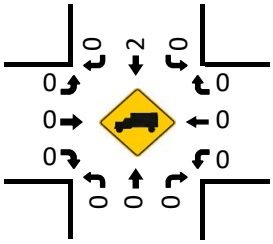
No Control

TEV	212	0	84
	AM	NOON	PM
PHF	0.60		0.91

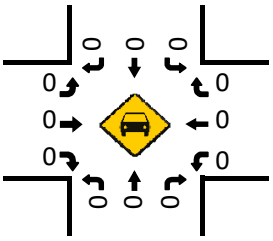
Cars (AM)



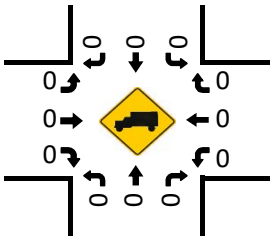
HT (AM)



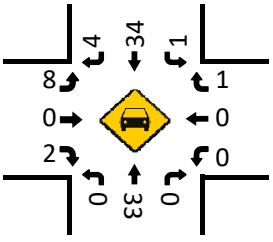
Cars (NOON)



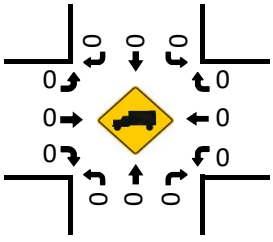
HT (NOON)



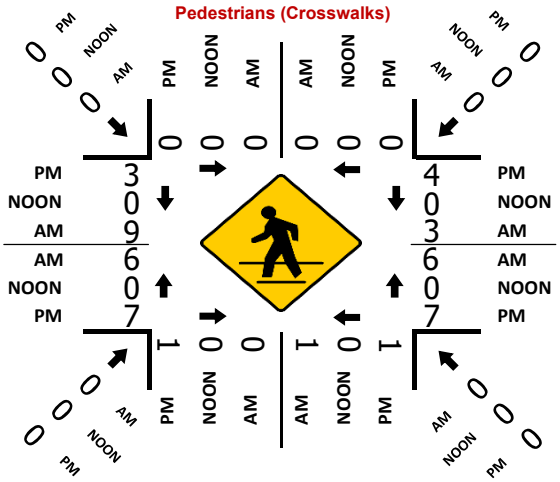
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Pacific Groves Dwy
City: Moraga
Control: No Control

Project ID: 24-080076-003
Date: 4/10/2024

Data - Total

NS/EW Streets:	School St				School St				Pacific Groves Dwy				Pacific Groves Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	2	0	0	0	3	1	0	0	0	0	0	0	0	0	0	6
7:30 AM	0	5	0	0	0	8	1	0	0	0	0	0	0	0	0	0	14
7:45 AM	0	8	0	0	0	9	0	0	0	0	0	0	0	0	0	0	17
8:00 AM	1	29	0	0	0	25	0	0	0	0	1	0	0	0	0	0	56
8:15 AM	1	40	0	0	0	44	3	0	0	0	0	0	0	0	0	0	88
8:30 AM	0	18	0	0	0	21	4	1	1	0	0	0	0	0	0	0	45
8:45 AM	0	10	0	0	0	11	1	0	1	0	0	0	0	0	0	0	23
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	113	0	0	0	124	10	1	2	0	1	0	0	0	0	0	253
APPROACH %'s :	1.74%	98.26%	0.00%	0.00%	0.00%	91.85%	7.41%	0.74%	66.67%	0.00%	33.33%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	97	0	0	0	101	8	1	2	0	1	0	0	0	0	0	212
PEAK HR FACTOR :	0.500	0.606	0.000	0.000	0.000	0.574	0.500	0.250	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.602
	0.604				0.585				0.750								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	13	0	0	0	10	0	0	1	0	0	0	0	0	0	0	24
4:15 PM	0	14	0	0	0	4	1	0	0	0	0	0	0	0	0	0	19
4:30 PM	0	11	0	0	0	6	2	0	0	0	0	0	0	0	0	0	19
4:45 PM	0	9	0	0	0	9	1	0	1	0	0	0	0	0	0	0	20
5:00 PM	0	8	0	0	1	5	2	0	4	0	1	1	0	0	1	0	23
5:15 PM	0	8	0	0	0	9	0	0	0	0	1	0	0	0	0	0	18
5:30 PM	0	8	0	0	0	11	1	0	3	0	0	0	0	0	0	0	23
5:45 PM	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	76	0	0	1	56	7	0	9	0	2	1	0	0	1	0	153
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	1.56%	87.50%	10.94%	0.00%	75.00%	0.00%	16.67%	8.33%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	33	0	0	1	34	4	0	8	0	2	1	0	0	1	0	84
PEAK HR FACTOR :	0.000	0.917	0.000	0.000	0.250	0.773	0.500	0.000	0.500	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.913
	0.917				0.813				0.458				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Pacific Groves Dwy
City: Moraga
Control: No Control

Project ID: 24-080076-003
Date: 4/10/2024

Data - Cars

NS/EW Streets:	School St				School St				Pacific Groves Dwy				Pacific Groves Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	5	0	0	0	8	1	0	0	0	0	0	0	0	0	0	14
7:45 AM	0	8	0	0	0	9	0	0	0	0	0	0	0	0	0	0	17
8:00 AM	1	29	0	0	0	25	0	0	0	0	1	0	0	0	0	0	56
8:15 AM	1	40	0	0	0	43	3	0	0	0	0	0	0	0	0	0	87
8:30 AM	0	18	0	0	0	21	4	1	1	0	0	0	0	0	0	0	45
8:45 AM	0	10	0	0	0	10	1	0	1	0	0	0	0	0	0	0	22
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	112	0	0	0	122	10	1	2	0	1	0	0	0	0	0	250
APPROACH %'s :	1.75%	98.25%	0.00%	0.00%	0.00%	91.73%	7.52%	0.75%	66.67%	0.00%	33.33%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	97	0	0	0	99	8	1	2	0	1	0	0	0	0	0	210
PEAK HR FACTOR :	0.500	0.606	0.000	0.000	0.000	0.576	0.500	0.250	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.603
	0.604				0.587				0.750								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	13	0	0	0	10	0	0	1	0	0	0	0	0	0	0	24
4:15 PM	0	14	0	0	0	4	1	0	0	0	0	0	0	0	0	0	19
4:30 PM	0	11	0	0	0	6	2	0	0	0	0	0	0	0	0	0	19
4:45 PM	0	9	0	0	0	9	1	0	1	0	0	0	0	0	0	0	20
5:00 PM	0	8	0	0	1	5	2	0	4	0	1	1	0	0	1	0	23
5:15 PM	0	8	0	0	0	9	0	0	0	0	1	0	0	0	0	0	18
5:30 PM	0	8	0	0	0	11	1	0	3	0	0	0	0	0	0	0	23
5:45 PM	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	76	0	0	1	56	7	0	9	0	2	1	0	0	1	0	153
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	1.56%	87.50%	10.94%	0.00%	75.00%	0.00%	16.67%	8.33%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	33	0	0	1	34	4	0	8	0	2	1	0	0	1	0	84
PEAK HR FACTOR :	0.000	0.917	0.000	0.000	0.250	0.773	0.500	0.000	0.500	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.913
	0.917				0.813				0.458				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Pacific Groves Dwy
City: Moraga
Control: No Control

Project ID: 24-080076-003
Date: 4/10/2024

Data - HT

NS/EW Streets:	School St				School St				Pacific Groves Dwy				Pacific Groves Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
						0.500											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Pacific Groves Dwy
City: Moraga
Control: No Control

Project ID: 24-080076-003
Date: 4/10/2024

Data - Bikes

NS/EW Streets:	School St				School St				Pacific Groves Dwy				Pacific Groves Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	4	0	0	0	0	7	0	0	0	0	0	11
8:00 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	16	0	0	0	0	7	0	0	0	0	0	23
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
					0.500												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	0	0	0	4	0	0	1	0	0	0	0	0	0	0	12
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
		0.375				0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: School St & Pacific Groves Dwy
City: Moraga

Project ID: 24-080076-003
Date: 4/10/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	School St		School St		Pacific Groves Dwy		Pacific Groves Dwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	2	2
7:15 AM	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	1	1	2	4
7:45 AM	0	0	0	0	0	1	4	5	10
8:00 AM	0	0	0	0	1	0	1	3	5
8:15 AM	0	0	0	0	1	0	2	2	5
8:30 AM	0	0	0	1	4	1	0	0	6
8:45 AM	0	0	0	0	0	2	3	4	9
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	1	6	6	11	18	42
APPROACH %'s :			0.00%	100.00%	50.00%	50.00%	37.93%	62.07%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	1	6	3	6	9	25
PEAK HR FACTOR :				0.250	0.375	0.375	0.500	0.563	0.694
			0.250		0.450		0.536		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	3	0	0	0	3
4:15 PM	0	0	0	0	1	4	1	0	6
4:30 PM	0	0	1	0	0	0	1	0	2
4:45 PM	0	0	0	0	2	1	2	3	8
5:00 PM	0	0	0	1	4	0	1	0	6
5:15 PM	0	0	1	0	1	0	2	0	4
5:30 PM	0	0	0	0	0	3	2	0	5
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	1	11	8	9	3	34
APPROACH %'s :			66.67%	33.33%	57.89%	42.11%	75.00%	25.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	1	1	7	4	7	3	23
PEAK HR FACTOR :			0.250	0.250	0.438	0.333	0.875	0.250	0.719
			0.500		0.688		0.500		

Prepared by National Data & Surveying Services

Law Office Of Susan Kang Gordon Dwy & Country Club Dr

Peak Hour Turning Movement Count

ID: 24-080076-004
City: Moraga

Day: Wednesday
Date: 4/10/2024

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Law Office Of Susan Kang Gordon Dwy)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Country Club Dr)

AM	NOON	PM		
124	0	146	⇦	
0	0	0	↶	0
0	0	0	↱	0
133	0	83	→	1
3	0	0	↴	0
AM	NOON	PM		

WESTBOUND (Country Club Dr)

PM	NOON	AM		
0	0	0	↰	0
146	0	124	←	1
0	0	0	↰	0
0	0	0	↰	0
86	0	136	⇨	
PM	NOON	AM		

NORTHBOUND (Law Office Of Susan Kang Gordon Dwy)

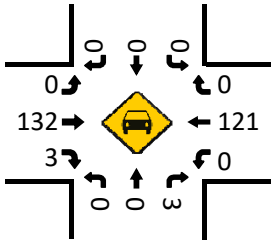
PM	0	0	0	0	3	PM
NOON	0	0	0	0	0	NOON
AM	3	0	0	0	3	AM

CONTROL

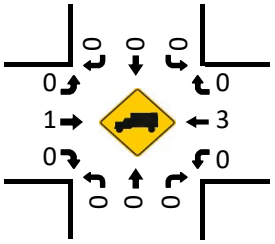
No Control

TEV	263	0	232
	AM	NOON	PM
PHF	0.79		0.91

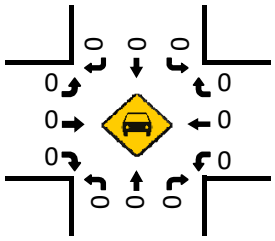
Cars (AM)



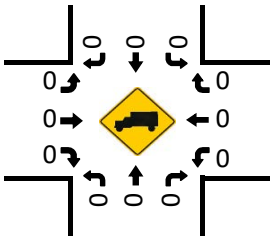
HT (AM)



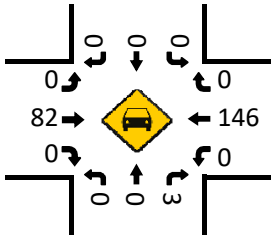
Cars (NOON)



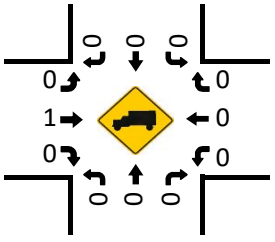
HT (NOON)



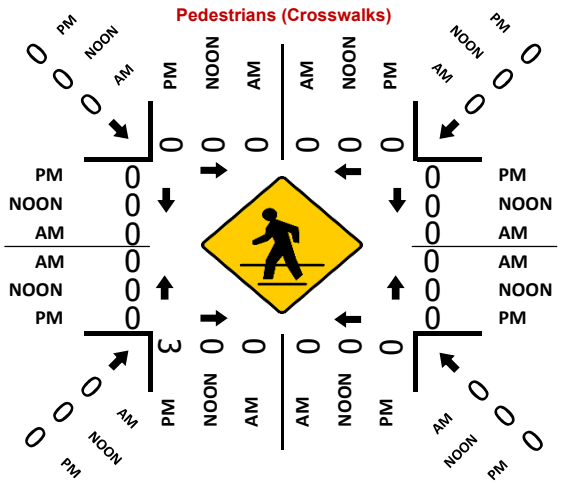
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Law Office Of Susan Kang Gordon Dwy & Country Club Dr
City: Moraga
Control: No Control

Project ID: 24-080076-004
Date: 4/10/2024

Data - Total

NS/EW Streets:	Law Office Of Susan Kang Gordon Dwy				Law Office Of Susan Kang Gordon Dwy				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	14	0	0	21
7:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	13	0	0	19
7:30 AM	0	0	1	0	0	0	0	0	0	18	1	0	0	17	0	0	37
7:45 AM	0	0	0	0	0	0	0	0	0	21	0	0	0	32	0	0	53
8:00 AM	0	0	1	0	0	0	0	0	0	47	0	0	0	35	0	0	83
8:15 AM	0	0	0	0	0	0	0	0	0	44	1	0	0	38	0	0	83
8:30 AM	0	0	2	0	0	0	0	0	0	21	2	0	0	19	0	0	44
8:45 AM	0	0	0	0	0	0	0	0	0	17	1	0	0	21	0	0	39
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	4	0	0	0	0	0	0	181	5	0	0	189	0	0	379
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	97.31%	2.69%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	133	3	0	0	124	0	0	263
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.707	0.375	0.000	0.000	0.816	0.000	0.000	0.792
	0.375								0.723				0.816				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	19	0	0	0	43	0	0	63
4:15 PM	0	0	0	0	0	0	0	0	0	23	0	0	0	41	0	0	64
4:30 PM	0	0	2	0	0	0	0	0	0	20	0	0	0	30	0	0	52
4:45 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	32	0	0	53
5:00 PM	0	0	0	0	0	0	0	0	0	22	0	0	0	36	0	0	58
5:15 PM	0	0	0	0	0	0	0	0	0	26	0	0	0	30	0	0	56
5:30 PM	0	0	1	0	0	0	0	0	0	25	0	0	0	24	0	0	50
5:45 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	27	0	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	4	0	0	0	0	0	0	177	0	0	0	263	0	0	444
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	83	0	0	0	146	0	0	232
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.902	0.000	0.000	0.000	0.849	0.000	0.000	0.906
	0.375								0.902				0.849				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Law Office Of Susan Kang Gordon Dwy & Country Club Dr
City: Moraga
Control: No Control

Project ID: 24-080076-004
Date: 4/10/2024

Data - Cars

NS/EW Streets:	Law Office Of Susan Kang Gordon Dwy				Law Office Of Susan Kang Gordon Dwy				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	14	0	0	20
7:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	13	0	0	19
7:30 AM	0	0	1	0	0	0	0	0	0	18	1	0	0	17	0	0	37
7:45 AM	0	0	0	0	0	0	0	0	0	21	0	0	0	31	0	0	52
8:00 AM	0	0	1	0	0	0	0	0	0	47	0	0	0	34	0	0	82
8:15 AM	0	0	0	0	0	0	0	0	0	43	1	0	0	37	0	0	81
8:30 AM	0	0	2	0	0	0	0	0	0	21	2	0	0	19	0	0	44
8:45 AM	0	0	0	0	0	0	0	0	0	16	1	0	0	21	0	0	38
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	4	0	0	0	0	0	0	178	5	0	0	186	0	0	373
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	97.27%	2.73%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	132	3	0	0	121	0	0	259
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.702	0.375	0.000	0.000	0.818	0.000	0.000	0.790
	0.375								0.718				0.818				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	19	0	0	0	43	0	0	63
4:15 PM	0	0	0	0	0	0	0	0	0	23	0	0	0	41	0	0	64
4:30 PM	0	0	2	0	0	0	0	0	0	20	0	0	0	30	0	0	52
4:45 PM	0	0	0	0	0	0	0	0	0	20	0	0	0	32	0	0	52
5:00 PM	0	0	0	0	0	0	0	0	0	22	0	0	0	36	0	0	58
5:15 PM	0	0	0	0	0	0	0	0	0	26	0	0	0	30	0	0	56
5:30 PM	0	0	1	0	0	0	0	0	0	25	0	0	0	24	0	0	50
5:45 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	27	0	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	4	0	0	0	0	0	0	176	0	0	0	263	0	0	443
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	82	0	0	0	146	0	0	231
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.891	0.000	0.000	0.000	0.849	0.000	0.000	0.902
	0.375								0.891				0.849				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Law Office Of Susan Kang Gordon Dwy & Country Club Dr
City: Moraga
Control: No Control

Project ID: 24-080076-004
Date: 4/10/2024

Data - HT

NS/EW Streets:	Law Office Of Susan Kang Gordon Dwy				Law Office Of Susan Kang Gordon Dwy				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.000	0.500
									0.250				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Law Office Of Susan Kang Gordon Dwy & Country Club Dr
City: Moraga
Control: No Control

Project ID: 24-080076-004
Date: 4/10/2024

Data - Bikes

NS/EW Streets:	Law Office Of Susan Kang Gordon Dwy				Law Office Of Susan Kang Gordon Dwy				Country Club Dr				Country Club Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	2	7	0	0	0	0	0	9
8:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	11	7	0	0	3	0	0	21
APPROACH %'s :									0.00%	61.11%	38.89%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	8	7	0	0	2	0	0	17
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.000	0.472
										0.417				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	10	1	0	0	7	0	0	19
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	90.91%	9.09%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	5	1	0	0	4	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.250	0.000	0.000	1.000	0.000	0.000	0.917
			0.250							0.750				1.000			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Law Office Of Susan Kang Gordon Dwy & Country Club Dr **Project ID:** 24-080076-004
City: Moraga **Date:** 4/10/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Law Office Of Susan Kang Gordon Dwy		Law Office Of Susan Kang Gordon Dwy		Country Club Dr		Country Club Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	3
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	3
PEAK HR FACTOR :			0.250						0.250
			0.250						

Appendix C: Existing Conditions Capacity Analysis Worksheets

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	86	43	57	93	9	30	48	23	13	25	1
Future Vol, veh/h	7	86	43	57	93	9	30	48	23	13	25	1
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	119	60	79	129	13	42	67	32	18	35	1
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	10	9.2	9.9	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	30%	100%	0%	100%	0%	0%	33%
Vol Thru, %	48%	0%	67%	0%	100%	0%	64%
Vol Right, %	23%	0%	33%	0%	0%	100%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	7	129	57	93	9	39
LT Vol	30	7	0	57	0	0	13
Through Vol	48	0	86	0	93	0	25
RT Vol	23	0	43	0	0	9	1
Lane Flow Rate	140	10	179	79	129	13	54
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.218	0.017	0.268	0.127	0.19	0.016	0.088
Departure Headway (Hd)	5.598	6.121	5.382	5.787	5.283	4.578	5.876
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	637	581	663	617	676	776	605
Service Time	3.372	3.893	3.153	3.549	3.045	2.339	3.663
HCM Lane V/C Ratio	0.22	0.017	0.27	0.128	0.191	0.017	0.089
HCM Control Delay, s/veh	9.9	9	10.1	9.4	9.3	7.4	9.2
HCM Lane LOS	A	A	B	A	A	A	A
HCM 95th-tile Q	0.8	0.1	1.1	0.4	0.7	0	0.3

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	6	0	23	0	21	4	14	19	0
Future Vol, veh/h	1	0	0	6	0	23	0	21	4	14	19	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	6	6	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	9	0	34	0	31	6	21	28	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	123	113	30	112	110	42	28	0	0	43	0	0
Stage 1	70	70	-	40	40	-	-	-	-	-	-	-
Stage 2	53	43	-	72	70	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	852	777	1044	866	780	1029	1585	-	-	1566	-	-
Stage 1	940	837	-	975	862	-	-	-	-	-	-	-
Stage 2	960	859	-	938	837	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	813	761	1042	850	764	1021	1585	-	-	1557	-	-
Mov Cap-2 Maneuver	813	761	-	850	764	-	-	-	-	-	-	-
Stage 1	940	825	-	969	857	-	-	-	-	-	-	-
Stage 2	926	854	-	923	825	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.4	8.8	0	3.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1585	-	-	813	980	1557	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.044	0.013	-	-
HCM Control Delay (s/veh)	0	-	-	9.4	8.8	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	2	97	102	8
Future Vol, veh/h	2	1	2	97	102	8
Conflicting Peds, #/hr	0	1	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	3	162	170	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	360	193	198	0	-	0
Stage 1	192	-	-	-	-	-
Stage 2	168	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	639	849	1375	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	620	836	1355	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	850	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.3	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1355	-	678	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.7	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	133	3	0	124	0	3
Future Vol, veh/h	133	3	0	124	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	4	0	157	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	327	170
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	667	874
Stage 1	-	-	0	-	860	-
Stage 2	-	-	0	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	667	874
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	874	-	-	-
HCM Lane V/C Ratio	0.004	-	-	-
HCM Control Delay (s/veh)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	62	11	21	116	18	19	21	14	11	12	11
Future Vol, veh/h	14	62	11	21	116	18	19	21	14	11	12	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	65	11	22	121	19	20	22	15	11	13	11
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	8.3	8.3	8.3	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	35%	100%	0%	100%	0%	0%	32%
Vol Thru, %	39%	0%	85%	0%	100%	0%	35%
Vol Right, %	26%	0%	15%	0%	0%	100%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	54	14	73	21	116	18	34
LT Vol	19	14	0	21	0	0	11
Through Vol	21	0	62	0	116	0	12
RT Vol	14	0	11	0	0	18	11
Lane Flow Rate	56	15	76	22	121	19	35
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.081	0.023	0.106	0.033	0.163	0.022	0.05
Departure Headway (Hd)	5.164	5.623	5.015	5.359	4.857	4.155	5.127
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	695	638	716	670	741	864	699
Service Time	2.884	3.345	2.737	3.075	2.573	1.87	2.85
HCM Lane V/C Ratio	0.081	0.024	0.106	0.033	0.163	0.022	0.05
HCM Control Delay, s/veh	8.3	8.5	8.3	8.3	8.5	7	8.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.4	0.1	0.6	0.1	0.2

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	3	12	0	3	5	11	6	0
Future Vol, veh/h	1	0	0	3	3	12	0	3	5	11	6	0
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	4	4	15	0	4	6	14	8	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	55	53	8	50	50	16	8	0	0	17	0	0
Stage 1	36	36	-	14	14	-	-	-	-	-	-	-
Stage 2	19	17	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	943	838	1074	950	841	1063	1612	-	-	1600	-	-
Stage 1	980	865	-	1006	884	-	-	-	-	-	-	-
Stage 2	1000	881	-	980	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	918	825	1074	938	828	1054	1612	-	-	1589	-	-
Mov Cap-2 Maneuver	918	825	-	938	828	-	-	-	-	-	-	-
Stage 1	980	857	-	999	878	-	-	-	-	-	-	-
Stage 2	979	875	-	971	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.9	8.7	0	4.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	918	989	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.001	0.023	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	8.9	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	0	33	34	4
Future Vol, veh/h	9	2	0	33	34	4
Conflicting Peds, #/hr	0	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	2	0	36	37	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	85	51	51	0	-	0
Stage 1	49	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	916	1017	1555	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	898	1005	1540	-	-	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	976	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	916	-	-
HCM Lane V/C Ratio	-	-	0.013	-	-
HCM Control Delay (s/veh)	0	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	83	0	0	146	0	3
Future Vol, veh/h	83	0	0	146	0	3
Conflicting Peds, #/hr	0	3	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	0	0	160	0	3

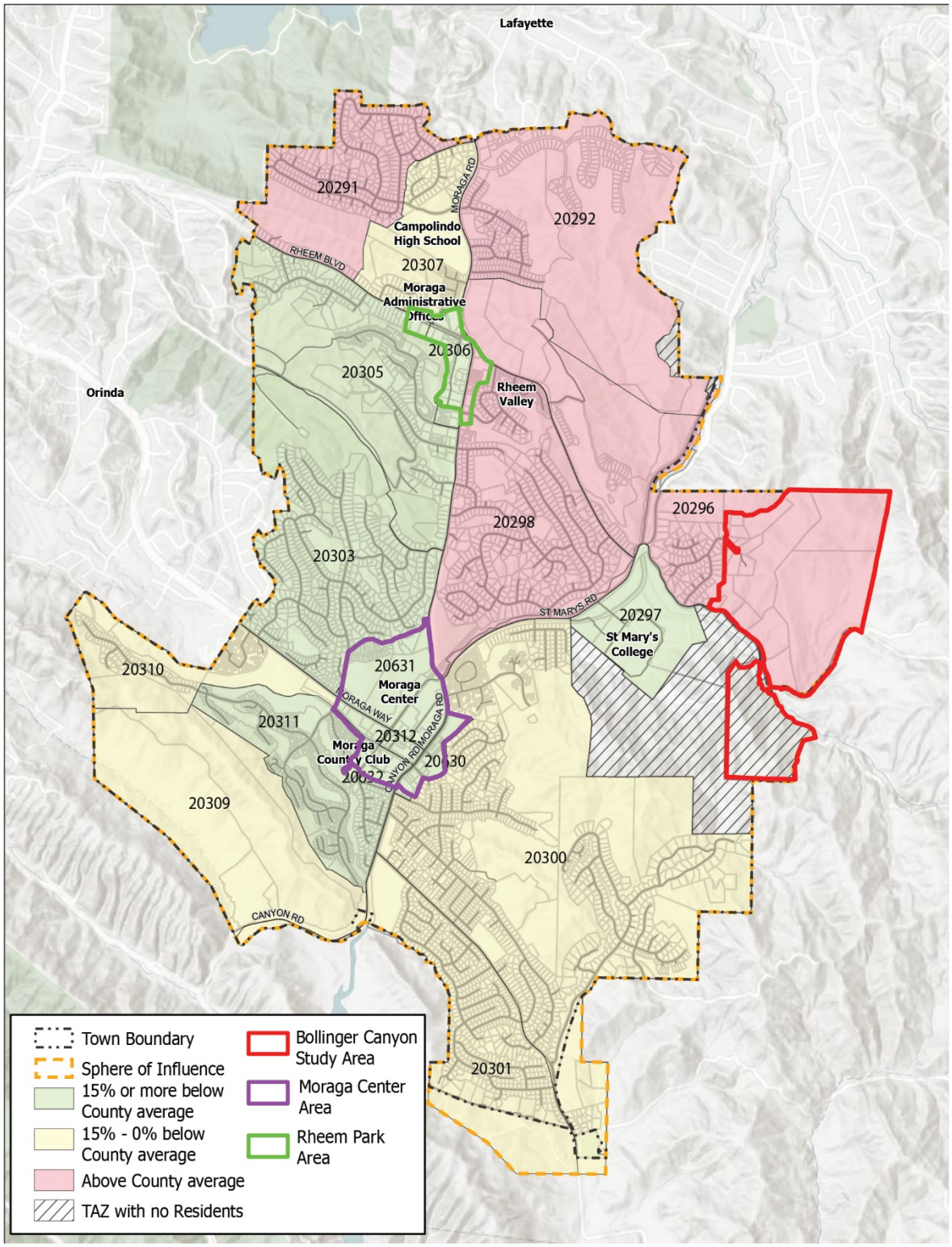
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	254	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	735	963
Stage 1	-	-	0	-	930	-
Stage 2	-	-	0	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	733	960
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	960	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-
HCM Control Delay (s/veh)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Appendix D: Vehicle Miles Traveled Screening Map

Figure 4.14-4 TAZs within the Town of Moraga



Note: TAZ 20301 is not included as a Moraga Town TAZ because it falls largely outside Town limits.

Source: City of Moraga, 2002.

Appendix E: Existing plus Project Conditions Capacity Analysis Worksheets

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	90	43	59	93	9	30	52	27	13	28	1
Future Vol, veh/h	10	90	43	59	93	9	30	52	27	13	28	1
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	125	60	82	129	13	42	72	38	18	39	1
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	10.3	9.3	10.1	9.4
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	28%	100%	0%	100%	0%	0%	31%
Vol Thru, %	48%	0%	68%	0%	100%	0%	67%
Vol Right, %	25%	0%	32%	0%	0%	100%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	10	133	59	93	9	42
LT Vol	30	10	0	59	0	0	13
Through Vol	52	0	90	0	93	0	28
RT Vol	27	0	43	0	0	9	1
Lane Flow Rate	151	14	185	82	129	13	58
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.236	0.024	0.279	0.133	0.192	0.016	0.096
Departure Headway (Hd)	5.616	6.178	5.445	5.847	5.343	4.637	5.92
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	634	575	654	610	666	765	600
Service Time	3.396	3.961	3.228	3.619	3.114	2.408	3.714
HCM Lane V/C Ratio	0.238	0.024	0.283	0.134	0.194	0.017	0.097
HCM Control Delay, s/veh	10.1	9.1	10.4	9.5	9.4	7.5	9.4
HCM Lane LOS	B	A	B	A	A	A	A
HCM 95th-tile Q	0.9	0.1	1.1	0.5	0.7	0	0.3

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	6	0	24	0	21	4	17	19	0
Future Vol, veh/h	1	0	0	6	0	24	0	21	4	17	19	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	6	6	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	9	0	36	0	31	6	25	28	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	132	121	30	120	118	42	28	0	0	43	0	0
Stage 1	78	78	-	40	40	-	-	-	-	-	-	-
Stage 2	54	43	-	80	78	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	840	769	1044	855	772	1029	1585	-	-	1566	-	-
Stage 1	931	830	-	975	862	-	-	-	-	-	-	-
Stage 2	958	859	-	929	830	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	799	752	1042	838	755	1021	1585	-	-	1557	-	-
Mov Cap-2 Maneuver	799	752	-	838	755	-	-	-	-	-	-	-
Stage 1	931	817	-	969	857	-	-	-	-	-	-	-
Stage 2	923	854	-	912	817	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.5	8.9	0	3.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1585	-	-	799	978	1557	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.046	0.016	-	-
HCM Control Delay (s/veh)	0	-	-	9.5	8.9	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	4	3	97	102	13
Future Vol, veh/h	10	4	3	97	102	13
Conflicting Peds, #/hr	0	1	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	7	5	162	170	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	368	197	207	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	172	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	632	844	1364	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	612	831	1345	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	846	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1345	-	662	-	-
HCM Lane V/C Ratio	0.004	-	0.035	-	-
HCM Control Delay (s/veh)	7.7	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	133	3	0	124	0	10
Future Vol, veh/h	133	3	0	124	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	4	0	157	0	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	327	170
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	667	874
Stage 1	-	-	0	-	860	-
Stage 2	-	-	0	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	667	874
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	874	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s/veh)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	64	11	27	116	18	19	23	16	11	19	11
Future Vol, veh/h	16	64	11	27	116	18	19	23	16	11	19	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	67	11	28	121	19	20	24	17	11	20	11
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	8.4	8.4	8.4	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	33%	100%	0%	100%	0%	0%	27%
Vol Thru, %	40%	0%	85%	0%	100%	0%	46%
Vol Right, %	28%	0%	15%	0%	0%	100%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	16	75	27	116	18	41
LT Vol	19	16	0	27	0	0	11
Through Vol	23	0	64	0	116	0	19
RT Vol	16	0	11	0	0	18	11
Lane Flow Rate	60	17	78	28	121	19	43
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.087	0.026	0.11	0.042	0.164	0.022	0.061
Departure Headway (Hd)	5.175	5.674	5.069	5.398	4.896	4.193	5.17
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	694	632	709	665	735	856	694
Service Time	2.898	3.396	2.791	3.114	2.612	1.909	2.894
HCM Lane V/C Ratio	0.086	0.027	0.11	0.042	0.165	0.022	0.062
HCM Control Delay, s/veh	8.4	8.5	8.4	8.4	8.6	7	8.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.4	0.1	0.6	0.1	0.2

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	3	15	0	3	5	13	6	0
Future Vol, veh/h	1	0	0	3	3	15	0	3	5	13	6	0
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	4	4	19	0	4	6	16	8	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	61	57	8	54	54	16	8	0	0	17	0	0
Stage 1	40	40	-	14	14	-	-	-	-	-	-	-
Stage 2	21	17	-	40	40	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	934	834	1074	944	837	1063	1612	-	-	1600	-	-
Stage 1	975	862	-	1006	884	-	-	-	-	-	-	-
Stage 2	998	881	-	975	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	905	820	1074	931	823	1054	1612	-	-	1589	-	-
Mov Cap-2 Maneuver	905	820	-	931	823	-	-	-	-	-	-	-
Stage 1	975	853	-	999	878	-	-	-	-	-	-	-
Stage 2	974	875	-	965	853	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9	8.7	0	5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	905	995	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.001	0.027	0.01	-	-
HCM Control Delay (s/veh)	0	-	-	9	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	4	3	33	34	17
Future Vol, veh/h	13	4	3	33	34	17
Conflicting Peds, #/hr	0	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	4	3	36	37	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	99	59	66	0	-	0
Stage 1	57	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	900	1007	1536	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	880	996	1521	-	-	-
Mov Cap-2 Maneuver	880	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.1	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1521	-	905	-	-
HCM Lane V/C Ratio	0.002	-	0.021	-	-
HCM Control Delay (s/veh)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	83	0	0	146	0	7
Future Vol, veh/h	83	0	0	146	0	7
Conflicting Peds, #/hr	0	3	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	0	0	160	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	254	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	735	963
Stage 1	-	-	0	-	930	-
Stage 2	-	-	0	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	733	960
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	960	-	-	-
HCM Lane V/C Ratio	0.008	-	-	-
HCM Control Delay (s/veh)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	88	43	54	93	9	30	50	25	13	22	1
Future Vol, veh/h	9	88	43	54	93	9	30	50	25	13	22	1
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	122	60	75	129	13	42	69	35	18	31	1
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	10.1	9.2	10	9.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	29%	100%	0%	100%	0%	0%	36%
Vol Thru, %	48%	0%	67%	0%	100%	0%	61%
Vol Right, %	24%	0%	33%	0%	0%	100%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	9	131	54	93	9	36
LT Vol	30	9	0	54	0	0	13
Through Vol	50	0	88	0	93	0	22
RT Vol	25	0	43	0	0	9	1
Lane Flow Rate	146	13	182	75	129	13	50
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.226	0.021	0.272	0.121	0.19	0.016	0.082
Departure Headway (Hd)	5.582	6.114	5.378	5.797	5.293	4.587	5.899
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	639	582	662	616	674	774	602
Service Time	3.356	3.89	3.153	3.56	3.056	2.35	3.687
HCM Lane V/C Ratio	0.228	0.022	0.275	0.122	0.191	0.017	0.083
HCM Control Delay, s/veh	10	9	10.2	9.4	9.3	7.4	9.2
HCM Lane LOS	A	A	B	A	A	A	A
HCM 95th-tile Q	0.9	0.1	1.1	0.4	0.7	0	0.3

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	6	0	21	0	21	4	16	19	0
Future Vol, veh/h	1	0	0	6	0	21	0	21	4	16	19	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	6	6	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	9	0	31	0	31	6	24	28	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	128	119	30	118	116	42	28	0	0	43	0	0
Stage 1	76	76	-	40	40	-	-	-	-	-	-	-
Stage 2	52	43	-	78	76	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	845	771	1044	858	774	1029	1585	-	-	1566	-	-
Stage 1	933	832	-	975	862	-	-	-	-	-	-	-
Stage 2	961	859	-	931	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	808	754	1042	841	757	1021	1585	-	-	1557	-	-
Mov Cap-2 Maneuver	808	754	-	841	757	-	-	-	-	-	-	-
Stage 1	933	819	-	969	857	-	-	-	-	-	-	-
Stage 2	930	854	-	914	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.5	8.9	0	3.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1585	-	-	808	975	1557	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.041	0.015	-	-
HCM Control Delay (s/veh)	0	-	-	9.5	8.9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	3	0	97	102	2
Future Vol, veh/h	6	3	0	97	102	2
Conflicting Peds, #/hr	0	1	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	5	0	162	170	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	349	188	188	0	-	0
Stage 1	187	-	-	-	-	-
Stage 2	162	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	648	854	1386	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	630	841	1366	-	-	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1366	-	687	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s/veh)	0	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q (veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	133	3	0	124	0	7
Future Vol, veh/h	133	3	0	124	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	4	0	157	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	327	170
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	667	874
Stage 1	-	-	0	-	860	-
Stage 2	-	-	0	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	667	874
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	874	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-
HCM Control Delay (s/veh)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	63	11	26	116	18	19	22	15	11	17	11
Future Vol, veh/h	14	63	11	26	116	18	19	22	15	11	17	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	66	11	27	121	19	20	23	16	11	18	11
Number of Lanes	1	1	0	1	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay, s/veh	8.4	8.4	8.4	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	34%	100%	0%	100%	0%	0%	28%
Vol Thru, %	39%	0%	85%	0%	100%	0%	44%
Vol Right, %	27%	0%	15%	0%	0%	100%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	14	74	26	116	18	39
LT Vol	19	14	0	26	0	0	11
Through Vol	22	0	63	0	116	0	17
RT Vol	15	0	11	0	0	18	11
Lane Flow Rate	58	15	77	27	121	19	41
Geometry Grp	5	6	6	5	5	5	5
Degree of Util (X)	0.084	0.023	0.108	0.04	0.164	0.022	0.058
Departure Headway (Hd)	5.176	5.659	5.053	5.383	4.881	4.178	5.157
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	694	634	711	667	737	859	696
Service Time	2.895	3.38	2.773	3.098	2.596	1.894	2.877
HCM Lane V/C Ratio	0.084	0.024	0.108	0.04	0.164	0.022	0.059
HCM Control Delay, s/veh	8.4	8.5	8.4	8.3	8.6	7	8.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.4	0.1	0.6	0.1	0.2

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	3	14	0	3	5	11	6	0
Future Vol, veh/h	1	0	0	3	3	14	0	3	5	11	6	0
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	4	4	18	0	4	6	14	8	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	56	53	8	50	50	16	8	0	0	17	0	0
Stage 1	36	36	-	14	14	-	-	-	-	-	-	-
Stage 2	20	17	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	941	838	1074	950	841	1063	1612	-	-	1600	-	-
Stage 1	980	865	-	1006	884	-	-	-	-	-	-	-
Stage 2	999	881	-	980	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	914	825	1074	938	828	1054	1612	-	-	1589	-	-
Mov Cap-2 Maneuver	914	825	-	938	828	-	-	-	-	-	-	-
Stage 1	980	857	-	999	878	-	-	-	-	-	-	-
Stage 2	976	875	-	971	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.9	8.7	0	4.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	914	995	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.001	0.025	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	8.9	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	2	2	33	34	14
Future Vol, veh/h	11	2	2	33	34	14
Conflicting Peds, #/hr	0	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	2	2	36	37	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	95	57	62	0	-	0
Stage 1	55	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	905	1009	1541	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	997	1526	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.1	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1526	-	901	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s/veh)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	83	0	0	146	0	4
Future Vol, veh/h	83	0	0	146	0	4
Conflicting Peds, #/hr	0	3	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	0	0	160	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	254	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	735	963
Stage 1	-	-	0	-	930	-
Stage 2	-	-	0	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	733	960
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	960	-	-	-
HCM Lane V/C Ratio	0.005	-	-	-
HCM Control Delay (s/veh)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-

Appendix F: TK/K-12 Enrollment by Age Group and Grade

Source: https://dq.cde.ca.gov/dataquest/ (California Department of Education)
Level: County
Subject: Annual Enrollment Data
Year of Data: 2023-2024
County: 07 CONTRA COSTA
Report: County TK/K-12 Enrollment by Age Group and Grade

2023-24 K-12 Enrollment by Age Group and Grade: Contra Costa County Report															
Age Group	Grade TK	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Total Enrollment
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4	1,523	1	0	0	0	0	0	0	0	0	0	0	0	0	1,524
5	2,792	6,780	1	1	0	0	0	0	0	0	0	0	0	0	9,574
6	0	3,893	7,255	5	0	1	0	0	0	0	0	0	0	0	11,154
7	0	6	4,063	7,722	7	0	0	0	0	0	0	0	0	0	11,798
8	0	0	14	4,381	7,620	11	0	0	0	0	0	0	0	0	12,026
9	0	0	0	25	4,387	8,042	8	0	0	0	0	0	0	0	12,462
10	0	0	0	0	25	4,514	7,737	13	0	0	0	0	0	0	12,289
11	0	0	0	0	0	24	4,649	7,982	12	0	0	0	0	0	12,667
12	0	0	0	0	1	0	40	4,600	7,841	26	1	0	0	0	12,509
13	0	0	0	0	0	0	1	51	4,860	7,887	31	1	0	1	12,832
14	0	0	0	0	0	1	0	0	72	4,899	8,547	40	0	1	13,560
15	0	0	0	0	0	0	0	0	0	40	4,513	9,348	42	1	13,944
16	0	0	0	0	0	0	0	0	0	1	102	4,027	10,319	60	14,509
17	0	0	0	0	0	0	0	0	0	0	15	100	3,372	10,777	14,264
18	0	0	0	0	0	0	0	0	0	0	2	15	105	3,538	3,660
19	0	0	0	0	0	0	0	0	0	0	0	0	8	274	282
20	0	0	0	0	0	0	0	0	0	0	0	1	0	173	174
21	0	0	0	0	0	0	0	0	0	0	0	0	0	120	120
22	0	0	0	0	0	0	0	0	0	0	0	0	1	41	42
30-39	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
40-49	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Total	4,315	10,680	11,333	12,134	12,040	12,593	12,435	12,647	12,786	12,853	13,212	13,533	13,847	14,986	169,394
Percent	2.5%	6.3%	6.7%	7.2%	7.1%	7.4%	7.3%	7.5%	7.5%	7.6%	7.8%	8.0%	8.2%	8.8%	100.0%
										22.6%					

Appendix G: Architect's Title Sheet with Parking Calculations

UNIT INFORMATION

TOTAL UNIT MIX AND AVG NET AREA

Name	Count	Unit Mix	Avg Area
1BR	16	24%	832 SF
2BR	35	53%	1089 SF
3BR	15	23%	1343 SF

TOTAL: 66

PER LEVEL UNIT MIX AND AVG NET AREA

Name	Count	Unit Mix	Avg Area
LEVEL 1			
1BR	2	3%	852 SF
2BR	3	5%	1115 SF
3BR	2	3%	1350 SF
LEVEL 2			
1BR	6	9%	820 SF
2BR	12	18%	1086 SF
3BR	3	5%	1304 SF
LEVEL 3			
1BR	6	9%	820 SF
2BR	12	18%	1088 SF
3BR	3	5%	1304 SF
LEVEL 4			
1BR	2	3%	887 SF
2BR	8	12%	1083 SF
3BR	7	11%	1374 SF

TOTAL: 66

TOTAL BEDROOMS:
1BR = 1 X (16) = 16
2BR = 2 X (35) = 70
3BR = 3 X (15) = 45

TOTAL: 131 BEDROOMS

DRAWING SHEET INDEX

		ENTITLEMENTS RESUBMISSION 02.22.24
01 - GENERAL		
G.000	COVER SHEET	X
G.001	TITLE SHEET	X
G.002	EXISTING OFFICE (FOR REFERENCE ONLY)	X
G.003	BUILDING HEIGHT ANALYSIS	X
G.007	SITE PHOTOS	X
G.010	RENDERED VIEWS	X
G.011	RENDERED VIEWS	X
02 - DEMOLITION		
AD.100	DEMOLITION SITE PLAN	X
03 - ARCHITECTURAL		
AS.101	SITE PLAN	X
AS.102	SITE PLAN - FIRE ACCESS	X
A.101	FLOOR PLAN LEVEL 1	X
A.102	FLOOR PLAN LEVEL 2	X
A.103	FLOOR PLAN LEVEL 3	X
A.104	FLOOR PLAN LEVEL 4	X
A.105	ROOF PLAN	X
A.300	BUILDING ELEVATIONS	X
A.301	BUILDING ELEVATIONS	X
A.310	COLOR & MATERIAL BOARD	X
A.320	BUILDING SECTIONS	X
A.321	BUILDING SECTIONS	X
A.580	TYP UNIT PLANS 1BR	X
A.581	TYP UNIT PLANS 2BR	X
A.582	TYP UNIT PLANS 2BR	X
A.583	TYP UNIT PLANS 2BR	X
A.584	TYP UNIT PLANS 3BR	X
04 - LANDSCAPING		
L0.1	TREE PROTECTION/DEMO PLAN	X
L0.2	TREE PROTECTION DETAILS	X
L0.3	SIGHT DISTANCE DIAGRAM	X
L1.0	MATERIALS PLAN - STREET LEVEL	X
L1.1	MATERIALS PLAN - 2ND LEVEL/ ROOF DECK	X
L3.0	PLANTING PLAN - STREET LEVEL	X
L3.1	PLANTING PLAN - STREET LEVEL	X
L3.2	PLANTING PLAN - 2ND LEVEL/ ROOF DECK	X
L4.0	LIGHTING CUT SHEETS	X
L4.1	DETAILS	X
05 - CIVIL		
C.01	PRELIMINARY SITE PLAN	X
C.02	TOPOGRAPHIC SURVEY	X
C.03	PRELIMINARY GRADING, DRAINAGE, AND UTILITY PLAN	X
C.04	PRELIMINARY STORM WATER CONTROL PLAN	X
C.05	PRELIMINARY FIRE SERVICE PLAN	X
TOTAL: 40		

ENTITLEMENT INFO

1. THE PROJECT HAS NO IMPACT TO THE STREAM CHANNEL
2. A PORTION OF THE PROPERTY IS WITHIN THE FLOOD ZONE. YES HAS BEEN ADDED TO THE PLANNING APPLICATION AS A RESULT. HOWEVER THE AREA OF THE SITE BEING IMPACTED BY CONSTRUCTION IS OUTSIDE THE FLOOD ZONE.
3.

REQUIRED FOR BUILDING PERMIT

1. A SECURITY SURVEILLANCE SYSTEM BE REQUIRED THAT INCLUDES CAMERAS PROVIDING VIEWS OF THE ENTRANCE TO THE GARAGE, INSIDE THE GARAGE AND THE INTERSECTION OF COUNTRY CLUB DRIVE AND SCHOOL STREET. RECORDINGS TO BE MAINTAINED ON SITE FOR AT LEAST 30 DAYS AND ACCESS BE PROVIDED TO MORAGA POLICE FOR INVESTIGATIVE PURPOSES. CAMERA SPECIFICATIONS TO BE DETERMINED IN CONSULTATION WITH MORAGA POLICE.
2. ELEVATOR CAB SIZE. PLEASE PROVIDE A NOTE ON THE PLANS THAT THE ELEVATOR SHALL MEET THE REQUIREMENTS OF A GURNEY ELEVATOR AS REQUIRED BY CBC 3002.4(A). PLEASE PROVIDE AN ENLARGED DETAIL SHOWING THE ELEVATOR CAB SIZE WITH THE GURNEY OVERLAY.
3. ELEVATOR LOBBY. THE ELEVATOR LOBBY SHALL BE PROVIDED WITH A TWO-WAY COMMUNICATION SYSTEM REQUIRED BY CFC 1009.8. PLEASE PROVIDE A NOTE ON THE PLANS THAT THIS COMMUNICATION SYSTEM WILL BE SUBMITTED AS A DEFERRED SUBMITTAL.
4. ELEVATOR HOISTWAY DETECTION FOR PHASE I RECALL. ASME A17.1 ELEVATOR AND ESCALATOR SAFETY CODE RULE 2.27.5.2 REQUIRES WHEN SPRINKLERS ARE INSTALLED IN THE ELEVATOR HOISTWAY, AUTOMATIC DETECTION SHALL BE PROVIDED FOR PHASE 1 RECALL IN ACCORDANCE WITH NFPA 72 – 21.3.8. IF AUTOMATIC FIRE SPRINKLERS ARE INSTALLED IN THE ELEVATOR HOISTWAY, INCLUDING THE ELEVATOR PIT, FIRE DETECTION TO INITIATE PHASE 1 RECALL SHALL BE PROVIDED WITHIN 24 INCHES OF THE SPRINKLER. SMOKE DETECTORS SHALL NOT BE INSTALLED IN ELEVATOR HOISTWAYS TO INITIATE ELEVATOR RECALL UNLESS THE SMOKE DETECTOR IS LISTED FOR THE ENVIRONMENT. [CFC 907.2 AND ASME A17.1 RULE 2.27.5.2] PLEASE IDENTIFY ON THE PLANS THE LOCATION AND DEVICE TYPE USED TO INITIATE PHASE 1 RECALL.
5. ELEVATOR SHUNT TRIP. IF HEAT DETECTORS ARE USED TO SHUT DOWN ELEVATOR POWER PRIOR TO SPRINKLER OPERATION, THE DETECTOR SHALL HAVE BOTH A LOWER TEMPERATURE RATING AND HIGHER SENSITIVITY COMPARED TO THE SPRINKLER. HEAT DETECTORS SHALL BE INSTALLED WITHIN 24 INCHES OF THE SPRINKLERS. [CFC 907.2 AND NFPA 72 – 21.4.1 AND -4.2] PERMIT APPLICANT TO (1) IDENTIFY IF THE ELEVATORS ARE EQUIPPED WITH SHUNT TRIP FEATURES, AND, IF SO, (2) SHOW THE TEMPERATURE/SENSITIVITY RATING OF THE ELEVATOR SHAFT HEAT DETECTOR AND PROVIDE A NOTE ON THE PLANS DESCRIBING HOW POWER SHUTDOWN WILL BE ACHIEVED.
6. SPRINKLER AND FIRE ALARM SYSTEMS. PLEASE PROVIDE A NOTE ON THE PLANS INDICATING THE BUILDING WILL BE PROVIDED WITH A SPRINKLER AND FIRE ALARM SYSTEM. LIST PLANS FOR THE SPRINKLER SYSTEM, UNDERGROUND WATER MAINS AND FIRE ALARM SYSTEM AS A DEFERRED SUBMITTAL.
7. CAR STACKER SYSTEMS REQUIRE AN EXTRA HAZARD GROUP II FIRE SPRINKLER SYSTEM DESIGN AND REQUIRE SPECIFIC CBC SEPARATION REQUIREMENTS. PLEASE MAKE A NOTE ON THE PLANS INDICATING THIS REQUIREMENT AND PROVIDE SPECIFIC CBC AND CFC REQUIREMENTS IN THE CODE ANALYSIS.
8. THE STAIRS WILL NEED TO BE WIDE ENOUGH TO HANDLE OCCUPANT EVACUATION AND FIRE FIGHTER ACCESS SIMULTANEOUSLY. IN THE CODE ANALYSIS, PLEASE PROVIDE A NOTE INDICATING HOW THIS REQUIREMENT WILL BE MET.
9. LOCATE FIRE EXTINGUISHERS AT EXTERIOR COURTYARDS.
10. AN APPROVED RADIO COVERAGE SYSTEM FOR EMERGENCY RESPONDERS IS REQUIRED FOR THE BUILDING UNLESS TESTING CAN SHOW IT IS NOT REQUIRED.

ZONING INFO

SITE ADDRESS:	1600 SCHOOL STREET MORAGA, CA 94556	
ASSESSORS PARCEL NUMBER:	257190 - 050, 051 & 052	
SITE AREA:	TOTAL SITE AREA: 87,245 SF / 2.002 AC	
ZONING DISTRICT:	MCSP - MIXED OFFICE/RESIDENTIAL	
	REQUIRED:	**PROPOSED:**
DENSITY:	24 MAX UNITS / ACR NET 2 ACR X 24 = 48 UNITS MAX	32.5% DENSITY BONUS = +15.6 UNITS 5% FOR 10% BMR = +2.4 UNITS 48 + 15.6 + 2.4 = 66 UNITS PROPOSED
LOT AREA:	MIN. AREA: 10,000 SF MIN. WIDTH: 30 FT MIN. DEPTH: 100 FT	87,245 SF / 2 ACR
SETBACKS:	FRONT: 0 FT SIDE: 0 FT REAR: 0 FT	FRONT: 11'-0" SIDE: 13'-0" REAR: 68'-1"
OPEN SPACE AREA:	**60%** OF SITE AREA **NOT COVERED** WITH BUILDING. ---------- 40% OF OPEN SPACE AREA LANDSCAPED 49,849 X 40% = **19,939 SF REQ LANDSCAPED AREA**	BUILDING FOOTPRINT = 37,396 SF 87,245 - 37,396 = 49,849 SF **87,245 : 49,849 = 57% NOT COVERED** ***WAIVER REQUESTED, WE'RE COMPLIANT WITH THE REQUIREMENT FOR LANDSCAPED AREA BELOW** ---------- L1 LANDSCAPE: 49,849 (OPEN) - 27,743 (PAVED) = 22,106 SF L2 LANDSCAPE: 5,546 SF 27,652 SF **LANDSCAPED AREA**
FLOOR AREA RATIO: APPLIED TO NON-RES ONLY	MAX: 85% OF SITE AREA (NON-RES)	OFFICE BUILDING, IS 5,557.9 SF SEE G.002 5,557.9 IS **6.3%** OF THE 87,245 SF SITE
HEIGHT + BULK LIMIT:	MAX (3) STORIES 45' MAX BUILDING HEIGHT	BLDG HT TO LEVEL 5 ROOF = 47.6' FOR CALCS SEE G.003 ***WAIVER REQUESTED**
BICYCLE PARKING:	5% OF REQUIRED AUTO PARKING (CGBC 5.106.4.1.2) **111 x (5%) = 6 SPACES**	(8) BICYCLE SPACES
FOR COMBINED PARCEL OFF-STREET PARKING:	**RESIDENTIAL:** 9'X19' SPACES WITH 28' DRIVE AISLE AND 90 DEGREE PARKING 50% OF REQUIRED SPACES TO BE COVERED PER STATE DENSITY BONUS LAW: 1 BR: (16 UNITS) X 1 = 16 SPACES 2 BR: (35 UNITS) X 1.5 = 52.5 SPACES 3 BR: (15 UNITS) X 1.5 = 22.5 SPACES **TOTAL: 91 SPACES** **OFFICE: SEE G.002 FOR AREA** **8.76.080:** SHARED PARKING FACTOR: 1.4 STALLS / 250 SF 5,558 SF / 250 SF = 22.2 22.2 / 1.4 = **15.8 SPACES** **TOTAL REQUIRED: 106.8 SPACES**	**RESIDENTIAL:** REQUIRED = 91 SPACES PROVIDED = 80 SPACES (IN GARAGE) PROVIDED = 13 SPACES (SHARED LOT) **OFFICE:** REQUIRED = 15.8 SPACES PROVIDED = 16 SPACES (SHARED LOT) **GARAGE SPACES: 80 SPACES** **SHARED LOT SPACES: 29 SPACES** **TOTAL PROVIDED: 109 SPACES**
ADA PARKING:	**RESIDENTIAL:** 2% FOR ASSIGNED PARKING (CBC 1109A.3) **93 x (2%) = 2 SPACES** (1) ADA CAR, (1) ADA VAN + SEPERATE (1) ADA **EV** VAN	**RESIDENTIAL PROVIDED:** (1) ADA CAR SPACES (1) ADA VAN SPACE (1) EV VAN ADA-COMPLIANT **OFFICE PROVIDED:** (1) ADA CAR SPACES (1) ADA VAN SPACE (1) EV VAN ADA-COMPLIANT ON NEIGHBORING PARCEL
PARKING LOT SHARING ACROSS PROPERTY LINES	**THE EXTERIOR ON GRADE PARKING LOT WILL BE SHARED BETWEEN THE NEWLY COMBINED PARCEL AND PARCEL 257190-049 FOR THE FOLLOWING USES:** • **FIRE TRUCK ACCESS** • **TRASH PICK-UP**	

PROJECT DESCRIPTION

1600 SCHOOL STREET PRESENTS A THOUGHTFUL AND WELL-DESIGNED HOUSING PROJECT THAT PRIORITIZES COMMUNITY ENGAGEMENT, SUSTAINABILITY, AND AN APPEALING LIVING ENVIRONMENT FOR ITS RESIDENTS. THE PROJECT WILL SIGNIFICANTLY CONTRIBUTE TO THE ENHANCEMENT AND REVITALIZATION OF THE NEIGHBORHOOD.

HERE ARE SOME OF THE PROJECT'S KEY FEATURES:

STREET LEVEL UNITS WITH PRIVATE DECKS AND GREEN SPACE: HAVING UNITS AT STREET LEVEL WITH PRIVATE DECKS AND GREEN SPACE CREATES A STRONG CONNECTION BETWEEN THE PRIVATE LIVING SPACES AND THE COMMUNITY OUTSIDE. IT PROMOTES INTERACTION AMONG RESIDENTS AND ENHANCES THE OVERALL LIVING EXPERIENCE.

ENTRY PLAZA: THE PRESENCE OF AN ENTRY PLAZA ENLIVENS THE STREET SPACE AND SERVES AS A WELCOMING AND INVITING AREA FOR BOTH RESIDENTS AND PASSERSBY. THIS SPACE CAN FOSTER A SENSE OF COMMUNITY AND ENCOURAGE SOCIAL INTERACTION.

RECESSED TOP FLOOR: THE RECESSED TOP FLOOR DESIGN ADDS DEPTH TO THE BUILDING'S APPEARANCE, MAKING IT VISUALLY APPEALING AND BREAKING UP THE BUILDING'S MASS. THIS DESIGN ELEMENT WILL ALSO PREVENT THE STRUCTURE FROM OVERWHELMING NEIGHBORING BUILDINGS.

PODIUM WALLS WITH GREEN WALLS: GREEN WALLS ON THE PODIUM WALLS CONTRIBUTE TO THE PROJECT'S SUSTAINABILITY AND AESTHETICS. THEY PROVIDE ENVIRONMENTAL BENEFITS, SUCH AS IMPROVED AIR QUALITY AND REDUCED HEAT ISLAND EFFECT, WHILE ALSO ADDING GREENERY TO THE OVERALL DESIGN.

MULTIPLE CONNECTIONS TO LAFAYETTE MORAGA REGIONAL TRAIL: BY CREATING MULTIPLE CONNECTIONS TO THE REGIONAL TRAIL, THE HOUSING PROJECT NOT ONLY PROMOTES ACTIVE LIFESTYLES BUT ALSO ENGAGES WITH THE SURROUNDING ENVIRONMENT IN A POSITIVE AND SYNERGISTIC WAY.

VARIED MASSING: THE USE OF VARIED MASSING IN THE BUILDING DESIGN HELPS DISTINGUISH INDIVIDUAL DWELLING UNITS WHILE STILL MAINTAINING A COHESIVE AND HARMONIOUS OVERALL APPEARANCE. THIS APPROACH MAKES THE DEVELOPMENT VISUALLY INTERESTING AND DYNAMIC.

WARM MATERIALS: INCORPORATING WARM MATERIALS INTO THE PROJECT'S DESIGN GIVES IT A MORE INVITING AND WELCOMING FEEL. THE MATERIALS INCLUDE COMPOSITE WOOD PANELING, BOARD FORM CONCRETE, AND LIGHT SAND-TONED FINISHES CONTRASTING WITH A DARK WARM-GREY FINISHES THAT CREATE A COMFORTABLE ATMOSPHERE FOR RESIDENTS AND VISITORS.

STREET TREES: PLACING STREET TREES AT THE EDGE OF THE SIDEWALK ENHANCES THE PEDESTRIAN EXPERIENCE. BY FRAMING THE PEDESTRIAN SPACE BETWEEN THE BUILDING AND THE TREES, IT CREATES A SENSE OF PROTECTION AND INTIMACY, MAKING THE 8-FOOT WIDE SIDEWALK FEEL MORE COMFORTABLE AND INVITING.

THE SCOPE OF THE PROJECT INCLUDES THE FOLLOWING ITEMS:

1) COMBINING 3 PARCELS AT 1600, 1640 AND 1660 SCHOOL STREET INTO A SINGLE PARCEL WITH A GROSS LOT AREA OF 87,245 SF.

2) REMOVING TWO EXISTING OFFICE BUILDINGS

3) A NEW 66 UNIT RESIDENTIAL APARTMENT BUILDING

4) LANDSCAPE IMPROVEMENTS THROUGHOUT THE SITE, INCLUDING A RAISED COURTYARD AMENITY SPACE ON THE PODIUM OF THE APARTMENT BUILDING SERVING THE APARTMENT RESIDENTS.

WHEN THE PROJECT IS COMPLETE, THE PARCEL WILL INCLUDE ONE EXISTING OFFICE BUILDING AND A NEW APARTMENT BUILDING. THE PARKING WILL BE SHARED BETWEEN THE TWO BUILDINGS ON THE COMBINED PARCEL, AND THE EXISTING OFFICE BUILDING ON PARCEL 1620.

SEE ZONING INFO ON THIS SHEET FOR CALCULATIONS REGARDING DENSITY, SETBACKS, LOT AREAS, AND PARKING.

VICINITY MAP

PARCEL 257190-049
1620 SCHOOL STREET

COMBINED PARCEL
- **257190-050**
- **257190-051**
- **257190-052**

PROJECT DIRECTORY

CLIENT

OUTDO COUNTRY CLUB DRIVE, LLC
1127 RAHARA DR
LAFAYETTE, CA 94549

CONTACT: NIKHIL GERA
PHONE: 917-620-8829
EMAIL: NIKHIL.GERA@GERA.IN

ARCHITECT

FORM4 ARCHITECTURE
120 SECOND ST. 2ND FLOOR
SAN FRANCISCO, CA. 94105

CONTACT: GOETZ FRANK
PHONE: 415-775-8748
EMAIL: GFRANK@FORM4INC.COM

CONTRACTOR

DIAMOND CONSTRUCTION
PO BOX 477
LAFAYETTE, CA 94549

CONTACT: JEFF STONE
PHONE: 925-934-2711
EMAIL: JBSTONE@DIAMONDCONSTRUCTIONINC.COM

CIVIL ENGINEER

DEBOLT CIVIL ENGINEERING
480 SAN RAMON VALLEY BLVD #L
DANVILLE, CA 94526

CONTACT: EASTON MCALLISTER
PHONE: 925-837-3780
EMAIL: OFFICE@DEBOLTCIVIL.COM

LANDSCAPE ARCHITECT

GROUNDWORKS OFFICE
1792 FIFTH ST
BERKELEY, CA 94710

CONTACT: BRENNAN COX
PHONE: 510-920-3428
EMAIL: BRENNAN@GWO.LA

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Form4 Architecture
120 Second St 2ndFloor
SanFrancisco,CA 94105
Tel : 415 . 775 . 8748
Fax : 415 . 775 . 8752
www.Form4inc.com

1600 SCHOOL STREET HOUSING

1600 SCHOOL STREET, MORAGA, CA

CLIENT:
OUTDO COUNTRY CLUB DRIVE LLC

ISSUANCE	DATE
PLANNING SUBMISSION 01	12.21.2022
PLANNING SUBMISSION 02 (Redesign)	07.28.2023
PLANNING SUBMISSION 03	12.01.2023
PLANNING SUBMISSION 04	02.22.2024
PLANNING SUBMISSION 05	05.03.2024

REVISIONS	Δ DELTA	DATE
PLANNING SUBMISSION 03		12/01/2023

KEY PLAN:

STAMP:

LICENSED ARCHITECT PAUL ERIK FRANK No. C-39009 Reg. 12-30-25 STATE OF CALIFORNIA

PROJECT NO: 22.046.00

SHEET NAME:
TITLE SHEET

PHASE:

SHEET NO:
G.001

5/1/2024 3:40:12 PM Autodesk Docs://22.046.00_Jeff Stone_ 1600 School Street Housing/1600 School Street Housing_AR.rvt

School Street Townhomes – DRB-05-25, GR-01-26, and SUB-01-26

Environmental Consistency Checklist Pursuant to CEQA Guidelines Section 15183

prepared by

Town of Moraga
329 Rheem Boulevard
Moraga, California 94556
Contact: Brian Horn, Principal Planner

prepared with the assistance of

Rincon Consultants, Inc.
66 Franklin Street, Suite 300
Oakland, California 94607

June 2026

RINCON CONSULTANTS

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Appendix B Geotechnical Report
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Project Description

1. Project Title

School Street Townhomes

2. Lead Agency Name and Address

Town of Moraga
329 Rheem Boulevard
Moraga, California 94556

3. Lead Agency Contact

Brian Horn, Principal Planner
bhorn@moraga.ca.us

4. Project Location

The project site is located at 1600–1660 School Street in the Town of Moraga, Contra Costa County. The approximately 2.95-acre project site is at the southwest corner of School Street and Country Club Drive. The project site consists of four assessor parcels (APNs), APNs 257-190-049, 257-190-050, 257-190-051, and 257-190-052 where ground disturbance is proposed and does not include the Lafayette-Moraga Trail or Laguna Creek, which cross the parcel boundary but are outside of the project site. Figure 1 shows the regional location of the proposed project and Figure 2 shows the location of the project site within the parcel boundary in its immediate context.

5. Project Applicant

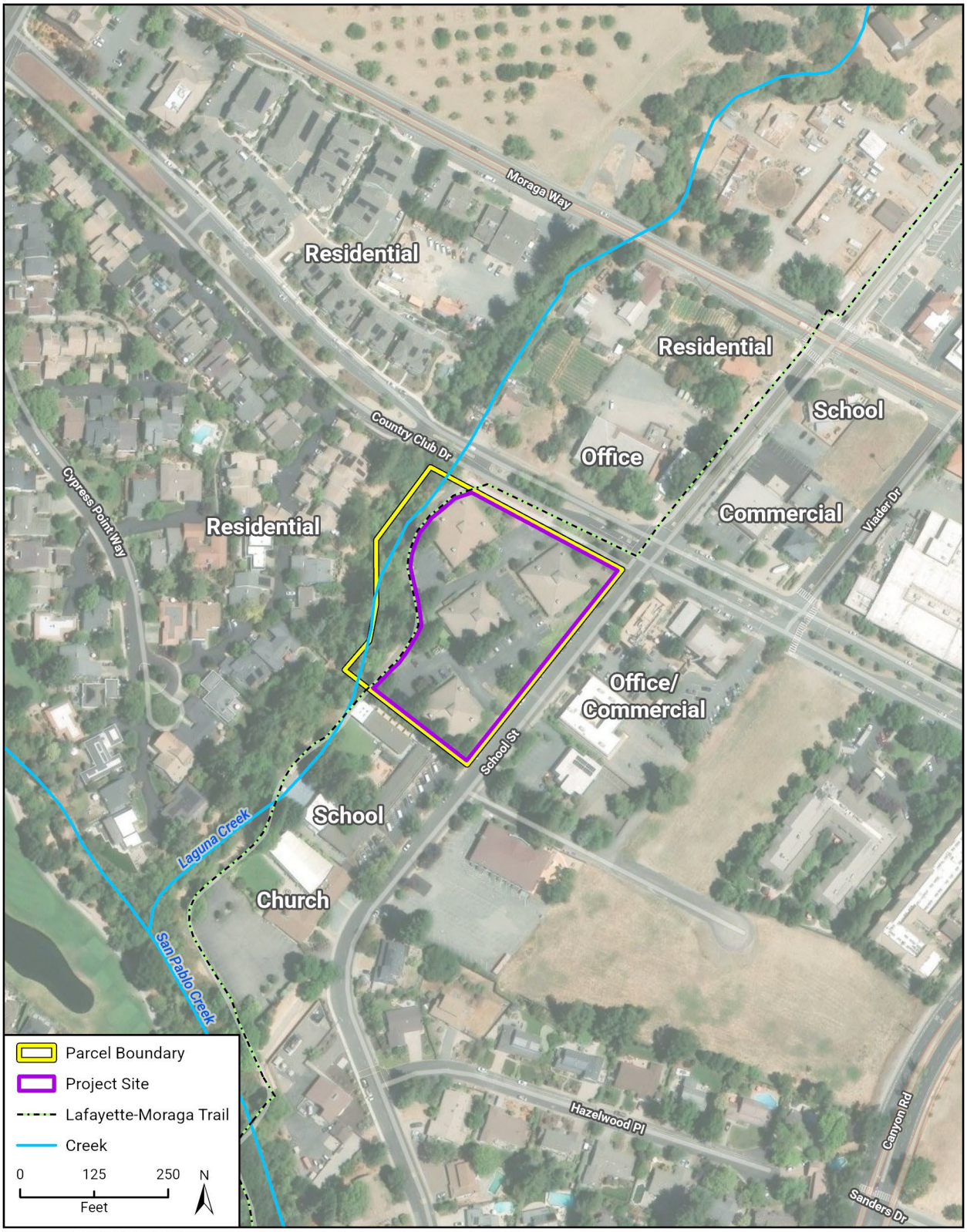
OUTDO Country Club Drive, LLC
1600 School Street, Suite 107
Moraga, California 94556

Figure 1 Regional Location

Basemap provided by Esri and its licensors © 2026. Map created by Rincon Consultants, Inc., 2026.

26-18833 EPS
EIRFig 1 Regional Location

Figure 2 Project Site Location



Imagery provided by Esri and its licensors © 2026. Map created by Rincon Consultants, Inc., 2026.

26-18833 EPS
EIRFig 2 Project Location

6. General Plan Designation

The project site is designated as MC (Moraga Center) in the Town of Moraga's General Plan 2040 (General Plan). The General Plan states that "Moraga Center is one of two areas in Moraga that has been designated a 'Priority Development Area' by the Town of Moraga and that "high-density residential development is permitted in the Moraga Center," among other uses. The General Plan identifies densities of 12 to 24 dwelling units per acre for mixed-use zones in Moraga Center, such as the project site.

The project site is also identified in the Town's 2023-2031 Housing Element of the General Plan as Housing Opportunity Site F-3, which it describes as *"Covered by Moraga Center Specific Plan, which was intended to streamline development. Site includes four office buildings built in 1979. High vacancy, low improvement value. Parcels can be aggregated for redevelopment as multi-family. Zoning density being increased to 24 DUA. 20 DU/AC assumed as realistic capacity. High interest from property owner to redevelop with housing."*

7. Zoning

The project site is within the Moraga Center Specific Plan (MCSP) area. The MCSP states that "the 187-acre Moraga Center Specific Plan (MCSP) presents excellent opportunities for new residential development, enhanced circulation, and commercial and recreational activity in the Moraga Center area." The site is zoned Mixed Office-Residential in the MCSP, which allows for higher density development between 12 and 24 dwelling units per acre.

8. Project Site Setting

As shown on Figure 2, the project site is bordered on the west by the Lafayette-Moraga Regional Trail, with Laguna Creek and residential uses beyond; on the north by Country Club Drive, with office and residential uses beyond; on the east by School Street, with office and commercial uses beyond; and on the south by the Saklan School, a private elementary school. Saklan School drop-off and pick-up occurs on School Street just south of the project site. Across School Street and farther south is Willow Spring Church, which also has a preschool on-site. Further south of these uses is a single-family residential neighborhood.

The project site is generally level and is developed with four single-story office buildings of approximately 6,396 square feet each, surface parking and landscaping. Vehicular access is provided from two driveways, one on Country Club Drive and one on School Street. Landscaping consists of shrubs and trees, including native trees. Tree species on-site include coast redwood, crape myrtle, honey locust trees, red maple, sycamore, Mexican fan palm, Japanese maple, California juniper, white alder, cherry and cottonwood. Figure 3a and Figure 3b show photographs of the project site.

Figure 3a Photographs of Project Site

Photograph 1. A portion of the project site's School Street frontage, looking north from across School Street.

Photograph 2. A portion of the project site's Country Club Drive frontage, looking west from across Country Club Drive.

Figure 3b Photographs of Project Site

Photograph 3. Lafayette-Moraga Regional Trail segment adjacent to the project site, looking south from Country Club Drive. The northwestern corner of the site is visible to the left, and a portion of the Laguna Creek corridor is visible to the right.

Photograph 4. A view of the trail and riparian vegetation on the left and a portion of the project site on the right, looking north from the trail.

9. Description of the Project

The proposed project would involve merging the existing parcels with a vesting tentative map; demolition of the four existing buildings; site preparation; and construction of 49 three-story for-sale townhome condominium units in 10 buildings of four to eight units each. Ninety-eight covered parking spaces would be provided on-site in 2-car garages for each unit; two guest parking spaces would be provided on-site and 14 parking spaces would be provided on School Street and Country Club Drive. The project would also include internal walkways, landscaping, stormwater management features, and common open space amenities.

Units would be three- and four-bedroom plans ranging from approximately 1,400 to approximately 2,130 square feet in size. The project includes five on-site moderate-income affordable units (inclusionary units). The project therefore qualifies for incentives, concessions, and waivers under the State Density Bonus Law (Government Code Section 65915). The project applicant has accordingly requested the following concessions and waivers:

Waiver

- 10 feet or more of building separation on building sides instead of the required 35 feet (Moraga Municipal Code [MMC] Section 8.42.050)

Concession

- Reduced bedroom count for inclusionary units, which would have three bedrooms while market rate units would have three to four bedrooms (MMC 8.180.070.B.2)

A 30-foot setback from the top of the Laguna Creek bank would be established for all proposed buildings, and no buildings would be constructed within this area. In some locations, site grades would be raised through the import of fill, including a limited area within the creek setback at the northeast corner of the project site. A retaining wall up to three feet in height is also proposed in this area, adjacent to the existing trail. Pursuant to MMC Section 8.200.110.D, an exception to the required creek setback may be granted on a case-by-case basis by the Town's Public Works Director or Town Engineer if the Town determines that a structure within the creek setback is necessary due to geologic, environmental, or topographical conditions.

The project would also include off-site improvements including construction of a Class I shared pedestrian and bicycle path along Country Club Drive, connecting to the Lafayette-Moraga Regional Trail and the removal of the landscaping along the site's Country Club Drive frontage to accommodate additional parking. In addition, the existing trail and drainage easement boundaries would be revised to better align with the improved trail.

Table 1 summarizes the project characteristics and Figure 4 shows the proposed site plan.

Table 1 Project Summary

Feature	Proposed Project Details
Site/Building Features	
Gross Site Area	128,474 sf
Total Building Area	124,362 sf
Total Units	49
Floor Area Ratio (FAR)	0.19 (garages only - residential excluded)
Building Height	42 ft (max)
Front Setback (School Street)	10 ft
Interior Side Setback	15 ft
Street Side Setback (Country Club)	10 ft
Rear Setback	66 ft
Creek Setback	30 ft, from top-of-bank to buildings
Landscaping	
Total Landscape Area	30,989 sf
Total Existing On-Site Trees	42
Total Trees to be Removed	41
Total Trees to be Planted	38
Private Open Space	
Private Open Space (Porches and Decks)	7,054 sf
Vehicle Parking	
Vehicle Parking	114 spaces (98 covered, 13 guest [2 on-site, 14 off-site])
Bicycle Parking Spaces	6 spaces

sf = square feet; ft = feet; ac = acres; in = inches

Utilities

The project would include utility connections to existing infrastructure in the vicinity of the site in accordance with requirements of the applicable utility providers for water, wastewater, stormwater drainage, power, and telecommunications services. Marin Clean Energy (MCE) would provide electrical services via Pacific Gas and Electric (PG&E) infrastructure, PG&E would provide natural gas services, East Bay Municipal District (EBMUD) would provide domestic water supply, and Central Contra Costa Sanitary District (Central San) would collect and treat wastewater. Utility connections would be established in compliance with applicable provisions of the MMC, including Title 8 (Planning and Zoning), which establishes requirements for the provision and undergrounding of utilities.

Site Access, Circulation, and Parking

Vehicular access to the site would be provided via two primary driveways along School Street to the south and Country Club Drive to the east. Internal circulation would be facilitated through a network of streets serving the 10 proposed buildings. The project would provide a total of 114 parking spaces, including 98 covered garage spaces (2 per unit), 2 on-site guest spaces, and 14 parallel parking spaces along School Street and Country Club Drive. Pedestrian access and circulation would be provided via a proposed 10-foot-wide Class I sidewalk/trail connecting to the existing public sidewalks along School Street and Country Club Drive, with connections to the Lafayette-Moraga Regional Trail along the Laguna Creek corridor at the northern boundary of the site. The project would also provide six short-term bicycle parking spaces distributed throughout the site.

Construction

Construction of the proposed project would occur in two sequential stages. The first stage would consist of site preparation (demolition, grading, utilities, and infrastructure) lasting approximately nine months, followed by a second stage of the construction of all 49 residential units lasting approximately 24 months. Project construction would occur five days a week from Monday to Friday from 8:00 a.m. until 5:00 p.m. Grading would involve excavation to a depth of 3 feet below ground surface for building foundations, and excavation to a maximum depth of 10 feet below ground surface for utility and joint trench excavations. The project would require the import of approximately 4,600 cubic yards of soil to the site.

Stormwater Management

The 2.95-acre project site currently consists of a mix of developed impervious surfaces and pervious areas that influence existing stormwater runoff patterns. Approximately 66,210 square feet of the developed area of the site is covered by impervious surfaces, including building footprints, and parking lots, while approximately 36,935 square feet of the developed area remains pervious. Stormwater is presently collected through a network of field inlets and conveyed via 12-inch storm drainpipes and a 30-inch main line that also receives runoff from adjacent streets, ultimately discharging to Laguna Creek, which crosses the northwestern portion of the site. Under the proposed project, redevelopment of approximately 2.46 acres into a 49-unit townhome community, along with new frontage improvements including a Class I trail and additional parking, would introduce new impervious surfaces and modify the distribution of impervious surfaces. Stormwater management would continue to direct flows to the existing drainage infrastructure and Laguna Creek, with site design anticipated to incorporate updated drainage features consistent with current standards.

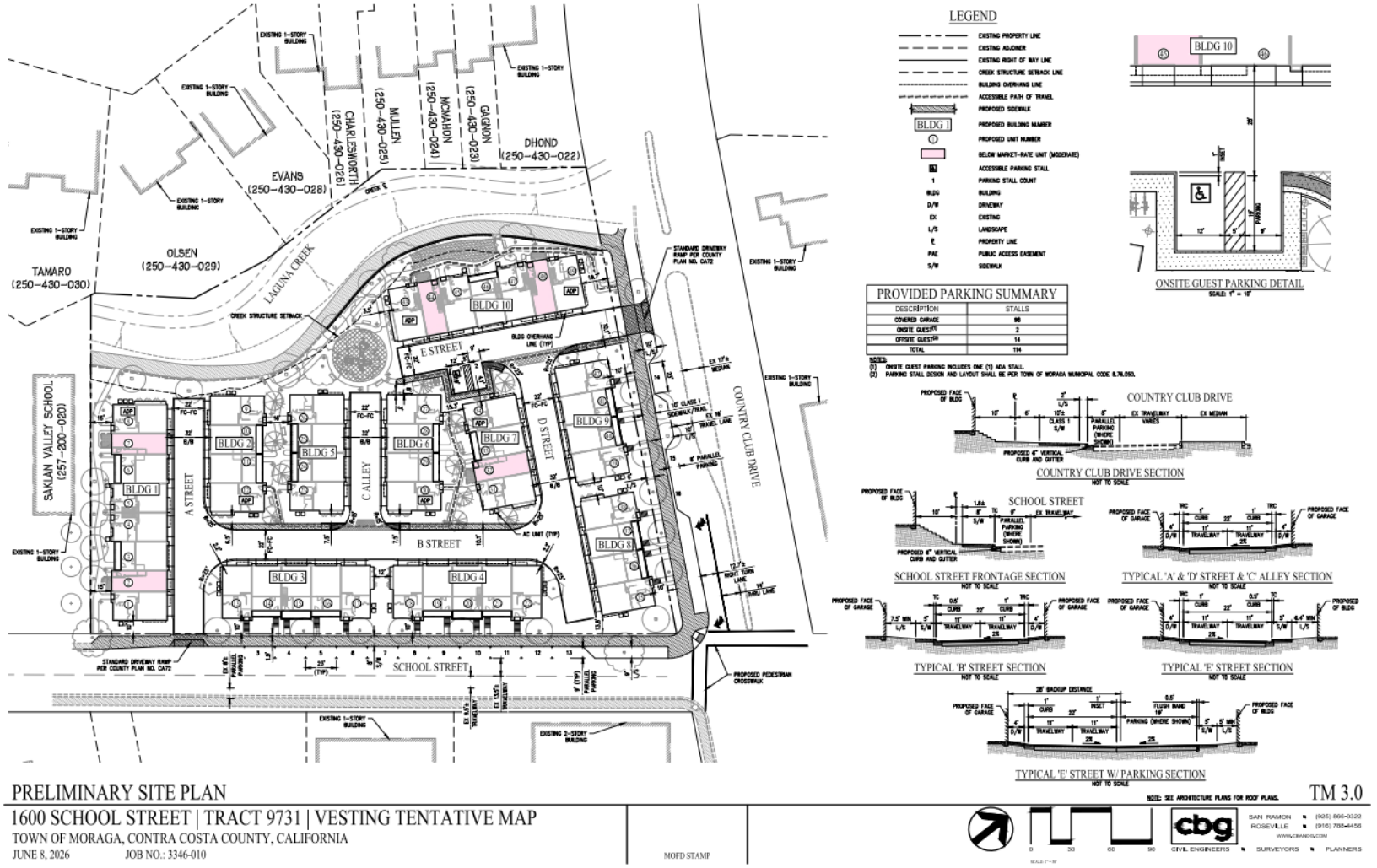
Landscaping, Trees, and Irrigation

The proposed landscaping includes removal of all existing trees on the site, except for one located along the shared property line with the Saklan School adjacent to the Lafayette/Moraga Trail. New trees are proposed across the site, drawn from five species: Strawberry Tree, Bradford Pear, Flowering Plum, Chinese Pistache, and Coast Live Oak, all installed at a minimum 15-gallon standard size. Shrub and groundcover plantings throughout would feature a drought-tolerant, California-friendly palette including Salvia, Lavender, Manzanita, Rosemary, Ceanothus, and Deer Grass, among others. The total proposed landscape area is approximately 30,989 square feet, designed to comply with Moraga's Model Water Efficient Landscape Ordinance with minimal turf (848 square feet) and no water features, and would be served by a fully automatic irrigation system.

Open Space and Amenities

The proposed project would provide private open space across all 49 units in the form of porches and decks, ranging from 107 to 208 square feet per unit depending on floor plan type. Plan 1 type units would include 50 square feet of private fenced rear yards. In addition to private unit open space, the project would provide a small flexible lawn area of approximately 848 square feet for informal recreation and a play area with a play structure. Common site amenities would include wood and metal benches, contemporary trash and recycling receptacles, dog waste bag dispensers, and six short-term bicycle parking spaces.

Figure 4 Proposed Site Plan



Source: CBG Engineering, June 2026

Sustainability

The proposed project would incorporate several sustainability features. Landscaping throughout the site is proposed to comply with the Town of Moraga's Model Water Efficient Landscape Ordinance (MWELO), utilizing a predominantly drought-tolerant, low to very low water use plant palette served by a fully automatic hydrozone irrigation system. Additionally, exterior lighting would consist of dark-sky compliant bollard lighting in compliance with dark-sky requirements.

10. Other Public Agencies Whose Approval is Required (e.g., Permits, Financing Approval, or Participation Agreement)

The Town of Moraga is the lead agency with responsibility for approving the project. Discretionary approval from other public agencies is not required. The project requires the following discretionary approvals from the Town of Moraga:

- Design Review Approval
- Subdivision approval
- Grading Approval
- Density Bonus Concessions and Waivers

In addition, the project would participate in the Contra Costa County Regional Alternative Compliance program, administered through a Joint Powers Authority, which requires execution of a participation agreement and purchase of stormwater treatment credits.

11. Environmental Factors Potentially Affected

This checklist below indicates which environmental factors would result in project-specific significant impacts peculiar to the project or its site compared to those analyzed by the prior EIR. Each of these factors is discussed in detail on the following pages. If none of the environmental factors listed below are selected, it indicates that the project would not result in environmental impacts related to any checklist topics that would be new significant impacts or more severe significant impacts compared to those analyzed in the previous EIR.

☐ 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

12. Determination

On the basis of this initial evaluation:

■ I find that the proposed Project is consistent with a Community Plan or Zoning and WOULD NOT result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant off-site impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. New effects would be substantially mitigated under uniformly applicable development policies or standards. Pursuant to CEQA Guidelines section 15183, NO FURTHER REVIEW is required.

□ I find that the proposed Project WOULD result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant off-site impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. I find that FURTHER ENVIRONMENTAL REVIEW is necessary to analyze those effects that are subject to CEQA pursuant to CEQA Guidelines Section 15183.

Signature	**6/30/2026** Date
Brian Horn Printed Name	**Principal Planner** Title

This report follows a checklist format that outlines eligibility criteria for streamlined review under the California Environmental Quality Act (CEQA) Section 15183. A consistency checklist may be prepared by a lead agency to streamline the environmental review process for eligible projects by limiting the topics subject to review at the project level where the effects of development have been addressed in a previous Environmental Impact Report (EIR). In accordance with CEQA Guidelines Section 15183, if the project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to the effects that are subject to CEQA, the lead agency is to prepare a Mitigated Negative Declaration or EIR if the written checklist shows the effects of the infill project would be potentially significant.

The checklist concludes that the project would not have significant effects on the environment that either have not been analyzed in a prior EIR or are more significant than previously analyzed, or that uniformly applicable development policies would not substantially mitigate. Pursuant to Public Resources Code (PRC) Section 21094.5, such effects are exempt from further CEQA review.

California PRC Section 21083.3 also limits the application of CEQA to effects on the environment peculiar to the parcel or to the project and that were not addressed as significant effects in the prior EIR, or about which substantial new information shows will be more significant than described in the prior EIR, when projects are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified (CEQA Guidelines Section 15183[a], also PRC Section 21083.3[b]).

This CEQA Guidelines Section 15183 Consistency Checklist has been prepared in accordance with PRC Section 21000 et seq. and the CEQA Guidelines, California Code of Regulations Section 15000 et seq.

Environmental Checklist

Pursuant to CEQA Guidelines Section 15183, projects consistent with a community plan, zoning action to accommodate a particular density, and general plan for which an EIR was certified do not require additional review unless there are project-specific effects that are peculiar to the project or site that were not adequately addressed in the certified EIR. In approving a project meeting the requirements of Section 15183 of the CEQA Guidelines, a public agency must limit its examination of environmental effects to those the agency determines in an Initial Study or other analysis:

1. Are peculiar to the project or the parcel on which the project would be located
2. Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent
3. Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action
4. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The purpose of this checklist is to assess consistency between the proposed project and the Town of Moraga Comprehensive Advanced Planning Initiative ([CAPI EIR], SCH #2022020106), and to compare the environmental effects of the proposed project with the those identified in the CAPI EIR to determine whether additional environmental review is required under CEQA, in accordance with CEQA Guidelines Section 15183.

Pursuant to CEQA Guidelines Section 15183(f), "[a]n effect of a project on the environment shall not be considered peculiar to the project … if uniformly applied development policies or standards have been previously adopted … with a finding that the development policies or standards will substantially mitigated that environmental impact when applied to future projects …." CEQA Guidelines Section 15183.3(f)(7), provides that "[u]niformly applicable development policies or standards" are policies or standards or enacted by a city or county, or by a lead agency, that reduce one or more adverse environmental effects." In evaluating the potential for adverse environmental impacts, the lead agency must identify and apply uniformly applicable development policies or standards that have been adopted by the lead agency, or city or county, and evaluate whether they would reduce potential impacts to below a level of significant. In this document, project-specific impacts are identified as "*Substantially Mitigated by Uniformly Applicable Development Policies"* where implementation of applicable mitigation measures or implementation programs from the CAPI EIR would reduce impacts to a less than significant level, and therefore such impacts are not considered peculiar or significant. Where impacts are reduced through Standard Conditions of Approval or existing policies or regulations independent of CAPI EIR mitigation measures, impacts are characterized as less than significant.

Relationship of the Proposed Project to Project Analyzed in Previous EIR

The Town of Moraga adopted the 2023-2031 Housing Element on January 25, 2023, and it was certified by the State of California's Department of Housing and Community Development on September 14, 2023. The Housing Element includes goals and policies to help the Town achieve its Regional Housing Needs Allocation (RHNA) of 1,118 units for the 2023-2031 planning period.

Consistency of the Project with the CAPI EIR

The Town of Moraga's RHNA for the 2023-2031 planning period is 1,118 units, distributed among four income categories: 318 very low-income units, 183 low-income units, 172 moderate-income units, and 445 above moderate-income units. In order to meet the RHNA, the Town assessed its capacity to accommodate housing through two categories: Entitled Projects and Housing Opportunity Sites, primarily within the Moraga Center and Rheem Center areas that were rezoned to allow higher density residential and mixed-use development. Together, these two categories, in addition to 32 accessory dwelling units (ADUs), provide capacity for a total of 1,802 units, exceeding the Town's RHNA of 1,118 units which resulted in a 23 percent buffer.

Table 2 summarizes the buildout analyzed in the CAPI EIR, which is based on the CAPI EIR Sites Inventory of 1,802 units. Overall, the CAPI EIR assumed that implementation of the 2023-2031 Housing Element zoning changes and other programs could facilitate up to 1,802 units.

Table 2 CAPI EIR Projected Buildout

	Total New Units
EIR Sites Inventory	
Entitled Projects	225
Opportunity Sites	1,545
ADUs	32
Total Units	**1,802**
RHNA	**1,118**
Site Buffer (23 percent)	**684**
Proposed Project	
Housing Element Presumed Units	56
Proposed Units	49
Net Loss	-7

Source: Town of Moraga 2023

The project site is identified in the CAPI EIR as Housing Opportunity Site F-3, which anticipated development of 56 residential units. The proposed project would involve construction of 49 new residential units, which is seven units fewer than originally anticipated for the site. As such, the proposed project, combined with other Housing Opportunity Sites identified in the CAPI EIR, would not exceed the potential buildout of 1,802 units and remains within the overall buildout analyzed in the EIR.

Town of Moraga General Plan Update

The CAPI EIR relied on the Town of Moraga General Plan 2002 (“2002 General Plan”). Subsequent to certification of the CAPI EIR, the Town adopted the current Town of Moraga General Plan 2040 (“General Plan” or “2040 General Plan”). The project-specific analysis in this document therefore references both plans. The 2002 General Plan is referenced to reflect the environmental setting, regulatory framework, and impact analysis evaluated in the CAPI EIR. The project-specific impact analysis in this document accounts for subsequent changes introduced by the General Plan 2040, including updates to land use designations, policies, and development standards, would result in new significant impacts or a substantial increase in the severity of previously identified impacts. The General Plan 2040 is also used to assess the project’s current consistency with adopted land use plans and policies.

In addition, the Housing Element Update and resulting rezoning required amendments to the 2002 General Plan to maintain internal consistency, respond to new State laws, and provide a framework for zoning changes. Amendments to the 2002 General Plan are analyzed in the CAPI EIR as implementation

programs, discussed as applicable to the proposed project in this document under Section 5, *Cultural Resources,* Section 7, *Geology and Soils,* and Section 18, *Tribal Cultural Resources*.

CEQA Guidelines Updates

Subsequent to the Town's certification of the CAPI EIR, the *CEQA Guidelines* have been updated by the State of California. Therefore, this report is based on the current Appendix G checklist questions in the updated *CEQA Guidelines.* The current Appendix G checklist questions form the basis for this analysis, but exceptions are noted when thresholds and checklist questions from the CAPI EIR are used to provide for tiering from the EIR.

1 Aesthetics

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Except as provided in Public Resources Code Section 21099, would the project:					
a. Have a substantial adverse effect on a scenic vista?	□	■	□	■	□
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	□	□	■	■	□
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?	□	■	□	■	□
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	□	■	□	■	□

Analysis in Previous Environmental Document

As discussed in Section 4.1, *Aesthetics*, of the CAPI EIR, while new development may occur on vacant or underutilized sites that allow views of these resources, such development would follow the Town's established development pattern, which focuses growth within already developed areas and helps conserve rural areas with greater scenic value. Future development would be required to comply with the Town's Design Guidelines, MMC, and applicable goals and policies of the 2002 General Plan[1]. These requirements would ensure that development does not substantially degrade scenic vistas. The CAPI EIR found impacts to scenic vistas would be less than significant.

There are no state-designated scenic highways in the Town. The nearest eligible state-designated scenic highway is State Route 24 in Contra Costa County, which lies approximately 1.5 miles north of the Town. Based on the distance from State Route 24 and the topography between the Town and the eligible segment, the Housing Element would not facilitate development that would substantially damage scenic resources within a state scenic highway.

The Town's scenic corridors and ridgelines contribute to its established visual character. Development facilitated by the Housing Element would introduce higher intensity residential or mixed-use development on Housing Opportunity Sites, which could incrementally alter the scenic quality of these locations. Such development would occur within areas that are already developed and would maintain the Town's

[1] The CAPI EIR relied on the 2002 General Plan. Subsequent to certification of the CAPI EIR, the Town adopted the current General Plan, Town of Moraga General Plan 2040 (the General Plan).

broader rural character. Housing Element development would be required to comply with existing local regulations, including the MMC, Design Guidelines, and applicable goals and policies in the 2002 General Plan, which guide building form, site design, and visual compatibility. Impacts on visual character and visual quality were found to be less than significant.

The Town is a low density valley and hillside community characterized by strong landscape features, with moderately high existing light levels in developed areas due to streetlights, building lighting, and illuminated signage. Development facilitated by the Housing Element would introduce additional sources of lighting and glare, particularly in large surface parking areas with limited shade trees. Development would be required to comply with existing local regulations, including the MMC and Design Guidelines, which contain standards for light source shielding, glare reduction, and low impact lighting in scenic corridors, ridgelines, and the MC area. Compliance with these requirements would ensure that new exterior lighting is appropriately controlled. Impacts related to light and glare were found to be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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?

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?

According to the CAPI EIR, an adverse effect would occur if development under the Housing Element blocked or otherwise adversely affected a scenic vista, such as the Town's designated scenic corridors and ridgelines. The project site is identified in the CAPI EIR as Housing Opportunity Site F-3, which anticipated development of 56 residential units. The proposed project would involve construction of 49 new residential units, which is seven units fewer than originally anticipated for the site. The maximum allowable building height for the project site is 45 feet. The project proposes a maximum building height of 42 feet, which complies with the height limit for the site. In addition, the project site is located approximately 480 feet from the nearest designated scenic corridor, Moraga Way, at its closest point along the northern boundary, and is therefore located outside of the 200-foot scenic corridor buffer along Moraga Way (Town of Moraga 2025). The project site is not located along a designated ridgeline. Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista.

The CAPI EIR determined that although the Housing Element would result in new development that could affect scenic vistas, the Housing Opportunity Sites are strategically located within built-out areas of the Town. The proposed project would be required to adhere to applicable General Plan goals and policies, including Goal LU-1 and associated Policy LU-1.1 directing growth on infill site; and Goal CD-4 and associated Policy CD-4.7 to ensure that the proposed multi-family development would respect the scale and quality of its surroundings. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Similar to the CAPI EIR, impacts from the project on scenic vistas and public views of the site would remain less than significant and within the scope of the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to scenic vistas or visual character.

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 project site is not located within a state scenic highway. According to the CAPI EIR, there are no state-designated scenic highways in the Town. The nearest state-designated scenic highway to the Town is State Route 24, which is located 1.4 miles from the Town; the site is not clearly visible from State Route 24. The project would not damage scenic resources within a state scenic highway and there would be no impact. This impact would remain within the scope of the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to scenic resources within a state scenic highway.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project site is located in a developed area of the MC, surrounded by commercial and residential uses that are existing sources of nighttime lighting and glare due to streetlights, exterior building lighting, and lighted lights. The proposed project would result in an increase in ambient nighttime lighting through the addition of parking lot and security/safety lighting, and exterior fixtures associated with residential structures. In addition, exterior building materials, windows, and surface paving materials may cause glare that could affect the nearby commercial and residential uses.

The proposed project would be required to adhere to applicable codes and guidelines which govern lighting, including applicable design guidelines from the MCSP (Chapter 11). Similar to the CAPI EIR, compliance with applicable Town policies and regulations would ensure the project would result in a less than significant impact associated with the creation of new sources of exterior lighting and glare. This impact would remain within the scope of the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to new sources of light or glare.

Conclusion

The project would have less than significant impacts on aesthetics, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to aesthetics and visual resources. No new mitigation measures are warranted. This issue **does not require further study**.

2 Agriculture and Forestry Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Convert Prime Farmland, Unique Farmland, 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. Conflict with existing zoning for agricultural use or a Williamson Act contract?	□	□	■	■	□
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))?	□	□	■	■	□
d. Result in the loss of forest land or conversion of forest land to non-forest use?	□	□	■	■	□
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?	□	□	■	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.18.1, *Agriculture and Forestry Resources*, of the CAPI EIR, the Town is primarily classified as urban and built-up land, other land, or non-agricultural/natural vegetation under the California Department of Conservation Farmland Mapping and Monitoring Program. While the Town contains 31.3 acres of unique farmland and 8.5 acres of prime farmland associated with an inactive former pear orchard, these areas are already zoned for residential and mixed-use development. The Housing Element would increase allowable densities in portions of this area but would not expand the environmental footprint beyond what current zoning permits. Therefore, Important Farmland would not be converted to non-agricultural use, and the CAPI EIR found there would be no impact.

The Town does not contain lands zoned for agricultural use and has no Williamson Act contracts; therefore, the CAPI EIR found no impacts related to agricultural zoning or Williamson Act contracts.

Based on the lack of forest land within the Town, the CAPI EIR found no impacts related to the rezoning, or conversion of forest land, timberland, or Timberland Production.

As described above, the Town does not contain land that qualifies as forest land or timberland, and there are no nearby farmlands or forestlands that could be pressured into conversion. As a result, the CAPI EIR found no impacts related to the loss or conversion of forest land.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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, 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?*

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?*

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?*

According to the California Department of Conservation (DOC), the project is located in urban and built-up land (DOC 2026a). The project site is not located on or adjacent to property zoned for agriculture or under Williamson Act contract (DOC 2026b). There is also no forestland or farmland on or adjacent to the project site. No impact would occur. Similar to the CAPI EIR, the project would result in no impacts related to agriculture and forestry resources, and impacts would remain within the scope of the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to agricultural or forestry resources.

Conclusion

The project would have no impact on agriculture or forestry resources, similar to the impact identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to agriculture and forestry resources. No new mitigation measures are warranted. This issue **does not require further study**.

3 Air Quality

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	□	■	□	■	□
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?	□	■	□	■	□
c. Expose sensitive receptors to substantial pollutant concentrations?	□	□	□	■	■
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.2, *Air Quality*, of the CAPI EIR, the analysis was based on the 2017 Bay Area Air District (Air District)[2] *CEQA Air Quality Guidelines*. Based on the analysis provided in Table 4.2-4 of the CAPI EIR, the Housing Element would not disrupt or hinder implementation of the 2017 San Francisco Bay Area Air Basin (SFBAAB) Clean Air Plan. This 2017 Clean Air Plan is the most recently adopted air quality plan in the Air District and provides a roadmap for air quality compliance in the San Francisco Bay Area. The Housing Element would be consistent with applicable 2017 Clean Air Plan control measures because the Housing Element due to more dense development in urban areas and multi-modal transportation would implement similar measures through specific goals and policies that would reduce criteria pollutant emissions. Therefore, the Housing Element would be consistent with the applicable control measures contained in the 2017 Clean Air Plan for the SFBAAB, and impacts were found to be less than significant.

Construction of the development facilitated by the Housing Element would result in the temporary generation of air pollutants that would affect local air quality. Policies in the 2002 General Plan incorporate the Air District Basic Construction Measures, which would reduce construction emissions. Impacts resulting from construction were found to be less than significant. Operation of the Housing Element was found to not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality standard because the Housing Element's vehicle miles traveled (VMT) per resident for the Town would increase at a lower rate from the baseline year to the buildout year than the population would increase. Therefore, impacts resulting from criteria pollutant emissions from construction and operation were found to be less than significant.

Development facilitated by the Housing Element could potentially expose sensitive receptors to toxic air contaminants (TAC) during construction, which was determined to be a potentially significant impact. This was mitigated to less than significant with CAPI EIR Mitigation Measure AQ-1 with either use of

[2] Since publication of the CAPI EIR, the district changed their name from Bay Area Air Quality Management District to Bay Area Air District. The most recent name is used in this document.

CARB Tier 4 construction equipment or conducting a health risk assessment. For operational TACs, the addition of new residential uses would not add new sources of TACs. In addition, for placement of sensitive receptors near TAC emitting sources, the Housing Element would adhere to policies in the 2002 General Plan that would limit incompatible land uses in proximity to each other and minimize health risks from sources of TAC upon sensitive receptors. Therefore, impacts related to substantial pollutant concentrations during operation were found to be less than significant.

Buildout under the Housing Element would generate oil, asphalt paving, and diesel fuel odors during construction from equipment use, but the odors would be limited to the construction period and therefore temporary. Under the Air District *CEQA Guidelines*, land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food manufacturing plants, chemical plants, composting refineries, landfills, and confined animal facilities. Considering the projected development would be single-family and multi-family development, these land uses would not produce objectionable odors. Odors may result from vehicle and engine exhaust but are not stationary and would be dispersed throughout the roadway network. Impacts related to odors were considered less than significant.

Table 3 lists the mitigation measures from the CAPI EIR related to air quality.

Table 3 CAPI EIR Mitigation Measures: Air Quality

Mitigation Measure #	Mitigation Text
Impact AQ-5. Development facilitated by the Housing Element could potentially expose sensitive receivers to toxic air contaminants during constructions. New sensitive receivers resulting from the Housing Element could be exposed to toxic air contaminants. However, the Housing Element would adhere to policies in the Moraga 2002 General Plan that would limit incompatible land uses in proximity to each other and minimize health risks from sources of TAC upon sensitive receivers. Impacts would be less than significant with mitigation.	
AQ-1	**Construction Emissions Reduction Measures.** Based on BAAQMD *CEQA Guidelines* (2017), construction-related TAC and PM impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors. Construction activity from the projects developed under the Housing Element or Bollinger Canyon Rezone that are within 1,000 feet of sensitive receptors; utilize more than three pieces of construction equipment simultaneously on-site; have a duration of construction longer than two months; and exclude Tier 4 construction equipment shall be required to prepare an HRA assessment. An HRA shall be conducted prior to the issuance of a permit to construct. The applicant would be required to have it prepared by a third party or if Town staff would be capable. The HRA would be reviewed by the Town in-house, or a contracted consultant. If the findings of the HRA assessment exceed BAAQMD health risk thresholds, then development projects under the Housing Element or Bollinger Canyon Rezone shall incorporate the following construction equipment emission control measures to the maximum extent feasible: • Implement diesel construction equipment meeting CARB Tier 4 emission standards for off-road heavy-duty diesel engines. If use of Tier 4 equipment is not feasible, diesel construction equipment meeting Tier 3 emission standards shall be used. Tier 3 equipment shall use a Level 3 diesel particulate filter. • Perform periodic site inspections during construction to verify compliance of Tier 4 or Tier 3 equipment. • Use alternative fueled or catalyst equipped diesel construction equipment. • Minimize idling time. • Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). • Curtail construction during periods of high-ambient-pollutant concentrations; this may include ceasing of construction activity during the peak-hour vehicular traffic on adjacent roadways. • Implement activity management (e.g., rescheduling activities to reduce short-term impacts)

Source: Town of Moraga 2022

Air Quality Environmental and Regulatory Setting

The project site is located in the Town of Moraga, which is in Contra Costa County, a subregion of the SFBAAB. The SFBAAB includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County. Contra Costa County is east of San Pablo Bay and San Francisco Bay, north of Alameda County, and south of Solano County. The Air District oversees regulation of air quality in the SFBAAB.

Due to the proximity of San Francisco Bay and the Pacific Ocean, the climate in the SFBAAB is characterized by warm dry summers and cool moist winters. During winter, temperatures range between 40 and 60 degrees Fahrenheit. The major large-scale weather feature controlling climate in Moraga is a large high-pressure system located in the eastern Pacific Ocean, known as the Pacific High. During winter months, marine air trapped in the lower atmosphere is often condensed into fog by the cool Pacific Ocean. Stratus-type clouds usually form offshore and move into the area during the evening hours. During winter months, the Pacific High becomes weaker and shifts south, allowing weather systems associated with the polar jet stream to affect the region. Low pressure systems produce periods of cloudiness, strong shifting winds, and precipitation. The Town receives approximately 25 inches of precipitation per year (Town of Moraga 2022). High-pressure systems are also common in winter, with low-level inversions that produce cool stagnant conditions.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 CAPI EIR determined that the Housing Element would not disrupt or hinder implementation of the 85 control strategies in the 2017 Clean Air Plan. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Therefore, similar to the CAPI EIR, impacts from the project on applicable air quality plans would be less than significant. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to the applicable air quality plan.

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?

Construction Emissions

Construction activities such as the operation of construction vehicles and equipment over unpaved areas, grading, trenching, and disturbance of stockpiled soils have the potential to generate criteria pollutants. The CAPI EIR determined that policies in the 2002 General Plan, including Policy OS4.2 (Development Approval and Mitigation) that require projects to implement the latest Air District Basic Construction Mitigation Measures would reduce impacts to less than significant levels. This determination is consistent with implementation of 2040 General Plan Policy CON-3.2 (Mitigation of Air Quality Impacts), which requires mitigation of air quality impacts for new development project that is consistent with CEQA

and incorporates input from the Air District. The latest Air District measures, which they now refer to as "basic best management practices," are outlined below:[3]

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. 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.
6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

The proposed project would be required to implement the above Air District Basic Construction Mitigation Measures, and would therefore be consistent with the applicable General Plan policies. Similar to the CAPI EIR, construction criteria pollutant impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to project construction criteria pollutants.

Operational Emissions

Long-term criteria pollutant emissions associated with project operation would include emissions from vehicle trips (mobile sources), electricity use (energy sources), and landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources). Operation of projects under the Housing Element was found to not result in significant operational emissions in the CAPI EIR due to project's increase in VMT being proportionally lower than the population increase. The project would be consistent with the buildout assumptions in the Housing Element, and therefore would not increase operational emissions beyond those considered in the CAPI EIR. Impacts from the project on operational criteria pollutant impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to operational criteria pollutants.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

The CAPI EIR evaluated air quality impacts on a programmatic level, and recognizes that site-specific impacts would be assessed during project review. The nearest sensitive receptors to the project site are the Saklan School and Tudorka Tots, each located approximately 180 feet south of the project site. In addition, the Creative Montessori Preschool is located approximately 450 north of the project site. According to the CAPI EIR, construction under the Housing Element could occur within 1,000 feet from a sensitive receptor (such as a school), which could expose nearby sensitive receptors to TAC emissions.

[3] Several of the basic best management practices have been modified since publication of the CAPI EIR. The Air District recommends implementing the latest practices, and the latest ones are listed here.

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Because there are sensitive receptors located within 1,000 feet of the project site, the potential for the project to expose these receptors to substantial pollutant concentrations is addressed below.

In accordance with CAPI EIR Mitigation Measure AQ-1, which requires implementation to the extent feasible, the project would incorporate the use of construction equipment that meets CARB Tier 4 emissions standards, which reduces diesel particulate matter (the primary TAC of concern), as such equipment is commercially available for the project. As determined in the CAPI EIR, with implementation of CAPI EIR Mitigation Measure AQ-1, construction of the project would have a less than significant impact from construction TACs. Per the language of Mitigation Measure AQ-1, a project-specific HRA is not required if a project uses CARB Tier 4 Final equipment. This language is included in Mitigation Measure AQ-1 because previous experience with HRAs have shown that the use of Tier 4 Final equipment substantially reduces a project's emissions of diesel particulate matter to where a typical project, such as the proposed project, would not exceed cancer risk thresholds (i.e., 10 in one million cancer risk and a hazard index of 1.0). Similar to the conclusions of the CAPI EIR, project construction impacts related to sensitive receptors within 1,000 feet of the site would be less than significant with mitigation incorporated. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to construction-related pollutant concentrations near sensitive receptors.

Operation of the project would involve new residential uses within 1,000 of sensitive receptors (e.g., The Saklan School, Tudorka Tots, and the Creative Montessori Preschool). The CAPI EIR determined that residential land uses are not associated as TAC emitters, and therefore development under the Housing Element would not increase TAC emissions in proximity to sensitive receptors. In addition, the project would adhere to General Plan Policy CON3.4 that requires vegetative buffers and building setbacks to reduce air pollutant exposure associated with project development. Because the project would be consistent with the buildout assumptions in the Housing Element, and would not introduce a new source of operational TACs, operation of the project would not increase operational TAC emissions beyond those considered in the CAPI EIR. Therefore, similar to the CAPI EIR, operational impacts related to sensitive receptors within 1,000 feet of the site would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to operation-related pollutant concentrations near sensitive receptors.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Project construction would generate diesel exhaust and reactive organic gases; however, these emissions would be limited to the construction period and temporary as they would disperse rapidly from the project site. Therefore, project construction would not create significant odors affecting a substantial number of people.

According to the Air District CEQA Guidelines, odor-generating projects include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (Bay Area Air District 2025). The proposed project would not involve any of these uses. The project would not emit odors beyond those previously assessed in the CAPI EIR and impacts would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to odors.

Conclusion

With incorporation of CARB Tier 4 construction equipment from CAPI EIR Mitigation Measure AQ-1, the project would have less than significant impacts on air quality, consistent with the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to air quality. No new mitigation measures are warranted. This issue **does not require further study**.

4 Biological Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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?	☐	☐	☐	■	■
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?	☐	■	☐	■	☐
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?	☐	■	☐	■	☐
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?	☐	■	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	■	☐
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?	☐	☐	■	■	☐

Analysis in Previous Environmental Documents

As discussed in Section 4.3, Biological Resources, of the CAPI EIR, the Town contains and is surrounded by habitat that supports special-status plant and wildlife species, including species such as California red-legged frog, Alameda whipsnake, western pond turtle, San Francisco dusky-footed woodrat, and several special-status plants. Although development under the Housing Element would occur primarily as redevelopment in already built-out areas that generally lack suitable habitat, the General Plan includes policies such as policy CD1.1 and policy OS2.4 that focus new development away from sensitive

biological resources and protect designated Open Space areas from habitat loss. The General Plan does not include policies that directly protect special-status species or their occupied habitat. Therefore, the CAPI EIR determined that Housing Element implementation could still result in direct or indirect impacts on special-status species or migratory bird nesting habitat. With implementation of CAPI EIR Mitigation Measures BIO-1, BIO-2, and BIO-3, these potential impacts would be reduced to a less than significant level.

The CAPI EIR also evaluates effects on riparian habitats, wetlands, and other sensitive natural communities, which occur throughout the Town. As described above, the majority of development under the Housing Element would occur within areas that are already developed and therefore unlikely to contain jurisdictional wetlands or riparian habitat. Sites that would require work within or adjacent to jurisdictional waters would be subject to the permitting requirements of the United States Army Corporation of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) under the Clean Water Act and Porter-Cologne Water Quality Control Act, and jurisdictional delineations would be required at the time of permit application. The CAPI EIR also found that construction in or near riparian areas could result in direct impacts such as vegetation removal, soil compaction, or disturbance to wetland habitat; however, erosion and stormwater controls required through the National Pollutant Discharge Elimination System (NPDES) construction general permit and MMC Sections 14.52.010 and 13.04.090 would reduce the potential for sedimentation and water quality impacts. General Plan goals and policies, including policies CD1.1, CD1.4, CD1.5, OS2.2, OS2.3, OS3.5, and OS3.6, direct development away from sensitive natural communities, preserve creeks and riparian corridors, and require stormwater management measures that protect waterways. Projects would be required to confirm with General Plan Policies OS2.1 and OS2.4 described above, CAPI EIR Mitigation Measures BIO-1 through BIO-3, and BIO-5 and BIO-6, which would ensure that impacts to riparian habitat, wetlands, and other sensitive natural communities would be reduced to a less than significant level.

Wildlife movement in the Town is primarily associated with open space areas, riparian corridors, and the regional Ecological Conservation Area that extends along the Berkeley and Oakland Hills. The CAPI EIR determined that the areas planned for rezoning and increased density under the Housing Element, including the MC and Rheem Park areas, are already developed and do not function as wildlife movement corridors or nursery sites. The CAPI EIR also found that General Plan Policies and goals including Goal OS1 and policies OS1.12, OS2.5, and OS2.2 preserve open space, maintain connectivity between habitat areas, and protect creeks and riparian corridors that support wildlife movement. Because development facilitated by the Housing Element would remain concentrated in existing developed areas and would be required to comply with these applicable General Plan Policies, impacts on wildlife movement and habitat connectivity would be less than significant.

As further discussed in Section 4.3, Biological Resources of the CAPI EIR, development facilitated by the Housing Element would be required to conform with applicable local policies protecting biological resources. Removal or alteration of regulated trees would be subject to applicable requirements as outlined in MMC Section 12. Future development would be required to comply with General Plan Policies OS2.8 and OS2.9, which require the preservation of trees and protection of significant tree-covered areas that provide habitat value, such as Mulholland Hill, Indian Ridge, and Bollinger Canyon, none of which occur within the Moraga Center or Rheem Park areas where Housing Element development would be concentrated. Compliance with these municipal code requirements and General Plan policies would ensure protection of individual regulated trees and avoidance of significant tree-covered habitat areas. The CAPI EIR found that impacts would be less than significant.

The CAPI EIR found that there are no adopted Habitat Conservation Plan (HCPs) or Natural Communities Conservation Plan (NCCPs) within the Housing Element area. Therefore, development facilitated by the Housing Element would have no impact related to conflicts with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

Table 4 lists the mitigation measures from the CAPI EIR related to biological resources.

Table 4 Applicable CAPI EIR Biological Resources Mitigation Measures

Mitigation Measure #	Mitigation Text
Impact BIO-1. Implementation of the Housing Element may result in direct or indirect impacts to special-status plant species or their associated habitats including impacts to migratory bird nest sites. Impacts would be less than significant with mitigation.	
BIO-1	**Biological Resources Screening and Assessment.** For development projects facilitated by the Housing Element that would require vegetation trimming or removal, prior to consideration of the application, the project applicant shall hire a qualified biologist to perform a preliminary biological resources screening, for the Town's review and approval, to determine whether the project has any potential to impact special-status biological resources, inclusive of special-status plants and animals, sensitive vegetation communities, jurisdictional waters (including creeks, drainages, streams, ponds, vernal pools, riparian areas and other wetlands), critical habitat, wildlife movement area, or biological resources protected under local or regional ordinances. If it is determined that the project has no potential to impact biological resources, no further action is required under this mitigation measure. If the project would have the potential to impact biological resources, a qualified biologist shall conduct a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 50 feet around the project footprint, as is feasible, and to determine the potential impacts to those resources, as approved by the Town. The project-specific biological analysis shall evaluate the potential for impacts to all biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities, critical habitats, and other resources judged to be sensitive by local, State, and/or federal agencies. If the project would have the potential to impact these resources, additional measures may be required and recommendations developed to enhance wildlife movement (e.g., installation of wildlife friendly fencing), as applicable, to reduce impacts to less than significant levels. Pending the results of the project-specific biological analysis, Town review, design alterations, further technical studies (e.g., protocol surveys) and consultations with the United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service, CDFW, and/or other local, State, and federal agencies may be required.
BIO-2	**Pre-Construction Bird Surveys, Avoidance, and Notification.** For construction activities at development sites under the Housing Element initiated during the bird nesting season (February 1 – September 15) involving removal of vegetation or other nesting bird habitat, including abandoned structures and other man-made features, a qualified biologist shall conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in California Bay Area communities (i.e., qualified biologist). If nests are found, an avoidance buffer shall be determined by a qualified biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the Town prior to the commencement of construction activities. Future project site plans proposed at development sites shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15 and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.

Mitigation Measure #	Mitigation Text
BIO-3	**Roosting Bat Surveys and Avoidance Prior to Removal.** Prior to tree or vacant structure removal, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on-site. Tree or structure removal shall be planned for either the spring or the fall and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the Town within 30 days of the survey, after which no further action will be required. If day roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the Town's approval. The plan shall incorporate the following guidance as applicable: • When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity (outside the breeding and hibernation periods), including the following: a) Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs. b) Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs. • If a tree/structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures similar to or better than the following: a) If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure. b) If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31). • Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two. • Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required. • If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.

Mitigation Measure #	Mitigation Text
BIO-5	**Conduct Jurisdictional Delineation.** If required pursuant to Mitigation Measure BIO-1, and in areas determined by the Biological Resources Screening and Assessment as likely to impact waters, wetlands, or riparian habitat a jurisdictional delineation shall be required. A qualified biologist shall complete a jurisdictional delineation of all features within the project site. The jurisdictional delineation shall determine the extent of the jurisdictions for CDFW, USACE, and RWQCB, and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report that shall be submitted to the implementing agency, USACE, RWQCB, and CDFW, as appropriate, for review and approval. Jurisdictional areas shall be avoided to the maximum extent possible. If jurisdictional areas are expected to be impacted, then the RWQCB would require a WDRs permit and/or WQC (depending upon whether the feature falls under federal jurisdiction). If CDFW asserts its jurisdictional authority, then a LSAA pursuant to Section 1600 et seq. of the CFGC would also be required prior to construction within the areas of CDFW jurisdiction. If the USACE asserts its authority, then a permit pursuant to Section 404 of the CWA would likely be required.
BIO-6	**Perform Restoration for Impacts to Waters and Wetlands.** If waters and/or wetlands cannot be avoided and will be impacted by construction, a compensatory mitigation program shall be implemented. Impacts to waters and wetlands shall be mitigated through one or more options to meet the required amount of mitigation as required based on direct impacts form project development under the mitigation ratios outlined below. Mitigation for impacts to waters and wetlands can be achieved through the acquisition and in-perpetuity management of similar habitat and/or through the in-lieu funding of such through an existing mitigation bank. Funding and management of internal mitigation areas can be managed internally. Funding and management of off-site mitigation lands shall be provided through purchase of credits from an existing, approved mitigation bank or land purchased by implementing entity and placed into a conservation easement or other covenant restricting development (e.g., deed restriction). Internal mitigation lands and/or in-lieu funding sufficient to acquire lands shall provide habitat at a minimum ratio of 1:1 for impacted lands, comparable to habitat to be impacted by individual project activity. Compensatory mitigation for sensitive vegetation communities can be combined with other compensatory mitigation (e.g., sensitive vegetation communities) as applicable. All temporary impacts to waters and wetlands shall be fully restored to natural condition.

Source: Town of Moraga 2022

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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

Methods

Literature Review

Queries of the CDFW California Natural Diversity Database (CDFW 2026), California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2026), and USFWS Information for Planning and Consultation system (2026a) were conducted for this analysis to obtain comprehensive information regarding state and federally listed species, and other special-status species, considered to have potential to occur within the *Oakland East, California* USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles (*Oakland West, Briones Valley, Walnut Creek, Richmond, San Leandro, Las Trampas Ridge, Hayward*, and *Hunters Point*).

Additionally, the National Wetland Inventory (NWI, 2026b), and Critical Habitat Portal (2026c) were reviewed for additional information on existing conditions relating to biological resources within the project site.

Field Survey

A Rincon biologist conducted a reconnaissance-level survey of the survey area on March 24, 2026 to assess the habitat suitability for potential special-status species; map existing vegetation communities and evident special-status biological resources; note the presence of potential jurisdictional waters or wetlands; document wildlife connectivity/movement features; and record observations of plant and wildlife species within the study area. CAPI EIR Mitigation Measure BIO-1 requires a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 50 feet around the project footprint. In compliance with this CAPI EIR mitigation measure, survey area evaluated for this report includes the project parcels plus a 50-foot buffer.

Special-Status Species Assessment

For this report, "endangered, rare or threatened species" as referenced in CEQA Guidelines Section 15380 are interpreted broadly to include all special-status species. Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act; those listed or candidates for listing as rare, threatened, or endangered under the California Endangered Species Act or Native Plant Protection Act; those identified as Fully Protected by the California Fish and Game Code (CFGC, Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern (SSC) by CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society's California Rare Plant Rank system pursuant to the following definitions:

- Rank 1A: Plants presumed extinct in California
- Rank 1B.1: Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- Rank 1B.2: Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)
- Rank 1B.3: Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)
- Rank 2: Rare, threatened or endangered in California, but more common elsewhere

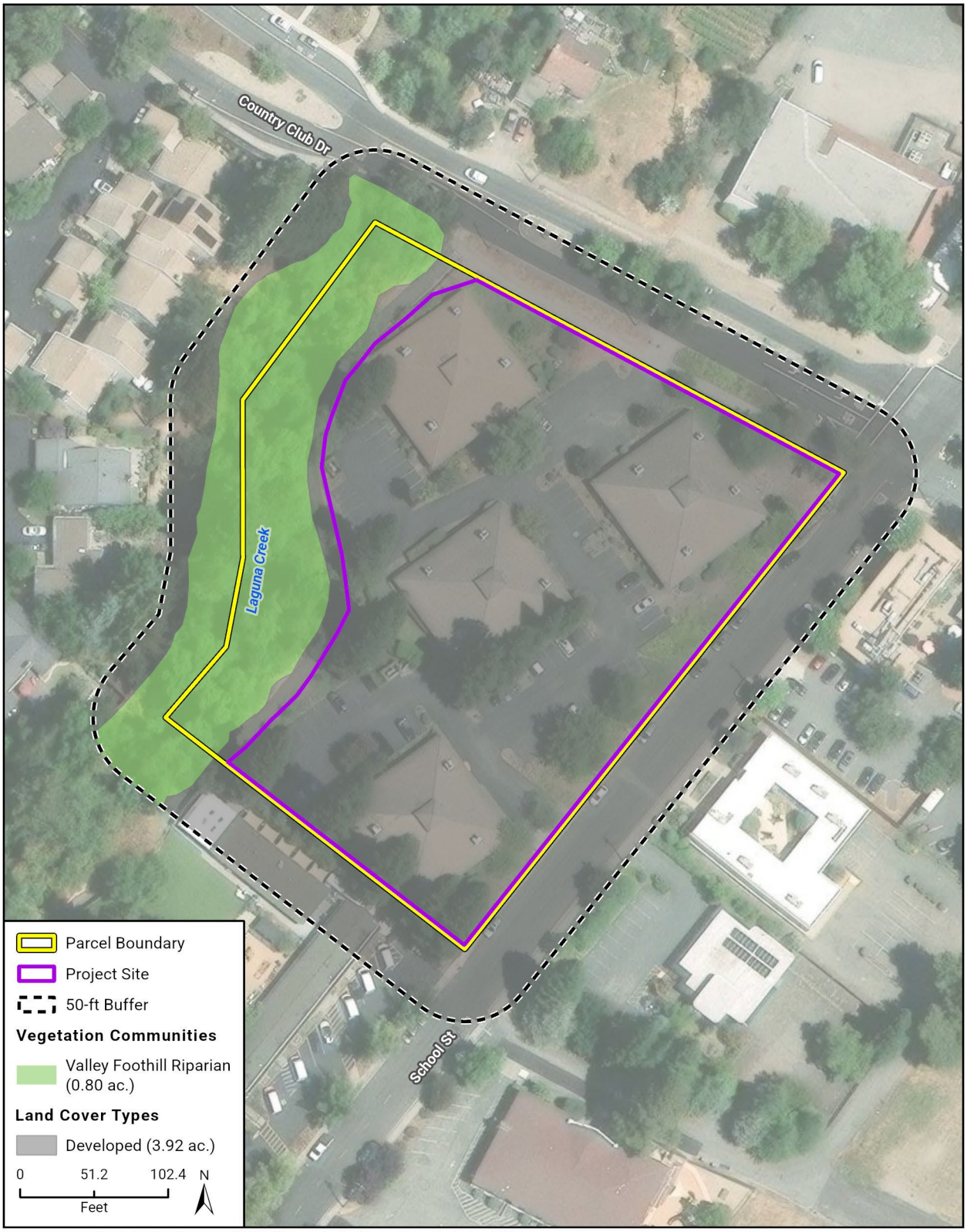
Existing Conditions

For the purposes of this analysis, the survey area encompasses the entirety of the four assessor parcels plus a 50 foot buffer, as required by CAPI Mitigation Measure BIO-1.The project site would be limited to previously developed areas east of the Lafayette-Moraga Regional Trail as shown in Figure 2.

The survey area is located in a developed area of Moraga and is currently developed with four office buildings and paved parking lots. Vegetation in the project site is limited to maintained ornamental plantings, including large coast redwoods (*Sequoia sempervirens*). The project site is bordered on the west by the Lafayette-Moraga Regional Trail, with Laguna Creek and residential uses beyond; on the north by Country Club Drive, with office and residential uses beyond; on the east by School Street, with office and commercial uses beyond; and on the south by the Saklan School, a private elementary school.

Within the survey area and survey area Laguna Creek supports a corridor of Valley Foothill Riparian woodland vegetation (Figure 5). This vegetation community most closely resembles the Fremont cottonwood forest and woodland *Populus fremontii - Fraxinus velutina - Salix gooddingii* Forest & Woodland Alliance as described in the Manual of California Vegetation Online (MCV2, CNPS 2026b). This community is dominated by Fremont cottonwood (*Populus fremontii*), willow (*Salix* sp.), box elder (*Acer negundo*), California bay (*Umbellularia californica*), and California buckeye (*Aesculus californica*).

Figure 5 Vegetation Communities and Land Cover Types



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26-18833 BIO
Fig X Vegetation

According to the U.S. Geological Survey National Hydrography Dataset and the NWI, Laguna Creek is a perennial stream (USGS 2026, USFWS 2026b). The site is approximately 500 feet upstream of the confluence with Moraga Creek, within the 49.4 square mile San Leandro Creek Subwatershed (hydrologic unit code: 180500040803).

Project-Specific Impact Analysis

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

The project site is located within the survey area southeast of the Lafayette-Moraga Regional Trail (see Figure 4). The site is fully developed and does not provide suitable habitat for special-status plants or most special-status wildlife species, although large trees on-site may provide marginal roosting habitat for bats and nesting habitat for birds. The survey area does not contain designated critical habitat for federally listed species (USFWS 2026c). Outside the project site, Laguna Creek and the associated riparian corridor provide suitable habitat for special-status species.

California Red-Legged Frog

There are known occurrences of California red-legged frog (CRLF; *Rana draytoni*, federally threatened) within five miles of the survey area and one observation reported from Laguna Creek at Hacienda de las Flores Park, approximately 1.25 miles northeast of the site (LSA 2024). Laguna Creek within the survey area contains suitable habitat for CRLF, but no upland habitat is present within the project site. Because the redevelopment area is adjacent to suitable habitat, this species could occur transiently within the project site during overland movement, although unlikely given the existing development on the site. If present, impacts to CRLF due to construction could include direct mortality if individuals are present in the work area during construction. These impacts would be potentially significant.

As required by Town policies OS2.1 Protection of Wildlife Areas and OS2.2 Preservation of Riparian Environments, and in accordance with CAPI EIR Mitigation Measure BIO-1 which requires additional measures if a project would have the potential to affect special-status species, the Town would require wildlife exclusion fencing or silt fencing to protect CRLF and CRLF habitat through implementation of the following CRLF avoidance and minimization measures pursuant to CAPI EIR Mitigation Measure BIO-1.

CAPI EIR Mitigation Measure BIO-1 - Required CRLF Avoidance and Minimization

If any life stage of the CRLF (*Rana draytonii*) is detected at any time during construction, work in the immediate vicinity of the observation shall cease, and the qualified biologist shall notify the Town and, if required, the USFWS for further direction before work resumes in the affected area. If the USFWS determines that adverse effects to the CRLF cannot be avoided, the project will not commence until further guidance from the USFWS is provided. The following are avoidance and minimization measures to avoid potential impacts to CRLF.

- Prior to the initiation of project activities, a qualified biologist shall conduct an environmental sensitivity training for all construction personnel, which will include a description of the CRLF, its habitat, and specific measures described below to avoid adverse effects to the species during the project, including sensitivity training, species identification, and wildlife exclusion fencing. This training will discuss that work will be stopped in the event a CRLF is identified on-site and will provide the appropriate USFWS contact information.
- Prior to construction, wildlife exclusion fencing shall be installed along the work area adjacent to Laguna Creek under the direction of a Town-approved qualified biologist. Exclusionary fencing shall include:
    1. A minimum 3-foot tall silt fence or wildlife exclusion fence (such as ERTEC or equivalent) with a climbing lip barrier shall be erected along the edge of the construction area for at least 50

feet past the edge of suitable habitat, to provide a solid barrier against wildlife wandering onto the project site.

2. The exclusion fencing shall be maintained throughout construction to delineate Environmentally Sensitive Areas and provide a barrier to CRLF to prevent any possible movement onto the project site during construction.
3. Work area limits shall be clearly marked for activities outside the fence to ensure no activities affect Laguna Creek or CRLF habitat.

With implementation of BIO-1 Mitigation Measure – Required CRLF Avoidance and Minimization described above, these impacts would be reduced to less than significant levels.

Special-Status Bats

Because the project site is adjacent to a riparian corridor (within the larger survey area) and contains mature tree and shrub landscaping, special-status bats may roost in the project site. Townsend's big-eared bat (*Corynorhinus townsendii*, SSC), western mastiff bat (*Eumops perotis californicus*, SSC), and big free-tailed bat (*Nyctinomops macrotis*, SSC), could roost in the project vicinity and within vegetation in the project site. While suitable maternity-roost structures are not present, trees and dense vegetation provide temporary day and night-roosting opportunities. Consequently, removal of occupied trees or vegetation could result in impacts on roosting bats. In accordance with CAPI Mitigation Measure BIO-3, roosting bat surveys and avoidance measures would be required prior to tree removal. Therefore, consistent with the conclusions of the CAPI EIR, impacts on roosting bats would be less than significant.

Nesting Birds

There are trees and shrubs located within the project site and riparian trees along Laguna Creek, which could potentially provide habitat for nesting birds. In accordance with CAPI EIR Mitigation Measure BIO-2, pre-construction nesting bird surveys and active nest avoidance would be required. Therefore, consistent with the conclusions of the CAPI EIR, impacts on nesting birds would be less than significant.

With implementation of CAPI EIR Mitigation Measures BIO-1, BIO-2, and BIO-3, the proposed project would not have a substantial adverse effect on any candidate, sensitive, or special-status species. Impacts would be substantially mitigated by uniformly applicable development policies and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to candidate, sensitive, or special-status species.

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 extent of the Laguna Creek riparian corridor was evaluated during the reconnaissance-level field survey (Figure 5). Although the Laguna Creek riparian corridor occurs within the overall survey area, it is located outside the project site. As further described in Section 9, *Description of the Project,* a 30-foot setback from the top of the Laguna Creek bank would be established for all proposed buildings. Within this setback, a limited area would be modified to raise site grades using imported fill and to construct a retaining wall up to three feet in height. These improvements would remain separated from Laguna Creek by approximately 20 feet, which would also include the intervening 10-foot-wide paved Lafayette-Moraga Regional Trail. (An aquatic resource delineation would only be required if grading, utility, frontage, and trail-related improvements encroached into potentially jurisdictional areas.) The project site itself does not contain riparian vegetation or other sensitive natural communities, and no wetlands or other waters occur within the project site. Because all ground-disturbing activities would be confined to previously developed areas and would avoid the Laguna Creek corridor, the proposed project would not result in a substantial adverse effect on riparian vegetation or other sensitive natural communities and would not

require a formal jurisdictional delineation. Impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site and would not result in new significant off-site or cumulative impacts related to riparian habitat or other sensitive natural communities.

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 extent of the Laguna Creek riparian corridor was evaluated during the reconnaissance-level field survey. Although the Laguna Creek riparian corridor occurs within the overall survey area, it is located outside the project site (Figure 5). Because the project site avoids the creek corridor, a formal jurisdictional delineation would only be required if final grading, utility, frontage, or trail-related improvements are revised to encroach into potentially jurisdictional areas. No wetlands or other waters of the U.S. or State are present within the project site. Additionally, as discussed in the CAPI EIR, projects larger than one acre are required to comply with the (NPDES) construction general permit; Stormwater Pollution Prevention Plan Best Management Practices (BMPs); and the MMC 14.52.010 standards for stormwater management and BMPs. These requirements would limit the potential for erosion, sedimentation, and contamination during construction.

Because project activities would be confined to previously developed areas and would avoid Laguna Creek, and because existing regulations would avoid erosion, sedimentation, and contamination that could affect the creek, the proposed project would not result in direct removal, filling, hydrological interruption, or other impacts on state or federally protected wetlands. Impacts under this threshold would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site and would not result in new significant off-site or cumulative impacts related to wetlands.

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 project site is currently developed with existing office buildings and surface parking lot and does not provide important movement habitat for wildlife in the East San Francisco Bay Area. Laguna Creek within the survey area could provide small scale movement pathways for both aquatic and terrestrial wildlife species. However, the proposed project would not result in loss of habitat in the creek or riparian corridor or result in any substantial reduction in the corridor's value for wildlife movement. The project would not interfere substantially with the movement of a 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. Impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to wildlife corridors.

e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The project site lies within the Contra Costa County Creek Structure Setback (County Code §914-14). As applied by the Town, where the County setback overlaps developed areas, the Town relies on the County's creek setback line determinations and any applicable drainage-easement or encroachment requirements. No buildings would be constructed within the 30-foot creek setback, as measured from the Laguna Creek top-of-bank. In some locations, site grades would be raised through the import of fill, including a limited area within the creek setback at the northeast corner of the project site (Figure 4). A retaining wall up to

three feet in height would also be constructed in this area, adjacent to the existing trail. Pursuant to MMC 8.200.110.D, an exception to the required creek setback may be granted on a case-by-case basis by the Town's Public Works Director or Town Engineer, in coordination with responsible regulatory agencies, if the Town determines that a structure within the creek setback is necessary due to geologic, environmental, or topographical conditions. The project would not affect sensitive biological resources or riparian habitat because no riparian vegetation or wetlands would be disturbed, and with implementation of applicable CAPI EIR mitigation measures described under checklist item 4.a above, the project would avoid adverse impacts to biological resources within the existing developed footprint. In addition, the project would be required to implement standard NPDES erosion-and-sediment controls during construction to avoid temporary construction impacts to Laguna Creek.

In accordance with MMC12.12.070, an Arborist Report was prepared for the project by Bob Peralta Arbor Consulting (Bob Peralta 2023; 2024). The proposed project would include the removal of 41 trees. The tree would be removed in coordination with the Town. Pursuant to MMC 12.12.110 and 120, the trees would be removed as part of an approved subdivision or building permit, and no tree removal permit would be required. The project would include planting 38 replacement trees to offset the removal of regulated trees. With Town approval of the proposed tree removal and replacements and the required implementation of applicable CAPI EIR mitigation measures discussed under checklist item 4.a, the project would not conflict with local policies or ordinances protecting biological resources, including regulated trees. This impact would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to conflicts with local policies or ordinances protecting biological resources.

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?

No adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans apply to the survey area. No impact would occur. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to potential conflicts with habitat conservation plans.

Conclusion

With incorporation of the CAPI EIR Mitigation Measures BIO-1 – Required CRLF Avoidance and Minimization, BIO-2, and BIO-3, the project would have less than significant impacts on biological resources, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to biological resources. This issue **does not require further study**.

5 Cultural Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	□	■	□	■	□
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	□	□	□	■	■
c. Disturb any human remains, including those interred outside of formal cemeteries?	□	□	□	■	■

Analysis in Previous Environmental Documents

As discussed in Section 4.4, *Cultural Resources*, of the CAPI EIR, development facilitated by the Housing Element has the potential to impact cultural resources as individual project sites could contain unknown historical or archaeological resources or human burials. Excavation during construction activities would have the potential to disturb these resources. Development facilitated by the Housing Element would be required to adhere to existing regulations such as the California Health and Safety Code regarding the treatment of human remains. The 2002 General Plan has provisions that address historical resources and would apply to development facilitated by the Housing Element. In addition, amendments to the 2002 General Plan associated with the Housing Element Update are implemented under the CAPI EIR as Implementation Programs, which provide the framework for applying updated policies and regulatory actions to future development projects. These programs supplement the 2002 General Plan policies and include Implementation Programs CR-A to CR-D:

> **Implementation Program CR-A: Historical and Archaeological Resources Survey.** Retain a qualified cultural resource specialist to conduct a historical and archaeological resource survey prior to issuance of a grading permit in a previously undisturbed area. Mitigation may include but is not limited to avoidance of discovered cultural resources; relocation, rehabilitation, or alteration consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties; and/or data recovery mitigation or documentation that offsets the loss of the resource.
>
> **Implementation Program CR-B: Protect Potential Historic and Archaeological Resources.** Retain a qualified cultural resource specialist to conduct site-specific analysis and implement feasible mitigation or avoidance for development that may impact a listed, eligible, or potentially eligible historic structure (older than 45 years) or resource or archaeological resource.
>
> **Implementation Program CR-C: Construction Monitoring.** Retain a qualified cultural resource specialist to monitor construction activities that involve ground-disturbing activities greater than 12 inches in depth and occur within 60 feet of a potentially significant cultural resource.
>
> **Implementation Program CR-D: Unanticipated Discovery of Cultural Resources.** Suspend all earth-disturbing work within 60 feet of identified cultural resources. Retain a qualified cultural resources specialist to design and implement feasible mitigation. Mitigation may include but is not limited to avoidance of discovered cultural resources, archaeological testing to determine California Register of

Historical Resources eligibility, consultation with descendant communities, and/or implementation of a treatment plan to offset the loss of the resource.

With compliance with CAPI EIR Implementation Program CR-A through CR-D and adherence to existing regulations, the CAPI EIR found that impacts to historical and archaeological resources would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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

Rincon completed a Cultural Resources Assessment of the project site in April 2026 (Appendix A to this report). The Cultural Resources Assessment included a cultural resources records search, archival and background research, Sacred Lands File search, field survey, geoarchaeological review, and National Register of Historic Places, California Register of Historical Resources (CRHR), and Town of Moraga Landmark eligibility evaluations. The intent of the study was to identify historical resources, as defined by CEQA Section 15064.5(a), within the project site. The project-specific impacts for cultural resources were informed by the Cultural Resources Assessment.

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

CEQA Guidelines Section 15064.5 defines a historical resource as that listed or determined eligible for listing in the CRHR, that listed in a local register of historical resources, or that determined by a lead agency to be historically significant. Four historic-age (more than 45 years old) commercial-office buildings and related landscaping were identified during the field survey within the project site: 1600, 1620, 1640, and 1660 School Street, which collectively comprise the Moraga Office Park complex constructed in 1979-1980. In accordance with California Office of Historic Preservation guidelines, the buildings were recorded and evaluated for historic resources eligibility as a single property on Department of Parks and Recreation (DPR) 523 Series Forms (Appendix A). As discussed in the DPR 523 Series forms in Appendix A, the complex was found ineligible for listing in the CRHR and as a Town of Moraga Landmark due to a lack of historical and architectural significance. As such, it does not qualify as a historical resources and its demolition would not result in a significant adverse impact as defined by Section 15064.5 of the CEQA Guidelines. No other historical resources were identified within the project site. In addition, the off-site transportation improvements required by the Town would occur in previously graded or paved areas such as existing roadways and sidewalks and would not affect areas below or beyond previous disturbance. Therefore, the project would have no impact on historical resources and would not result in more severe adverse impacts than discussed in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to historical resources.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?

The Cultural Resources Assessment (Appendix A) did not identify archaeological resources within or immediately adjacent (60 feet) to the project site. Because no archaeological resources are known to be located within or immediately adjacent to the project site, Implementation Program CR-C: Construction Monitoring of the CAPI EIR does not apply. In addition, the off-site transportation improvements required by the Town would occur in previously graded or paved areas such as existing roadways and sidewalks and would not affect areas below or beyond previous disturbance. However, the archaeological sensitivity

of the project site is considered to be moderate for subsurface precontact archaeological resources and low for subsurface historic period archaeological resources based on the presence of Holocene-age alluvial fan deposits and underlying alluvial soils. Thus, construction and ground-disturbing activities could uncover previously undisturbed resources if they are on-site. Implementation Program CR-D: Unanticipated Discovery of Cultural Resources of the CAPI EIR would apply. The project site is not known to have greater likelihood of containing subsurface archaeological resources or human remains than the rest of the Housing Element Opportunity Sites or other parts of the Town. With adherence to CAPI EIR Implementation Program CR-D, the project's impacts to archaeological resources would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to archaeological resources.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Project development, including off-site improvements required by the Town, would occur on an infill site in a previously disturbed area. However, ground-disturbing activities such as grading and excavation could potentially disturb human remains. The proposed project would comply with the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. Similar to the CAPI EIR, compliance with the mandatory regulatory procedures would ensure that potential impacts related to the potential discovery or disturbance of any human remains accidentally unearthed during construction activities would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to human remains.

Conclusion

With required adherence to CAPI EIR Implementation Program CR-D described in this section, the project would have less than significant impacts on cultural resources. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the CAPI EIR, or a substantial increase in the severity of previously identified significant effects related to cultural resources. No new mitigation measures are warranted. This issue **does not require further study** .

6 Energy

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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?	□	■	□	■	□
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	□	■	□	■	□

Analysis in Previous Environmental Documents

Section 4.5, *Energy*, of the CAPI EIR concludes that construction-related energy use would be temporary and regulated by applicable state and federal requirements, including CARB diesel idling restrictions under 13 California Code of Regulations Sections 2449 and 2485, USEPA Construction Equipment Fuel Efficiency Standards (40 Code of Federal Regulations Parts 1039, 1065, and 1068), CALGreen requirements, and construction waste diversion standards. Operational energy would be provided for the Housing Opportunity Sites by existing infrastructure, and reduced through implementation of Housing Element Goal H-7 and policies H-7.1 and H-7.3, which promote sustainable development and improved energy efficiency. The CAPI EIR concluded that energy impacts would be less than significant, based on compliance with applicable federal, state, regional, and local regulations and implementation of Housing Element policies.

The CAPI EIR determined that the Housing Element would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The CAPI EIR found the Housing Element to be consistent with applicable plans, including the California Energy Plan, 2018 Integrated Energy Policy Report, California Renewable Portfolio Standard, Energy Action Plan, Title 24, California Code of Regulations – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen), and Plan Bay Area 2050. As described above, construction and operation of the Housing Element would be required to comply with relevant provisions of CALGreen and Title 24 of the California Energy Code. Therefore, impacts would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Project construction would result in short-term consumption of energy from the use of construction equipment and processes. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may also be needed for construction trailers or electric construction equipment. Energy use during construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. Construction contractors would also be required to comply with the same regulations outlined in the CAPI EIR such as CARB regulations, provisions of California Code of Regulations, Title 13, Sections 2449 and 2485, USEPA Construction Equipment Fuel Efficiency, and 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Additionally, 65 percent of construction and demolition debris would be diverted from landfill disposal. The CAPI EIR found that the Housing Element would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Therefore, impacts from the project on energy impacts from project construction would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to consumption of energy resources during project construction.

Operation

Operational energy use would include use of transportation fuel. Although the proposed project would result in additional daily vehicle trips, the increase would be due mostly to the introduction of residential uses in the MC area. It does not reflect the efficiency of transportation energy use. Moreover, the introduction of mixed commercial and residential land uses close to one another further promotes the MC area's clustered development pattern that is intended to reduce vehicle trip lengths and subsequent transportation energy use by providing residents with easy access to new and existing dining, socializing, shopping, recreation, and public services such as schools and libraries.

Operation of the project would consume electricity and natural gas for building heating and power, lighting, and water conveyance, among other operational requirements. The project would be required to meet CALGreen specific requirements for energy efficiency in new development and would be constructed to achieve Energy Star certification criteria in compliance with Housing Element policy H-7.3 (Energy Efficiency in New Construction). In addition, the project would implement Housing Element policy H-7.1 (Environmental Sustainability) to promote cost-effective sustainability, energy efficiency, water conservation and waste reduction. Operation of the proposed project would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Therefore, this impact would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to consumption of energy resources during project operation.

b. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The project would be consistent with the construction and operation assumptions in the Housing Element, and would not require energy beyond those estimated in the CAPI EIR that were found to not conflict or obstruct a state or local plan for renewable energy or energy efficiency, which include the California Energy Plan, 2018 Integrated Energy Policy Report, California Renewable Portfolio Standard,

Energy Action Plan, Title 24, California Code of Regulations – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen). The Town does not have an adopted plan for renewable energy or energy efficiency; however, the Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments (ABAG)'s Plan Bay Area 2050, described in the CAPI EIR, contains strategies related to energy efficiency that are applicable and consistent with the Housing Element. These plans, policies, and regulations were discussed in the CAPI EIR to determine a less than significant impact. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to potential conflicts with applicable energy plans.

Conclusion

The project would have less than significant impacts on energy, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to energy. No new mitigation measures are warranted. This issue **does not require further study**.

7 Geology and Soils

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	■	■	☐
2. Strong seismic ground shaking?	☐	■	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	■	☐	■	☐
4. Landslides?	☐	☐	■	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	■	☐	■	☐
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	■	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	■	☐	■	☐
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?	☐	☐	■	■	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■	■

Analysis in Previous Environmental Documents

As discussed in Section 4.6, *Geology and Soils*, of the CAPI EIR, the Housing Element would not facilitate development in Alquist-Priolo Earthquake Fault Zones. The Quaternary Moraga fault that is located between the MC area and the southern edge of the town is considered inactive. Accordingly, there would be no impact related to surface fault rupture.

The CAPI EIR states that development facilitated by the Housing Element would potentially expose residents to the effects of seismic ground shaking, liquefaction, landslides, and expansive soils. While portions of Moraga contain soils and geologic conditions that could be susceptible to these hazards, the EIR found that adherence to the California Building Code (CBC), MMC Section 14.04, and 2002 General Plan policies PS 4.6 and PS4.10 would require site-specific geotechnical investigations and appropriate engineering design to minimize geologic hazards. With compliance with these existing regulations, impacts related to seismic hazards, unstable soils, erosion and soil loss, and expansive soils were determined to be less than significant.

The CAPI EIR found that ground disturbance associated with development facilitated by the Housing Element could result in erosion and the loss of topsoil. New development would be required to comply with the State Water Quality Control Board's (SWRCB) General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ, as amended by Order R2-2011-0083). Development would also be required to comply with MMC Section 14.04, which requires the preparation an engineering geologist's investigation and/or a preliminary soil report based on submittals of plans, as well as 2002 General Plan Policy PS4.2 requiring review of individual development proposals for construction methods and site design that minimize soil erosion. The CAPI EIR concluded that impacts related to soil erosion or the loss of topsoil would be less than significant.

As discussed in Section 4.6, *Geology and Soils*, of the CAPI EIR, development facilitated by the Housing Element would occur in areas with existing wastewater infrastructure and would generally not require alternative wastewater infrastructure or disposal. 2002 General Plan Policy OS.1 requires all development to be connected to a sewage system, unless demonstrated to be not feasible, in which case a technical expert must confirm on-site soils are appropriate for use for alternative wastewater systems. The CAPI EIR concluded that impacts related to soil capability for alternative wastewater disposal system use would be less than significant.

The CAPI EIR found that construction activities related to the Housing Element would potentially result in significant impacts to paleontological resources. Amendments to the 2002 General Plan associated with the Housing Element Update are implemented under the CAPI EIR as Implementation Programs, which provide the framework for applying updated policies and regulatory actions to future development projects. These programs supplement the 2002 General Plan policies and include Implementation Program PAL-A, requiring a qualified professional paleontologist to determine a development's potential to impact paleontological resources. The CAPI EIR found that implementation of PAL-A would reduce impacts to a less than significant level.

The following describes applicable analysis in the CAPI EIR and provides a review to determine project-specific would occur impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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

In February 2024, Rockridge Geotechnical prepared a Geotechnical Investigation for the proposed project ([Geotechnical Report] Rockridge 2024; 2026). The intent of the report was to characterize the subsurface geotechnical conditions underlying the project site. In January 2026, Rockridge Geotechnical prepared a letter confirming the Geotechnical Investigations for subsequent project revisions. The discussion below

is partially informed by the Geotechnical Report and subsequent letter, which are included as Appendix B to this document.

a.1. Would the project expose people or structures to 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 project site is not located within an Alquist-Priolo fault zone. The closest fault is the inactive Moraga fault located approximately 0.28-mile west of the project site The proposed project would not expose people or structures to the risk of loss, injury, or death involving rupture of a known earthquake fault. No impact would occur and the impact would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to earthquake faults.

a.2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is in an area at relatively high risk from seismic shaking due to proximity to faults such as the Hayward, Calaveras, and Mount Diablo faults, located approximately 4.0 miles west, 5.0 miles east, and 5.9 miles east, from the project site, respectively (Rockridge 2024). The project site does not contain unique conditions or features that would result in project-specific impacts beyond those identified in the CAPI EIR. The proposed project would be designed in accordance with the provisions of the CBC, MMC, Section 14.04, and policy S-4.1 and Program S-I of the Town's Safety and Resilience Element, which collectively require site-specific geotechnical investigations and appropriate engineering design to minimize geologic hazards. Compliance with the mandatory building code structural specifications would result in development that would resist adverse effects from seismic ground shaking. Impacts related to strong seismic ground shaking would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to seismic ground shaking.

a.3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction of soil can occur during seismic ground shaking. Loose, saturated, uniformly graded sand below the groundwater table is the soil type most susceptible to liquefaction. Silt and clay with low plasticity are also potentially liquefiable. The project site is within a low to moderate liquefaction susceptibility zone and has low potential for lateral spreading (Rockridge 2024). The project site does not contain unique conditions or features that would result in project-specific impacts beyond those identified in the CAPI EIR. Building design that complies with the CBC, MMC, Section 14.04, and policy S-4.1 and program S-I of the Town's Safety and Resilience Element would result in a structure that resists adverse effects from seismic-related liquefaction. Hazards associated with seismic ground failure, including liquefaction, would be less than significant, and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to ground failure.

a.4. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

According to the California Geological Survey the proposed project is not located within a landslide zone (California Geological Survey 2025). The project site is flat and does not contain unique conditions or features that would result in project-specific impacts beyond those identified in the CAPI EIR. No impact

related to the risk of loss, injury, or death involving landslides would occur. The proposed project's impact related to landslides would not be less than the impact identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to landslides.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The CAPI EIR found that ground disturbance associated with development facilitated by the Housing Element could result in erosion and the loss of topsoil. The site is not known to have greater likelihood of containing soils prone to erosion than the rest of the Housing Opportunity Sites or other parts of the Town. Nonetheless, as ground-disturbing activities would exceed one acre, construction contractors would be required to comply with the requirements of the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction Stormwater General Permit), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would specify the storm water monitoring and construction BMP required to be implemented to minimize water quality degradation, including from erosion. In addition, MMC Section 14.04 requires implementation of erosion control measures to reduce soil erosion. The use of standard soil erosion control measures during demolition and construction associated with the proposed project would minimize erosion from exposed surfaces and reduce soil erosion impacts to a less than significant level. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to soil erosion or the loss of topsoil.

c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As discussed under checklist items a.3 and a.4, the proposed project would not result in significant impacts related to landslides, liquefaction, or lateral spreading. The proposed project would not require groundwater dewatering or result in other substantial groundwater reduction such that localized subsidence could occur. As noted under checklist item a.2, CBC, MMC, Section 14.04, and policy S-4.1 and Program S-I of the Town's Safety and Resilience Element collectively require site-specific geotechnical investigations and appropriate engineering design to minimize geologic hazards, including the risk of collapse. Compliance with the mandatory building code structural specifications would result in development that would resist adverse effects from geologic hazards. Impacts related to exposing people or structures to potential substantial adverse effects related to unstable soils would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to geologic instability.

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Soils with relatively high clay content are expansive due to the capacity of clay minerals to take in water and swell (expand) to greater volumes. Soils underlying the project site are considered moderately expansive. As noted under checklist item a.2, CBC, MMC, Section 14.04, and policy S-4.1 and Program S-I of the Town's Safety and Resilience Element collectively require site-specific geotechnical investigations and appropriate engineering design to minimize geologic hazards, including expansive soils. The CBC includes provisions to minimize soil-related hazards through measures such as removal and replacement of unsuitable soils, selection of appropriate fill materials, and proper compaction. The proposed project would be designed in accordance with the recommendations of the Geotechnical Report to minimize the potential of risk due to expansive soils (Rockridge 2024). With adherence to these regulatory requirements and design provisions, impacts related to expansive soils would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines

Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to expansive soils.

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 proposed project would not include septic tanks or alternative wastewater disposal systems; therefore, there is no potential for adverse effects due to soil incompatibility. No impact would occur, and impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to septic tanks or wastewater disposal systems.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As shown in Figure 4.6-3 (Geologic Map of the Town of Moraga) of the CAPI EIR, the project site is underlain with late Miocene age Siesta Formation (Tst) which consists of siltstone, claystone, sandstone, and limestone. The Siesta Formation is considered to have high paleontological sensitivity. Although the project site has previously been developed, ground-disturbing activities associated with construction could have the potential to damage or destroy paleontological resources that may be present on or below the ground surface. Off-site transportation improvements required by the Town would occur in previously graded or paved areas such as existing roadways and sidewalks and would not affect areas below or beyond previous disturbance. The proposed project must comply with Implementation Program PAL-A of the CAPI EIR. This program requires a qualified paleontologist to conduct a paleontological survey of the project site to evaluate the potential for significant impacts to paleontological resources. If the survey identifies a potential for impacts, the project may require mitigation measures to reduce impacts during ground-disturbing activities. The project site is not known to have greater likelihood of containing subsurface paleontological resources than the rest of the Housing Element Opportunity Sites within the MC area. Therefore, impacts related to paleontological resources would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to paleontological resources.

Conclusion

With required adherence to CAPI EIR Implementation Program PAL-A described in this section, the project would have less than significant impacts on geology and soils, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project site, new significant impact not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to geology and soils. No new mitigation measures are warranted. This issue **does not require further study**.

8 Greenhouse Gas Emissions

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	□	■	□	■	□
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the CAPI EIR, analysis of the Housing Element relied on the Air District CEQA GHG thresholds and consistency with state and regional climate plans, including the CARB 2017 Scoping Plan, the 2002 General Plan, and the Plan Bay Area 2050. The CAPI EIR determined that development facilitated by the Housing Element would not exceed the Air District's interpolated 2031 project-level or plan-level GHG thresholds. In addition, the Housing Element directs growth to infill and mixed-use areas where VMT per resident would decrease from baseline compared to buildout, the Housing Element was found to be consistent with state and regional GHG-reduction strategies. Therefore, GHG impacts associated with the Housing Element were determined to be less than significant.

Construction and operational GHG emissions associated with buildout of the Housing Element would be minimized through compliance with applicable state regulations, including the Title 24 CALGreen Building Code, and receiving electricity from utilities that comply with the Renewable Portfolio Standard, and the Town's existing energy-efficiency and trip-reduction policies. With adherence to applicable regulatory requirements and the infill nature of planned development, the CAPI EIR found that the Housing Element would not conflict with the applicable GHG reduction plans including the 2017 Scoping Plan, 2002 General Plan, and the Plan Bay Area 2050.

Project-Specific Impacts

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction

The proposed project would generate GHG emissions during temporary construction activities, such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. The Air District does not have thresholds of significance for construction-related GHG emissions. The Air District considers GHG emissions from construction activities to be one-time, temporary emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the

proposed project. Therefore, construction GHG emissions would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to construction-generated GHG emissions.

Operation

Long-term operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, natural gas combustion for space and water heating and off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

The project would be consistent with the buildout assumptions for the project site in the Housing Element and therefore would not increase GHG emissions beyond those estimated in the CAPI EIR that were found to not exceed the 2031 interpolated GHG threshold (which considers progress toward the 2045 state goal of carbon neutrality). In addition, the project would be consistent with the plans, policies and regulations adopted for the purpose of reducing the GHG emissions that were analyzed in the CAPI EIR, which include the 2017 Scoping Plan, the Plan Bay Area 2050, and the applicable General Plan (2040 General Plan). The project would be consistent with them through the Title 24 CALGreen Building Code and receiving electricity from utilities complying with the Renewable Portfolio Standard, as well as the General Plan's existing energy-efficiency and trip-reduction policies, including CON5.2: Energy Efficiency Standards, CON5.1: Energy Conservation, CON5.3: Renewable Energy, CON5.4: Energy Innovation, CON5.5: Decarbonization, CON5.6: Energy Audits, CON6-4: Transportation Sector Focus, CON6-5, and CON6-5. The applicable plans, policies, and regulations identified in the CAPI EIR were reviewed for consistency with the proposed project. Based on this analysis, the project would not conflict with any of the applicable plans, policies, and regulations identified in the CAPI EIR for the purpose of reducing the emissions of greenhouse gases. Given the project's consistency with development under the Housing Element and the development assumed for the site in the CAPI EIR, the project's operational GHG impact would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to operational GHG emissions.

Conclusion

The project would have less than significant impacts on GHG, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to GHG emissions. No new mitigation measures are warranted. This issue **does not require further study**.

9 Hazards and Hazardous Materials

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	□	■	□	■	□
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?	□	■	□	■	□
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	□	■	□	■	□
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?	□	■	□	■	□
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?	□	□	■	■	□
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	□	■	□	■	□
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	□	□	□	■	■

Analysis in Previous Environmental Documents

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the CAPI EIR, construction facilitated by the Housing Element would require the use of hazardous materials, and could result in an increase in routine transport, use, and disposal of hazardous materials which could result in upset and accidental releases. Hazardous materials used during construction would be required to be transported, used, and

disposed of in accordance with applicable regulations such as the Toxic Substances Control Act, the Resource Conversation and Recovery Act, the Hazardous Waste Control Act, and the Contra Costa County Local Hazard Mitigation Plan. Adherence with these regulations would minimize the risk of hazards to the public or the environmental from hazardous materials release. While the potential for asbestos and lead-based paint hazards could occur during demolition, adherence to California Division of Occupational Safety and Health and Bay Area Air District regulations minimize the potential for release of these materials. The CAPI EIR identified two cleanup sites near several Housing Opportunity Sites: Moraga Cleaners and Laundry and the Rheem Valley Shopping Center. As described in the CAPI EIR, proximity to these cleanup sites could pose potential health and environmental risks during construction at Housing Opportunity Sites that may have been affected, due to contaminated groundwater and soil. The CAPI EIR requires implementation of Mitigation Measure HAZ-1, which entails preparation of a Phase I Environmental Site Assessment and, where warranted, a Phase II Environmental Site Assessment for development adjacent to these cleanup sites. The CAPI EIR concluded that with implementation of Mitigation Measure HAZ-1, impacts related to development located on a hazardous materials site would be reduced to a less than significant level.

Development under the Housing Element would facilitate construction activities involving the temporary transport, storage, and use of potentially hazardous materials, which could result in emissions or releases within 0.25 mile of existing schools. The CAPI EIR concluded that compliance with applicable policies and regulations would reduce potential impacts related to hazardous emissions, materials, substances, or waste within 0.25 mile of an existing or proposed school to a less than significant level.

The Town is not located within an airport influence area. Therefore, the CAPI EIR concluded that no impact related to airport hazards, private airstrips, or emergency landing facilities would occur.

The CAPI EIR determined that development facilitated by the Housing Element would not result in interference with an adopted emergency response plan or emergency evacuation plan because the Housing Opportunity Sites are on existing parcels that are not dedicated to circulation or access. As such, the CAPI EIR concludes this impact would be less than significant.

Wildland fire in Section 4.17, *Wildfire,* of the CAPI EIR. The wildfire impacts identified in the CAPI EIR are summarized in Section 20, *Wildfire,* of this document.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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?

Demolition and Construction

Use of Hazardous Materials During Construction

Consistent with the assumptions of the CAPI EIR, construction activities would temporarily transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. However, the proposed project would be required to comply with the same federal, state, and local laws and regulations as discussed in the CAPI EIR, such as the Toxic Substances Control Act and

the Resource Conversation and Recovery Act, Hazardous Waste Control Act, and the Contra Costa County Local Hazard Mitigation Plan. Compliance with existing regulations would reduce the risk of potential release of hazardous materials during construction. Impacts associated with the use of hazardous materials during construction would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to hazardous materials use.

Release of Contaminated Materials During Construction

As discussed in the CAP EIR, Moraga has two active cleanup program sites located near Housing Opportunity Sites: the Moraga Cleaners and Laundry (SWRCB No. T10000012913), located in the MC area approximately 0.25-mile northeast of the project site, and the Rheem Valley Shopping Center (SWRCB No. T10000012758) located in the Rheem Park area approximately 1.6 miles north of the project site. Given the distance between the project site and the two active cleanup program sites, hazardous soils or groundwater associated with these cleanup sites are not expected to be present at the project site and grading for the project would not encounter or result in the release of hazardous material from these sites. Impacts associated with the contaminated materials release during construction would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to contaminated materials release.

Asbestos and Lead

As described in Section 5, *Cultural Resources,* the existing buildings on the project site were constructed in 1979-1980. Due to the age of the on-site buildings, there is potential that the buildings could contain asbestos and/or lead-based paint. Demolition of the on-site structures could result in health hazard impacts to workers as a result of asbestos and/or lead-based paint exposure. However, as stated in the CAPI EIR, asbestos and lead-based paint exposure is regulated by the California Department of Occupational Safety and Health which mandates required testing, monitoring, containment, and disposal of lead-based materials and asbestos exposure through California Code of Regulations Section 1532.1 and 1529. In addition, the Air District enforces Regulation 11, Rule 2 which governs the proper handling and disposal of asbestos containing material for demolition. Adherence to these regulations would ensure minimal risk related to potential release of hazardous materials during construction. Impacts associated with the release of asbestos and lead-based paint during demolition would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to asbestos and lead.

Operation

The proposed project involves residential uses which do not typically use hazardous materials other than small amounts for cleaning and landscaping. These materials would not be different from household chemicals and solvents already in wide use throughout Moraga. Residents are anticipated to use limited quantities of products routinely for periodic cleaning, repair, and maintenance or for landscape maintenance/pest control that could contain hazardous materials. Those using such products would be required to comply with all applicable regulations regarding the disposal of household waste. Operation of the proposed project poses little risk of exposing the public to hazardous materials. Operation-related hazardous materials impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to operational hazardous materials.

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 nearest schools to the project site are the Saklan School and Tudorka Tots, each located approximately 180 feet south of the project site. In addition, the Creative Montessori Preschool is located approximately 450 north of the project site. Because these schools are located within 0.25 mile, the potential for hazardous materials to affect nearby sensitive receptors is addressed below.

The proposed project is residential and would not involve the routine use, transport, or disposal of hazardous or acutely hazardous materials during operation. Accordingly, operational activities would not result in hazardous emissions or the handling of hazardous materials that could affect nearby schools.

Construction would involve the temporary use and transport of potentially hazardous materials, including fuels (e.g., diesel and gasoline), lubricants, solvents, paints and coatings, and cleaners. In addition, demolition of the existing structures could encounter asbestos containing materials and lead containing materials. These construction and demolition activities would be typical of residential development projects and were evaluated in the CAPI EIR; they do not represent a condition unique to the project or the project site.

Project construction and demolition activities would be subject to applicable federal, state, and local regulations governing the handling and potential emissions from hazardous materials and waste. These include the Resource Conservation and Recovery Act (42 U.S.C. §6901) and its implementing regulations in 40 CFR Parts 260–273, which regulate the identification, handling, transport, and disposal of hazardous waste; the Clean Air Act National Emission Standards for Hazardous Air Pollutants for asbestos (40 CFR Part 61, Subpart M), which require inspection, notification, and specific work practices to control asbestos emissions during demolition and renovation; and California Division of Occupational Safety and Health standards under Title 8 California Code of Regulations Sections 1529 and 1532.1, which establish requirements for exposure assessment, monitoring, containment, and safe handling of asbestos and lead containing materials. At the local level, the Air District Regulation 11, Rule 2 requires pre-demolition asbestos surveys, notification, and compliance with specified removal and disposal procedures. Adherence to these regulatory requirements would minimize the potential for hazardous materials releases and associated emissions and thereby ensure that construction would not result in substantial hazards within 0.25-mile of a school.

As described above under checklist item 9.a, the Moraga Cleaners and Laundry cleanup site is approximately 0.25-mile northeast of the project site while the Rheem Valley Shopping Center cleanup site is approximately 1.6 miles north of the project site. Given the distance between the project site and cleanup areas, hazardous soils or groundwater associated with these cleanup sites are not expected to be present at the project site and construction would not result in the release of hazardous material from these sites. Therefore, impacts related to hazardous materials use within 0.25-mile of a school would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to hazardous emissions or materials within 0.25 mile of schools.

d. Would the project be located on a site 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 project site and adjacent properties are not located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, impacts associated with hazards to the public or the environment from disturbance of a listed site would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to listed sites.

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 project site is not located within two miles of a public airport or airstrip. The closest airport is Oakland San Francisco Bay Airport, located approximately 8.6 miles to the south. There would be no impact, and the impact would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to airports.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Town's Emergency Operations Plan was prepared by the Town's Police Department staff in cooperation with MOFD and establishes the organization and procedures for emergency response and coordination. The Town also participates in the Contra Costa County Local Hazard Mitigation Plan through an annex adopted in 2018 that identifies local hazard risks and mitigation actions consistent with countywide strategies. The Safety and Resilience Element of the General Plan incorporates both plans by reference, ensuring consistency with policy, hazard mitigation planning, and emergency response.

In the vicinity of the project site, the Town maintains a roadway network that provides emergency access consistent with applicable design and safety standards. Pursuant to General Plan Policy S3.14, the project would be required to maintain emergency access at all times, reducing potential interference with or impairment of an emergency response or evacuation plan. During construction, encroachment permits issued by the Town for work within public rights of way, including temporary lane, sidewalk, frontage, or access closures, would require approved traffic and pedestrian control plans and would also limit construction hours and days. In addition, the project would adhere to required coordination with emergency service agencies, including the Town's Police Department and MOFD, and nearby sensitive receptors, including the adjacent Saklan School and Tudorka Tots. These measures would minimize temporary disruptions to circulation and avoid interference with emergency response and evacuation plans.

Operationally, the project represents approximately six percent of the total housing growth evaluated in the CAPI EIR and would result in fewer residences than assumed for the site in the CAPI EIR. Therefore, the project's incremental effect on traffic conditions and evacuation capacity would be minimal when considered in the context of full Housing Element buildout. As discussed in Section 15, *Public Services*, and consistent with General Plan Policy S1.3 and the CAPI EIR, the project site is located in an area with sufficient police, fire, and emergency service capacity to meet project needs. Pursuant to policies S3.7 and S3.8, the project was reviewed by MOFD to ensure that multiple points of ingress and egress would be provided to improve evacuation, emergency response, and access, and to ensure that development of the project would not impair or interfere with evacuation or emergency response plans.

Because the project is within the buildout assumptions evaluated in the CAPI EIR, would maintain emergency access at all times, implement pedestrian and traffic control plans, and adhere to all required agency and nearby sensitive receptor coordination and General Plan policies, impacts related to impaired implementation of or physical interference with an adopted emergency response or evacuation plan would be less than significant and not greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site and would not result in new significant off-site or cumulative impacts related to emergency response or evacuation plans.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Wildfire impacts are discussed in Section 20, *Wildfire,* of this document.

Conclusion

With incorporation of CAPI EIR Mitigation Measures WFR-2 and WFR-3, the proposed project would have less than significant impacts on hazards and hazardous materials, the same as those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to hazards and hazardous materials. No new mitigation measures are warranted. This issue **does not require further study**.

10 Hydrology and Water Quality

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	□	■	□	■	□
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	□	■	□	■	□
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;	□	■	□	■	□
(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; or	□	■	□	■	□
(iv) Impede or redirect flood flows?	□	■	□	■	□
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	□	■	□	■	□
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.9, *Hydrology and Water Quality*, of the CAPI EIR, construction activities could cause soil erosion from exposed soil, accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. Development facilitated by the Housing Element would be required to comply with state and local water quality regulations designed to control erosion and protect water quality during construction, including the SWRCB Construction

Stormwater General Permit, which requires preparation and implementation of a SWPPP and BMPs for projects that disturb one acre or more of land. In addition, MMC 13.04.050 sets guidelines for preparation and implementation of a stormwater control plan for development projects that are subject to development runoff requirements, such as those facilitated by the Housing Element. Furthermore, MMC 13.04.090 mandates construction activities to incorporate site-specific BMPs. Although development facilitated by the Housing Element would result in an increase of impervious surfaces, compliance with the NPDES permit, California Green Building Standards code for stormwater runoff, and implementation of long-term BMPs in accordance with the provisions of the MMC would ensure that operation of residential development would not result in water quality degradation. Therefore, the impacts of construction and operation on water quality would be less than significant.

Compliance with the Construction General Permit and the MMC would ensure that the Housing Element does not substantially alter the existing drainage patterns of the site or area, alter the course of a stream or river, cause erosion or siltation, or substantially increase the rate of surface runoff in a manner that would result in flooding on- or off-site or exceed stormwater system capacity. The CAPI EIR concluded that impacts would be less than significant.

The CAPI EIR found that development facilitated by the Housing Element would not substantially interfere with groundwater recharge or substantially reduced groundwater supplies because development would be required to implement stormwater retention development through implementation of on-site retention basins, filtration systems, and/or compliance with a stormwater management ordinance, such as outlined in MMC Chapter 13.04. In addition, a majority of the Housing Opportunity Sites are already developed such that additional development would not substantially increase impervious surfaces. This impact would be less than significant.

The CAPI EIR identifies 100-year floodplains that run along Laguna Creek, Moraga Creek and San Leandro Creek and portions of Rheem Park that lie within a 500-year flood hazard area. Development in flood hazard areas would be required to comply with 2002 General Plan policies PS5.2 and 5.3 which restrict new development in floodways, PS5.5 which requires mitigation of streambank erosion and flooding, policy PS5.6 which requires on-site stormwater retention infrastructure, and policy PS5.7 which requires utilization of flood control measures in sensitive and critical slope areas. Development facilitated by the Housing Element would be required to implement all applicable design features and BMPs to control, reduce, or eliminate pollutant runoff into the stormwater system or uncontrolled off-site runoff. Adherence to these standards would ensure risks related to flooding would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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?

Demolition and Construction Impacts

Demolition and construction activities on the project site would have the potential to cause erosion from exposed soil, an accidental release of hazardous materials such as vehicle fuels and lubricants, or temporary siltation from stormwater runoff. The nearest surface water to the project site is Laguna Creek, which crosses the parcel boundary but is located outside of the project disturbance footprint (refer to Figure 2). Soil disturbance would occur during grading and excavation for the building foundations and utility trenches of the project site. As further described in Section 9, *Description of the Project,* a 30-foot setback from the top of the Laguna Creek bank would be established for all proposed buildings. Within

this setback, a limited area would be modified to raise site grades using imported fill and to construct a retaining wall up to three feet in height.. All ground-disturbing activities would be confined to previously developed areas and would avoid the Laguna Creek corridor. In addition, the project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. The off-site transportation improvements required by the Town would also occur in previously graded or paved areas such as existing roadways and sidewalks and would not affect areas below or beyond previous disturbance. As discussed in the CAPI EIR, construction contractors would be required to comply with applicable regulations such as the Construction Stormwater General Permit, MMC Section 13.04.090 which requires implementation of site-specific BMPs to minimize water quality impacts, and MMC Section 14.04 which requires implementation of erosion control measures to reduce soil erosion.

Project construction would include excavation to a depth of three feet below existing ground surface for building foundations, and excavation to a maximum depth of 10 feet below existing ground surface for limited utility and joint trench excavations. According to the Geotechnical Report, groundwater may be present four feet below ground surface at the project site and could require dewatering. Dewatering activities would be required to adhere to the Construction Stormwater General Permit Attachment J dewatering requirements, which requires treatment of dewatered groundwater and monitoring of discharge. With compliance with Construction Stormwater General Permit requirements, dewatering would not result in a violation of water quality standards or otherwise substantially degrade surface or ground water quality, and impacts would be substantially mitigated by uniformly applicable development policies (Rockridge 2024). This impact would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to water quality.

Operational Impacts

The project site is currently developed with four office buildings. The project site currently consists of a mix of developed impervious surfaces and pervious areas that influence existing stormwater runoff patterns. Approximately 66,210 square feet of the site is covered by impervious surfaces such as buildings and parking lots, while approximately 36,935 square feet remains pervious. Stormwater on-site is collected through a network of field inlets and conveyed via 12-inch storm drainpipes and a 30-inch main line that also receives runoff from adjacent streets, ultimately discharging to Laguna Creek which runs along the northwest boundary of the site. A Stormwater Control Plan was prepared for the project in accordance with the requirements of the RWQCB (Carlson, Barbee, and Gibson, Inc. 2026). The project's stormwater management design would be constructed consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook, which sets guidelines for design of stormwater infrastructure for development in Contra Costa County. The project would direct stormwater flows to the exiting drainage infrastructure and Laguna Creek and would incorporate drainage features that maintain effective on-site conveyance while meting applicable stormwater treatment requirements through participation in the Contra Costa Regional Alternative Compliance program, administered through a Joint Powers Authority, including the purchase of stormwater treatment credits at approved regional facilities. With implementation of this stormwater management approach, operation of the proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality and this impact would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to 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?

As discussed in the CAPI EIR, development facilitated by the Housing Element may increase the area of impervious surfaces, which may reduce the amount of water percolating in the ground to recharge groundwater supplies. The project site is currently developed and contains approximately 66,210 square feet of impervious surfaces. Under the proposed project, redevelopment of approximately 2.46 acres into a 49-unit townhome community, along with new frontage improvements including a Class I shared pedestrian and bicycle path and additional parking would introduce 10,135 square feet of new impervious surfaces and modify the existing distribution of impervious surfaces on the site. However, the remaining 26,800 square feet of the project site would consist of pervious surfaces and landscaped areas that would provide groundwater recharge on-site, and the additional impervious surfaces would not substantially decrease groundwater supplies. In addition, the project would be required to adhere to General Plan Policy CON-2.2 which requires stormwater retention for new developments, and with CalGreen and MMC Chapter 13.04 which require stormwater management during the construction of new developments. Further, the proposed project is slightly smaller than the buildout assumptions used in the analysis in the CAPI EIR, and would be served by municipal water systems rather than on-site wells.

As discussed above under checklist item 9.a, the observed groundwater depth at the site is estimated to be four feet below ground surface. The deepest extent of proposed excavation would be approximately ten feet, which could potentially require dewatering. Dewatering activities would adhere to the Construction Stormwater General Permit Attachment J dewatering requirements, which requires treatment of dewatered groundwater and monitoring of discharge. Dewatering would be localized and temporary, lasting only through construction, and would not substantially reduce groundwater availability. Based on the propose pervious surfaces that would provide groundwater recharge on-site, the project's municipal water supply, and adherence with applicable regulations, the proposed project would not substantially decrease groundwater supplies. Impacts related to groundwater would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to groundwater supply or groundwater recharge.

c.(i) 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 result in substantial erosion or siltation on- or off-site?

c.(ii) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) 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 that would 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?

c.(iv) 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 impede or redirect flood flows?

Stormwater within the project site is currently collected through a network of field inlets and conveyed via 12-inch storm drain pipes and a 30-inch main line that also receives runoff from adjacent streets, ultimately discharging to Laguna Creek which runs along the northwestern boundary of the site. The project would meet stormwater treatment requirements through participation in the Contra Costa County Regional Alternative Compliance program, administered through a Joint Powers Authority, and the purchase of stormwater treatment credits as a condition of approval consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook. Under this approach, stormwater treatment would occur at approved regional facilities rather than within the project site. The project would continue to convey runoff through the existing drainage system without substantially changing runoff patterns.

Therefore, the project would not substantially alter the existing drainage pattern of the site or Laguna Creek. Therefore, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, result in on- or off-site flooding, or provide substantial additional sources of polluted runoff. In addition, the project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Therefore, this impact would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to drainage patterns.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is located approximately nine miles east of the San Francsico Bay and is not proximate to ocean or large bodies of water that could expose the project site to tsunami or seiche hazards. The parcel boundary includes a portion of Laguna Creek, which is designated as a floodway in Zone AE (Federal Emergency Management Agency 2026). No development would occur within the floodway. The proposed project would include an approximately three-foot-high retaining wall at the eastern edge of Laguna Creek that would reduce the potential for inundation of the project site compared to current developed conditions. Accordingly, the proposed project would have a less than significant impact related to release of pollutants due to inundation. This impact would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to the release of pollutants due to project inundation.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is not within the jurisdiction of an approved sustainable groundwater management plan and therefore the proposed project would not interfere with a sustainable groundwater management plan.

The San Francisco Regional Water Quality Control Plan is the applicable water quality control plan for the project site. The plan identifies beneficial uses for Moraga Creek, which Laguna Creek ultimately flows into, including freshwater habitat and recreational uses (San Francisco RWQCB 2010). As described in checklist item 10.a, construction contractors would be required to comply with the Construction Stormwater General Permit which requires preparation and implementation of a SWPPP that specifies the storm water monitoring and construction BMPs required to be implemented to minimize water quality degradation. In addition, construction activities would occur in compliance with MMC Section 14.04 which requires incorporates a stormwater management approach based on participation in a regional compliance program consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook, which sets guidelines for design of stormwater infrastructure for development in Contra Costa County, including Moraga. Accordingly, the proposed project would not substantially increase the risk of degrading water quality in Laguna Creek or interfere with the beneficial uses of the creek identified in the San Francisco Regional Water Quality Control Plan. This impact would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site and would not result in new significant off-site or cumulative impacts related to applicable water quality control plans or groundwater management plans.

Conclusion

The proposed project would have less than significant impacts on hydrology and water quality, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant

effects related to hydrology and water quality. No new mitigation measures are warranted. This issue **does not require further study**.

11 Land Use and Planning

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Physically divide an established community?	□	■	□	■	□
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?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.10, *Land Use and Planning*, of the CAPI EIR, development facilitated by the Housing Element would not divide a community; rather, it would allow higher-density residential development on underdeveloped or underutilized properties. Therefore, impacts related to dividing of an established community would be less than significant.

The Housing Element was determined to be consistent with the goals and strategies of Plan Bay Area 2050, as well as policies in the 2002 General Plan and the 2017 Clean Air Plan. The CAPI EIR concluded impacts related to conflicts with land use policies, plans, programs, and ordinances intended to minimize environmental impacts would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 project would be located on a previously developed project site. It would not involve construction of a physical feature (e.g., a highway or rail line) or removal of an existing means of access (e.g., a road or bridge linking different portions of a community) that would physically divide an established community. No impact would occur and this impact would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to the division of an established community.

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 project site is zoned Mixed Office-Residential in the MCSP, which allows for higher density development between 12 and 24 dwelling units per acre. The project would be within the allowed residential density of the Mixed-Office Residential zoning.

Applicable land use plans include ABAG's Plan Bay Area 2050+, the Air District's 2017 Clean Air Plan, and the Town's General Plan 2040. Proposed project consistency with the 2017 Clean Air Plan is discussed in checklist item 3.a in Section 3, *Air Quality*. Proposed project consistency with ABAG's Plan Bay Area 2050+ and the Town's General Plan 2040 is discussed herein.

Proposed Project Consistency with Plan Bay Area 2050+

The project is a residential development that would be consistent with the strategies of Plan Bay Area 2050+ related to infill housing production and sustainable community development. A discussion of project consistency with selected applicable Plan Bay Area 2050+ policies is included in Table 5. As shown in Table 5, the project would be consistent with applicable Plan Bay Area 2050+ strategies.

Table 5 Plan Bay Area 2050+ Policy Consistency Analysis

Strategies	Consistency Determination
Strategy H4. Build Adequate Affordable Housing to Ensure Homes for All **Strategy H5.** Integrate Affordable Housing into All Major Housing Projects	**Consistent.** The proposed project would redevelop an underutilized office site with 49 residential units, including five moderate-income affordable ownership units.
Strategy H6. Transform Aging Malls and Office Parks into Neighborhoods	**Consistent**. The project would replace four single-story office buildings residential development, to provide additional housing supply in an developed area.
Strategy EN9. Expand Transportation Demand Management Initiatives	**Consistent.** By locating new housing proximate to existing commercial services, recreational trails, and schools, the proposed project would support growth patterns that reduce reliance on vehicle travel and associated GHG emissions.
Strategy T9. Build a Complete Streets Network	**Consistent.** The proposed project provides pedestrian connections to School Street, Country Club Drive, and the Lafayette-Moraga Regional Trail, and provides on-site walkways and bicycle parking.

Source: ABAG 2026

Town of Moraga General Plan 2040

The General Plan 2040 Land Use Element identifies policies for the location and intensity of growth in the town. The proposed project is a residential development that would be located in the area designated as MC in General Plan 2040. The General Plan identifies densities of 12 to 24 dwelling units per acre for mixed-use zones in Moraga Center, such as the project site. The proposed project would result in a density of 16.61 dwelling units per acre, consistent with the MC land use designation. The project site is also identified in the Town's 2023-2031 Housing Element of the General Plan as Housing Opportunity Site F-3 and would be developed consistent with that designation. A discussion of project consistency with selected applicable General Plan 2040 policies is included in Table 6. As shown in Table 6, the proposed project would be consistent with General Plan 2040.

Table 6 General Plan 2040 Policy Consistency Analysis

Policy	Consistency Determination
Policy LU-1.1: Directing Growth. Strategically direct the town's future growth to the Moraga Center and Rheem Park commercial districts. Support the development of these areas as vibrant, walkable mixed-use centers, with housing and commercial development on infill sites.	**Consistent.** The proposed project is a residential development located in the Moraga Center.

Policy	Consistency Determination
Policy LU-1.9: Clustering. Provide for the permanent preservation of open space and avoidance of sensitive visual and natural resource areas by allowing clustered housing. Clustered housing should be sensitively sited and should be designed to minimize visual impacts to scenic corridors and existing residential areas.	**Consistent.** The proposed project would be constructed on an office site that has been previously developed. The proposed project would not remove open space, and would have limited effects on scenic corridors and visual resources. The project would establish a 30-foot creek setback where no buildings would be constructed to avoid impacts to Laguna Creek.
Policy LU-4.4: Residential Densities in Moraga Center and Rheem Park. Allow base densities of up to 24 units per acre in Moraga Center and Rheem Park, and 30 units per acre for senior housing in these two areas. These densities exclude bonuses that may be awarded for projects including affordable units, as required by state law. All future mixed-use and residential projects in the Moraga Center and Rheem Park areas shall meet objective design standards to be adopted as part of the MMC. On all sites where the maximum density of 24 units per acre is permitted, a minimum density of 12 units per acre also shall apply.	**Consistent.** The proposed project would be located in Moraga Center and have a residential density of 16.61 dwelling units per acre, consistent with the Moraga Center land use designation.
Policy CD-1.3: Location of New Development. To the extent possible, concentrate new development in areas that are already urbanized and have less environmental and visual sensitivity, including: a. The Moraga Center and Rheem Park commercial areas (e.g., "priority development areas") b. Infill parcels in areas of existing development c. Areas of flat or gently sloping topography outside of flood plain or natural drainage areas.	**Consistent.** The proposed project would be located in a previously developed, relatively level property in Moraga Center.
Policy CD-2.3: Undergrounding of Utilities. Whenever and wherever possible, convert overhead utility lines to underground. A priority should be placed on undergrounding projects in commercial/mixed-use areas. Require underground utilities in areas of new development.	**Consistent.** The proposed project would require new connections to existing utilities which would be installed underground.
Policy CD-4.3: Pedestrian Amenities. Design single family and multi-family developments to create high quality pedestrian environments, including pedestrian connections to adjacent neighborhoods and the Town's path and trail system.	**Consistent.** The proposed project provides pedestrian connections to School Street, Country Club Drive, and the Lafayette-Moraga Regional Trail.
Policy H1.4: Infill Housing Opportunities. The Town shall continue working with property-owners in the Moraga Center and Rheem Park commercial districts to support and proactively encourage the development of housing on vacant and underutilized sites. This should include implementation of the Moraga Center Specific Plan as well as additional plans and programs to make residential and mixed-use development more viable in both the Moraga Center and Rheem Park areas.	**Consistent.** The proposed project is a residential development located in the Moraga Center that would be developed on an underutilized office site.

Source: Town of Moraga 2024

The project would be consistent with applicable land use plans, policies, and regulations. Therefore, impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to applicable land use plans.

Conclusion

The project would have less than significant impacts on land use and planning, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to land use and planning. No new mitigation measures are warranted. This issue **does not require further study**.

12 Mineral Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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?	□	□	■	■	□
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?	□	□	■	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.18.2, *Mineral Resources*, of CAPI EIR, the Town does not have significant mineral resources or active mining sites within its boundaries. Therefore, the Housing Element would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan or other land use plan. The CAPI EIR concluded that there would be no impacts on mineral resources.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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?*

As discussed in the CAPI EIR, the Town does not have significant mineral resources or active mining sites within its boundaries. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the residents of the state and the region, nor would it result in loss of a locally important mineral resource recovery site. There would be no impact and this impact would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to mineral resources.

Conclusion

The proposed project would have no impact on mineral resources, similar to the impact identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a

substantial increase in the severity of previously identified significant effects related to mineral resources. No new mitigation measures are warranted. This issue **does not require further study**.

13 Noise

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. 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?	□	□	□	■	■
b. Generation of excessive groundborne vibration or groundborne noise levels?	□	■	□	■	□
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, would the project expose people residing or working in the project area to excessive noise levels?	□	□	■	■	□

Analysis in Previous Environmental Documents

Section 4.11, *Noise*, of the CAPI EIR evaluated construction, operational, and vibration-related noise associated with Housing Element buildout. For the Housing Element, construction activities were found to temporarily increase noise levels at nearby sensitive receivers. Although the MMC limits construction hours, the CAPI EIR found that construction noise could still exceed applicable thresholds. Even with implementation of Mitigation Measure NOI-1 (requiring mufflers, equipment staging away from receivers, smart backup alarms, and temporary noise barriers), the EIR determined that construction noise associated with the Housing Element would remain significant and unavoidable.

During operation, new stationary noise sources associated with Housing Element development include heating, ventilation, and air conditioning (HVAC equipment). This equipment would comply with Town of Moraga noise limits through Implementation Program NOI-A that was a part of the General Plan Update:

> **Implementation Program NOI-A:** Development projects shall conduct site-specific noise analysis to ensure that stationary source (e.g., mechanical equipment) noise levels remain below the daytime limit of 60 A-weighted decibel (dBA) equivalent continuous sound level (L_{eq}) and nighttime limit of 50 dBA L_{eq} at residential uses and other sensitive receptor property lines. The nighttime limit shall only apply to sensitive receptors which are in use at night.

With compliance with Implementation Program NOI-A, impacts were determined to be less than significant.

Operational traffic-related noise increases were found to be significant along one roadway: Canyon Road south of Constance Place. As described in Section 17, Transportation, the EIR concluded that traffic noise increases would remain significant and unavoidable, even with implementation of VMT-reduction measures under TRA-1 (refer to Section 17, Transportation).

The CAPI EIR determined that construction vibration from pile driving or a vibratory roller could potentially affect nearby land uses through exceedance of vibration building damage thresholds. Implementation of Mitigation Measure NOI-2, which would implement a Vibration Control Plan if this equipment is used within certain distances of nearby buildings, would reduce this impact to a less than significant level.

Table 7 Applicable CAPI EIR Mitigation Measures: Noise

Mitigation Measure #	Mitigation Text
Impact NOI-1. Construction of individual projects facilitated by the Housing Element would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Implementation of Mitigation Measure NOI-1 would limit construction noise disturbance to the extent feasible; however, construction noise may still exceed noise standards and impacts would be significant and unavoidable.	
NOI-1	**Construction Noise Reduction Measures.** The Town shall include the following measures to minimize exposure to construction noise as standard conditions of approval: 1. Mufflers. During excavation and grading construction phases, construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards. 2. Stationary Equipment. Stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers. 3. Equipment Staging Areas. Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers. 4. Smart Back-Up Alarms. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, backup alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction. 5. Signage. For the duration of construction, the applicant or contractor shall post a sign in a construction zone that includes contact information for individuals who desire to file a noise complaint. 6. Temporary Noise Barriers. Where necessary to meet the FTA criterion of 80 dBA Leq(8 Hr) for daytime construction affecting residential uses, erect temporary noise barriers at a height of 12 feet minimum to block the line-of-sight between construction equipment and receptors. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. The Town shall confirm that these measures are implemented during construction by monitoring the project at least once per month.
Impact NOI-5. Development facilitated by the Housing Element could temporarily generate groundborne vibration during construction, potentially affecting nearby land uses. Construction vibration from pile drivers may disturb people or damage buildings. However, impacts would be less than significant with mitigation.	
NOI-2	**Vibration Control Plan.** Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures such as historical resources, 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); a vibratory roller within 25 feet of any structure; or a dozer or other heavy earthmoving equipment within 15 feet of any structure, the project applicant shall prepare a vibration analysis to assess and mitigate potential vibration impacts related to these activities. This vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower dozers shall be used. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded. Where vibration monitoring is determined to be necessary, a pre-construction baseline survey shall be conducted at buildings and structures within the screening distances by a licensed structural engineer. The condition of existing potentially affected properties shall be documented by photos

Mitigation Measure #	Mitigation Text
	and description of existing condition of building facades, noting existing cracks. A vibration monitoring and construction contingency plan shall be developed to identify where monitoring would be conducted, set up a vibration monitoring schedule, and define structure-specific vibration limits. Construction contingencies would be identified for when vibration levels approach the limits. If vibration levels approach limits, the contractor shall suspend construction and implement contingencies to either lower vibration levels or secure the affected structure. Where historic structures are involved, the engineer shall provide a shoring design or other methods to protect such buildings and structures from potential damage. At the conclusion of vibration causing activities, the qualified structural engineer hired by the applicant shall issue a follow-up letter describing damage, if any, to impacted buildings. The letter shall include recommendations for repair, as may be necessary, in conformance with the Secretary of the Interior Standards. Repairs shall be undertaken and completed by the contractor and monitored by a qualified structural engineer in conformance with all applicable codes including the California Historical Building Code (Part 8 of Title 24). A Statement of Compliance signed by the applicant and owner is required to be submitted to the Contra Costa County Building Department at plan check and prior to the issuance of any permit. The Vibration Control Plan, prepared as outlined above, shall be documented by a qualified structural engineer, and shall be provided to the Town upon request. A Preservation Director shall be designated, and this person's contact information shall be posted in a location near the project site that it is clearly visible to the nearby receptors most likely to be disturbed. The Director would manage complaints and concerns resulting from activities that cause vibrations. The severity of the vibration concern should be assessed by the Director, and if necessary, evaluated by a qualified noise and vibration control consultant.

Source: Town of Moraga 2022

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?*

Construction Impacts

Construction activity would result in temporary noise in the overall project site vicinity, exposing surrounding nearby sensitive receptors to increased noise levels. Construction noise associated with the proposed project would be generated by heavy-duty diesel construction equipment used for demolition, site preparation, grading, building construction, and paving activities. Each phase of construction consists of a specific equipment mix depending on the work to be carried out during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., demolition and grading) and would be lower during the later construction phases (i.e., paving). During construction, equipment undergoes varying load cycles and is operated intermittently to allow for non-equipment tasks such as measurement. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FTA 2018).

To determine if temporary noise barriers would be required under CAPI EIR Mitigation Measure NOI-1, construction noise that would result from the proposed project was estimated using the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receptors near the project site based on a typical construction scenario involving three pieces of heavy equipment operation simultaneously: a dozer, backhoe, and concrete saw. At a reference distance of 50 feet, these pieces of equipment generate noise levels of 78, 74, and 83 dBA, respectively. To

calculate construction noise levels, RCNM uses these reference values, sums the noise levels together, and calculates attenuation from distance at a rate of 6 dBA per doubling of distance.

This analysis assumes that construction equipment may average 50 feet from the school to the southwest (the Saklan School) during a typical construction day. At this distance with no temporary noise barriers, construction noise levels would be 84 dBA L_{eq} (8-hour). To comply with CAPI EIR Mitigation Measure NOI-1 and reduce construction noise below the FTA's construction noise limit of 80 dBA L_{eq} (8-hour), temporary noise barriers at least 12 feet high would be required via conditions of approval along the western boundary of the project site to block the line-of-sight between construction equipment and The Salkan School. Generally, any large structure blocking the line-of-sight between a noise source and receiver would provide at least a 5-dBA reduction in source noise levels at the receiver (FHWA 2011). Therefore, these noise barriers would reduce construction noise levels to at most 79 dBA L_{eq} (8-hour), and impacts would be less than significant to the Salkan School.

Assuming construction equipment would operate an average of 50 feet from the property line, the residences to the northwest, the residence to the north, and the preschool to the south (Tudorka Tots) would be located 150 feet, 130 feet, and 130 feet from construction activities, respectively. Construction noise levels would be 75 dBA L_{eq} (8-hour), 76 dBA L_{eq} (8-hour), and 76 dBA L_{eq} (8-hour) without temporary noise barriers at these receptors, respectively. Therefore, construction noise levels would not exceed FTA's construction noise limit of 80 dBA L_{eq} (8-hour), and no additional measures from CAPI EIR Mitigation Measure NOI-1 are needed for construction to the northwest, north, and east. Impacts would be less than significant with mitigation, which is reduced compared to the significant and unavoidable finding in the CAPI EIR. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to ambient noise levels during project construction.

Operational Impacts

Mechanical Equipment Noise Impacts

The primary on-site operational noise source from the project would be ground-mounted HVAC units for the residential buildings within the project site. In accordance with Implementation Program NOI-A, this analysis estimates HVAC unit noise levels at the nearest sensitive receptors. This analysis assumes the use of a typical 2-ton Carrier 24ANB7-3PD air conditioner that has a sound power level of 71 dBA, equivalent to a sound pressure level of 63 dBA L_{eq} at 3 feet. An HVAC unit was modeled at a distance of approximately 10 feet to The Salkan School property line, and 90 feet from the nearest residential property line to the east. Only the daytime noise standard was applied to noise impacts at the school as it does not operate regularly during nighttime hours.

HVAC noise levels would be 52 dBA L_{eq} at The Salkan School and 34 dBA L_{eq} at the nearest residence. This would not exceed the daytime limit of 60 dBA L_{eq} at the school and the nighttime limit of 50 dBA L_{eq} at the nearest residence. Therefore, HVAC noise levels would be less than significant. Similar to the CAPI EIR, impacts from mechanical equipment would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to mechanical equipment noise levels.

Traffic Noise Impacts

The proposed project would add new vehicle trips to nearby roadways. In the EIR analysis, operational traffic-related noise increases were found to be significant along one roadway: Canyon Road south of Constance Place. The CAPI EIR concluded that traffic noise increases would remain significant and unavoidable, even with implementation of VMT-reduction measures (e.g., encouraging non-vehicle transportation methods such as bike or scooter use and subsidizing transit passes) that would result in less vehicle trips and therefore lower traffic noise increases under CAPI EIR Mitigation Measure TRA-1.

The project is located several blocks from Canyon Road and would potentially contribute to the noise increases on this roadway even with implementation of CAPI EIR Mitigation Measure TRA-1. However, as the project would involve construction of seven fewer units than originally anticipated for the site, the project's contribution to the traffic noise increase compared to the CAPI EIR contribution would be less. The project would not result in impacts that would exacerbate generation of a substantial permanent increase in ambient noise levels from traffic noise in the vicinity of the project in excess of standards established in the local general plan or noise ordinance that are peculiar to the project or more severe than those analyzed in the CAPI EIR. The CAPI EIR determined such impacts to be significant and unavoidable, and the Town adopted a Statement of Overriding Considerations for those impacts. Accordingly, while it cannot be guaranteed that implementation of the project would not result in traffic noise increases, this impact remains within the scope of the CAPI EIR determination, and no new or substantially more severe impacts would occur. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to traffic noise.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

CAPI EIR Mitigation Measure NOI-2 provides distances for certain construction equipment in which a construction vibration plan would be necessary: for pile driving, within 135 feet of fragile structures such as historical resources, 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); for a vibratory roller, within 25 feet of any structure; and for a dozer or other heavy earthmoving equipment, within 15 feet of any structure. The nearest structure is a building at the Saklan School, which is located 10 feet from the property line. Therefore, for a Vibration Control Plan to be necessary, a pile driving would need to operate within 90 feet of the property line; a vibratory roller would need to operate within 15 feet of the property line; and a dozer would need to operate within 5 feet of the property line. The project would not use a pile driver or a vibratory roller within these distances; in addition, a dozer and similar heavy-duty equipment would not be operated within 5 feet of the property line due to equipment size and the vibration being emitted from the center of the equipment. No Vibration Control Plan is necessary, and similar to the CAPI EIR, construction vibration impacts would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to groundborne vibration.

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, would the project expose people residing or working in the project area to excessive noise levels?*

There are no airports within Moraga. The closest airports to the project site are Oakland San Francisco Bay Airport, approximately 8.6 miles to the southwest, and Buchanan Field Airport in Concord, approximately 11 miles to the northeast. Because of the distance from these airports, the project site is located well outside of airport noise contours. No substantial noise exposure from airport noise would occur. There would be no impact, similar to the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to airports.

Conclusion

With incorporation of temporary noise barriers from CAPI EIR Mitigation Measure NOI-1, the project would have less than significant impacts related to construction noise, which is less than the significant and unavoidable finding identified for construction noise in the CAPI EIR. The project would construct seven fewer units than analyzed in the CAPI EIR, and therefore would not result in traffic noise impacts that are peculiar to the project or more severe than those identified in the CAPI EIR. As disclosed in the CAPI EIR, traffic noise impacts remain significant and unavoidable, and the Town adopted a Statement of

Overriding Considerations for those impacts. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to noise or vibration. No new mitigation measures are warranted. This issue **does not require further study**.

14 Population and Housing

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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)?	□	■	□	■	□
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.12, *Population and Housing*, of the CAPI EIR, the Housing Element would accommodate an additional 5,067 new residents by 2040 and 1,770 new housing units in the Town. The population increase resulting from the Housing Element would exceed the Plan Bay Area 2040 population and housing forecasts, but would be consistent with the Town's RHNA. As stated in the CAPI EIR, the state is currently in an ongoing housing crisis due to an insufficient housing supply. The additional housing units that would be developed under the Housing Element would help address the existing and ongoing housing crisis and would increase the amount of available housing to meet the Town's housing needs. Accordingly, impacts related to substantial unplanned population growth would be less than significant.

The CAPI EIR states that no residential developments were identified that could displace residents, and if displacement were to occur, new residential units would be constructed to more than replace existing displaced residences. Accordingly, impacts related to substantial displacement would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The project would introduce 49 new residential units to the Town. The California Department of Finance estimated an average of 2.6 people occupy each household in Moraga (California Department of Finance 2026). Assuming each new residential unit would house an average of 2.6 residents, and all residents would relocate to the Town, the project would result in a population increase of approximately 127 residents. The estimated population growth of 127 new residents would not be substantial unplanned

growth in the context of existing and forecasted population in Moraga. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Plan Bay Area 2050 is the most recent regional long-range plan and regional growth forecast for the Bay Area (ABAG 2021). Although it does not include projections by city, it does include housing projections for Central Contra Costa County which includes Moraga, Orinda, and parts of Walnut Creek and Lafayette. The Plan Bay Area 2050 population estimates project 28,000 new housing units in Central Contra Costa County by 2050 (ABAG 2021). The 49 new residential units and subsequent population growth would be well within ABAG projections. In addition, the proposed project would not include infrastructure improvements that would extend roadways or infrastructure into areas that do not currently support residential or other urban uses. Therefore, the proposed project would neither directly nor indirectly increase population growth in Moraga beyond that planned for the Town, and this impact would be less than significant. This impact would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to population growth.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The project would not result in the removal of existing residential units. Construction and development of the site would not displace people or residences, and this impact would be less than significant. This impact would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to displaced housing.

Conclusion

The project would have less than significant impacts on population and housing, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to population and housing. No new mitigation measures are warranted. This issue **does not require further study**.

15 Public Services

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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 any of the public services:					
1 Fire protection?	☐	■	☐	■	☐
2 Police protection?	☐	■	☐	■	☐
3 Schools?	☐	■	☐	■	☐
4 Parks?	☐	■	☐	■	☐
5 Other public facilities?	☐	■	☐	■	☐

Analysis in Previous Environmental Documents

As discussed in Section 4.13, *Public Services and Recreation*, of the CAPI EIR, the Housing Element would result in an increased demand for fire and police protection services, school facilities, and parks and recreational facilities. However, compliance with Government Code 65995(B) and policies in the Town's General Plan would reduce impacts to a less than significant level.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection 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?

The CAPI EIR found that the Housing Element could increase demand for fire protection and emergency medical services such that additional staff, equipment or facilities would be needed to meet response time goals. The closest fire station to the project site is Fire Station 41, located at 1280 Moraga Way, approximately 0.3 miles northwest of the project site. Since the project site is within MOFD's existing service area and the proposed project is within the buildout (both location and density) assumed in the CAPI EIR, emergencies on the project site could be responded to within the current response time. The

proposed project would be required to comply with basic building designs and standards for residential buildings as mandated by the applicable fire code and ordinances for construction, emergency/fire access, water mains, fire flows, and hydrants. The project would be subject to review by the MOFD to ensure compliance with all applicable code regulations. With adherence to state and local regulations, impacts related to the potential for new construction or alteration of fire service facilities to ensure the project would be served would be less than significant. Therefore, similar to what was analyzed in the CAPI EIR, the proposed project would not require the expansion or construction of new fire protection facilities, and this impact would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to fire protection facilities.

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The closest police station to the project site is located at 329 Rheem Boulevard #1, approximately 2.5 miles north of the site. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. The project would be located in a developed area already served by existing MPD facilities. Therefore, the project would not create excessive demand for police services or introduce development to areas outside of normal service range that would necessitate new or substantially altered police protection facilities. Therefore, this impact would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to police protection facilities.

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The Town is served by the Acalanes Union High School District (AUHSD) and Moraga School District. The Town's General Plan policies G-3.1 through G-3.4 would ensure population growth and school capacity impacts are considered when reviewing and approving development proposals, and impact fees are applied to offset costs of facility expansion. The proposed project would be a housing project consistent with the buildout and population growth estimates for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR; therefore, the findings of the CAPI EIR in relation to school services would apply to the project. In addition, the project would be subject to state-mandated school impact fees under Government Code 65995 (b) that would be used by AUHSD and Moraga School District to maintain the desired school capacity and the maintenance and/or development of new school facilities. For these reasons, project impacts related to school facilities would be less than significant, and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to schools.

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Please refer to Section 16, *Recreation*.

a.5. 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 other public facilities?

The proposed project does not include and would not require new or physically altered governmental facilities. Population growth facilitated by the proposed residential units included in the project would generate additional demand for library and other public services, but this growth would be consistent with and accounted for in the Housing Element and the CAPI EIR. Impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to governmental facilities.

Conclusion

The project would have less than significant impacts on public services, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to public services. No new mitigation measures are warranted. This issue **does not require further study**.

16 Recreation

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.13, *Public Services and Recreation*, of the CAPI EIR, the Housing Element would result in increased population, which would reduce the Town's parkland ration and result in additional demand to existing parks and recreational facilities. However, the parkland ratio would remain well above the Town threshold and impacts were determined to be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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. Does 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 CAPI EIR determined that although development facilitated by the Housing Element would decrease the Town's parkland ratio from approximately 48.3 acres of parkland per 1,000 residents to 37.7 acres per 1,000 residents, the parkland ratio would remain well above the Town's threshold of three acres of parkland per 1,000 residents (Town of Moraga 2024). The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Although the project would contribute 127 additional residents to the Town's population, the project would be required to pay parkland in-lieu fees and/or dedicate land in accordance with MMC Chapter 8.140, as well as applicable park development impact fees pursuant to MMC Chapter 17.24, thereby contributing to the expansion and maintenance of the Town's parkland inventory commensurate with population growth.

The project proposes to adjust an easement for the Lafayette-Moraga Trail, a regional recreation trail managed by East Bay Regional Park District, to accurately reference the trail's location and alignment. The trail runs along the western perimeter of the subject property, with partial overlap of the project site

and continues around the northern boundary, where a public sidewalk is designated as part of the trail. The project would not involve physical alteration of the trail bordering the western side of the project site. On the north side of the site, an existing driveway entrance would be removed and replaced with new sidewalk, while a new driveway entrance would be constructed further to the west. This work would not alter the existing alignment of the trail and would only alter a portion of the trail with sidewalk and driveway paving materials and landscaping. As such, the project would not substantially increase demand for park or recreational facilities beyond that addressed through compliance with MMC Chapters 8.140 and 17.24, nor would it result in substantial physical deterioration of existing recreational resources or necessitate the construction of new facilities. In addition, construction of the proposed project would not involve off-site activities or construction that would directly affect these parks. Impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to recreation facilities.

Conclusion

The project would have less than significant impacts on recreation, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to recreation. No new mitigation measures are warranted. This issue **does not require further study**.

17 Transportation

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	□	■	□	■	□
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	□	■	□	■	□
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	□	■	□	■	□
d. Result in inadequate emergency access?	□	■	□	■	□

Analysis in Previous Environmental Documents

The Housing Element would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Housing Element would be consistent with applicable General Plan policies that emphasize safe and efficient circulation and emergency access (policies C1 and C1.11), encourage walking, bicycling, transit use, and reduced traffic trips (policies C4, C4.1, C4.2, C4.3, and C4.4), and support high-quality pedestrian environments and proximity of multi-family housing to services and transit (policies CD5.1 and CD5.4). Because development under the Housing Element would comply with Town guidelines, standards, and specifications, it would not conflict with adopted policies for transit, bicycle, or pedestrian facilities. As a result, impacts to transit, bicycle, and pedestrian facilities would be less than significant.

The CAPI EIR found that development consistent with the Housing Element would generate home-based VMT per resident that is greater than 85 percent of the Countywide average home-based VMT per resident, resulting in impacts that would be significant and unavoidable even with implementation of Mitigation Measure TRA-1.

Development under the Housing Element would not include hazardous geometric design features or incompatible uses, and circulation components and geometric design features for individual projects would be reviewed by the Town to ensure consistency with industry design standards and best practices consistent with the Town's zoning code and building design and inspection requirements. Therefore, this impact was determined to be less than significant.

As discussed in Section 4.14, *Transportation*, of the CAPI EIR, development under the Housing Element would not result in inadequate emergency access. The CAPI EIR determined that development under the Housing Element would be subject to General Plan Policy C1.11, which establishes a circulation system that maintains critical transportation facilities for emergency vehicle access and emergency evacuation needs. In addition, individual projects would be subject to review by the Town and responsible emergency service agencies, thereby ensuring that projects would be designed to meet all emergency access and

design standards. Based on the preceding, impacts related to emergency access were found to be less than significant.

Table 8 lists the mitigation measures from the CAPI EIR related to transportation.

Table 8 CAPI EIR Mitigation Measures: Transportation

Mitigation Measure #	Mitigation Text
Impact TRA-3. The Housing Element would generate home-based VMT per resident that is greater than 85 percent of the countywide average home-based VMT per resident. Impacts would be significant and unavoidable.	
TRA-1	**VMT Reduction Measures.** Individual housing project development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods applied in this EIR, with modifications if appropriate based on future changes the Town of Moraga practices and CCTA VMT analysis methodology guidelines. Projects which result in a significant impact shall include measures to reduce VMT. These shall include travel demand management measures and physical measures to reduce VMT, including but not limited to the measures below, which have been identified as potentially VMT reducing in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021). Potential VMT reduction estimates are included below, but detailed requirements, calculation steps, and limitations are described in the CAPCOA Handbook. In addition, application of one or more transportation demand measures (TDM) is generally expected to result in a net VMT reduction of 10 percent or less for development projects in suburban settings such as Moraga. • Unbundle parking costs (i.e., sell or lease parking separately from the housing unit). • Provide car-sharing, bike sharing, or scooter sharing programs. Effectiveness: 0.15-0.18 percent reduction in GHG from VMT for car share, 0.02-0.06 percent for bike share, and 0.07 percent for scooter share, per the CAPCOA Handbook The higher car share and bike share values are for electric car and bike share programs. Note that these effectiveness rates are based on available research and analysis prepared by CAPCOA. • Subsidize transit passes for residents of affordable housing. Effectiveness: up to 5.5 percent reduction in GHG from VMT per the CAPCOA Handbook.

Source: Town of Moraga 2022

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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

This analysis is based primarily on the *Traffic Impact Study for Development Project 1600 School Street, Moraga, California (*Traffic Impact Study) prepared by TJKM Transportation Consultants in August 2024 (TJKM 2024) and the *Updates to the Traffic Impact Study for Development Project 1600 School Street, Moraga, California Memorandum* (Traffic Impact Study Memorandum) prepared by Sandis in May 2026 (Sandis 2026). The Traffic Impact Study and update memo are included as Appendix C to this report.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impacts related to conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities are analyzed in this section.

Transit

Transit agencies serving the Town include the County Connection, which provides one fixed local route serving the Town (Route 6). The project site is located 0.1 miles southwest of the nearest Route 6 bus stop, located on Moraga Way. The proposed project would not interfere with the existing bus route and would not remove or relocate existing bus stops. According to the Traffic Impact Study, the project would not generate substantial increases in transit ridership, as any additional transit use resulting from the project would be accommodated by the existing bus and transit services (TJKM 2024, Sandis 2026). The proposed project also would not conflict with transit plans or goals of the Town. Therefore, impacts related to transit services would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to transit facilities.

Pedestrian and Bicycle Facilities

In the vicinity of the project site, there are multi-use trails, bicycle paths, and pedestrian walkways. As shown on Figure 2, the project site is bordered on the west by the Lafayette-Moraga Regional Trail, a popular walking, jogging, and biking trail. The project would add pedestrians and bicyclists to these facilities. However, based on forecasted trip generation in relation to existing conditions, the increase would not substantially change existing pedestrian or bicycle activity levels or require modifications to facility design.

As described in the Traffic Impact Study, the proposed project would add additional vehicle trips to the surrounding roadways. These trips would not introduce new hazards to pedestrians or bicyclists. As required by the Town through conditions of approval, the project would include intersection improvements at Country Club Drive and School Street to improve pedestrian safety by reducing crossing distances. Intersection improvements would include construction of a right-turn lane pocket, curb extension, median refuge, and new marked crosswalks. The project would also include construction of a Class I pedestrian-bicycle facility along Country Club Drive connecting to the Lafayette-Moraga Regional Trail. Pursuant to General Plan Policy T5.4 and T5.5, the proposed pedestrian and bicycle improvements would support connectivity through new and existing development to reduce walking distances and would support local and regional active transportation goals, including emergency response and evacuation planning.

Overall, the proposed project would not substantially impact existing facilities, and would not conflict with a program, plan, ordinance or policy regarding bicycle and pedestrian facilities. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Impacts related to bicycle and pedestrian facilities would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to pedestrian and bicycle facilities.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Section 15064.3(b) of the CEQA Guidelines requires evaluation of transportation impacts based on VMT. For land use projects, exceeding an applicable VMT threshold may indicate a significant impact. The CAPI EIR addressed potential impacts related to applicable VMT threshold exceedances from implementing the Planning Initiative as a whole, which determined that projects the meet the following screening criteria and do not have characteristics that would otherwise warrant a VMT analysis could be presumed to have a less than significant impact:

1. **CEQA Exemption.** The Planning Initiative is not otherwise exempt from CEQA, so this criterion does not apply.

2. **Small Projects.** While it is possible that certain housing developments built under the Planning Initiative would be 20 or fewer units, this screening test would need to be applied as a part of individual project review and does not apply to the Planning Initiative as a whole.
3. **Local-Serving Uses.** This screening criteria is intended to apply to commercial uses, and is not relevant to residential project types.
4. **Projects Located in Transit Priority Areas (TPAs).** There is no TPAs in the study area, so this criterion does not apply.
5. **Projects Located in Low VMT Areas.** Screening based on location within a low-VMT area would be based on the VMT maps prepared by CCTA at the traffic analysis zone (TAZ) level, using the Contra Costa Countywide Travel Demand Model results. Certain TAZs could meet the criteria of low-VMT generating characteristics, and housing projects within these TAZs could be presumed to have a less than significant impact with respect to VMT.

In accordance with the CAPI EIR, the proposed project was screened from a detailed VMT analysis in accordance with the Contra Costa Transportation Authority Technical Procedures (2022), which are identified in the General Plan under Program T-H (Traffic Studies) as the applicable methodology for assessing VMT. Specifically, the project qualifies for screening because it is located within a low VMT area. As described in the Traffic Impact Study Memorandum, the project site is situated within a transportation analysis zone characterized by existing VMT that is at least 15 percent below the countywide average, as shown on Figure 4.14-4 of the CAPI EIR. Projects in low VMT areas are presumed to result in less than significant transportation impacts under CEQA Guidelines Section 15064.3(b) because they are consistent with regional and local goals to reduce VMT (TJKM 2024, Sandis 2026). Operationally, the project represents approximately six percent of the total housing growth evaluated in the CAPI EIR and would result in fewer residences than assumed for the site in the CAPI EIR. Therefore, the project's incremental effect on traffic conditions and evacuation capacity would be minimal when considered in the context of full Housing Element buildout. Therefore, the project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to CEQA Guidelines section 15064.3 subdivision (b).

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 project would not include geometric design features or introduce incompatible uses that could substantially increase hazards. The proposed transportation improvements discussed under Checklist Item 17.a would be designed to enhance the safety of pedestrians and vehicles near the project site. Similar to the CAPI EIR, the project would result in a less than significant impact related to transportation hazards. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to design hazards.

d. Would the project result in inadequate emergency access?

In the vicinity of the project site, the Town maintains a roadway network that provides emergency access to the project site in accordance with industry design standards. Town-issued encroachment permits require limits on construction hours and days and approved traffic and pedestrian control plans, and traffic in both directions would be maintained or temporarily detoured as needed which would minimize disruptions. The project would adhere to all applicable General Plan policies related to the maintenance of emergency access and evacuation routes during construction and operation, including policy S3.14 which requires the maintenance of evacuation routes at all times. In addition, pursuant to General Plan Policy S3.7, the project was reviewed by MOFD to ensure the project would maintain ingress and egress

to facilitate evacuation and emergency response (Town of Moraga 2026). Because the project would adhere with current building, fire, and life-safety standards to ensure adequate emergency access during construction and operation, impacts related to emergency access would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to emergency access.

Conclusion

The project would have less than significant impacts on transportation, representing a reduction from the significant and unavoidable impacts identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to transportation. No new mitigation measures are warranted. This issue **does not require further study**.

18 Tribal Cultural Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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), or	□	□	□	■	■
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 Cod 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.	□	□	□	■	■

In accordance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, the Town notified the following 12 tribes on October 26, 2021 and invited them to participate in consultation for the CAPI EIR:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Guidiville Indian Rancheria
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- Indian Canyon Mutsun Band of Costanoan
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- North Valley Yokuts Tribe
- The Confederated Villages of Lisjan
- The Ohlone Indian Tribe
- Tule River Indian Tribe
- Wilton Rancheria
- Wuksache Indian Tribe/Eshom Valley Band

No tribes responded to request formal consultation.

Analysis in Previous Environmental Documents

As discussed in Section 4.15, *Tribal Cultural Resources*, of the CAPI EIR, ground-disturbing activities associated with development of the Housing Element could expose and adversely affect previously

unidentified subsurface archaeological resources that may qualify as tribal cultural resources. The 2002 General Plan has provisions that address historical resources and would apply to development facilitated by the Housing Element. However, the 2002 General Plan does not include goals or policies relevant to tribal cultural resources. Amendments to the 200 General Plan associated with the Housing Element Update are implemented under the CAPI EIR as Implementation Programs, which provide the framework for applying updated policies and regulatory actions to future development projects. These programs supplement the 2002 General Plan policies and include Implementation Programs TCR-A and TCR-B:

> **Implementation Program TCR-A: Suspension of Work Around Tribal Cultural Resources.** Suspend all earth-disturbing work within 60 feet of identified cultural resources of Native American origin. Retain a qualified cultural resource specialist and consult with an appropriate Native American representative to design and implement feasible mitigation.
>
> **Implementation Program TCR-B: Tribal Cultural Resource Treatment Plan.** Retain a qualified cultural resource specialist, in consultation with appropriate Native American representative, to design a tribal cultural resource treatment plan in the event an unanticipated archaeological resource that may be considered a tribal cultural resource is identified during construction

With required compliance with Implementation Programs TCR-A and TCR-B, the CAPI EIR found that impacts to tribal cultural resources would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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 tribal cultural resource as defined in Public Resources Code Section 21074 that is 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. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

The proposed project would include construction activities such as grading and excavation to a depth of approximately ten feet below ground, which could potentially lead to the unanticipated discovery of tribal cultural resources. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Off-site transportation improvements required by the Town would occur in previously graded or paved areas such as existing roadways and sidewalks and would not affect areas below or beyond previous disturbance. The proposed project would be required to comply with the Implementation Programs TCR-A and TCR-B described above. In addition, the project would adhere to the policies in the General Plan, including Policy CD-6.9 which requires coordination with representative of the Native American community to promote the conservation of historic sites and reduce impacts of the discovery of a TCR. With compliance with the Implementation Programs TCR-A and TCR-B, and adherence to General Plan policies, impacts related to tribal cultural resources would be less than significant and substantially mitigated by uniformly applicable development policies. Impacts would not be greater than those identified in the CAPI EIR. Therefore, consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to tribal cultural resources.

Conclusion

With incorporation of the Implementation Programs TCR-A and TCR-B described in this section, the project would have less than significant impacts on tribal cultural resources, less than those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to tribal cultural resources. No new mitigation measures are warranted. This issue **does not require further study**.

19 Utilities and Service Systems

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
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?	□	■	□	■	□
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	□	■	□	■	□
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?	□	■	□	■	□
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?	□	■	□	■	□
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	□	■	□	■	□

Analysis in Previous Environmental Documents

As discussed in Section 4.16, *Utilities and Service Systems*, of the CAPI EIR, the population increase associated with the Housing Element would exceed ABAG 2040 population projections by 5,035 people. Because the EBMUD uses ABAG population projections to determine its future service populations in the Urban Water Management Plan (UWMP), the Housing Element would also incrementally exceed the UWMP estimated 2040 service population by 0.3 percent. The CAPI EIR determined this increase is negligible (less than 1 percent) and could be accommodated through additional conserved and recycled water, but concluded that EBMUD would not have sufficient supplies during third dry year conditions, requiring implementation of the Water Shortage Contingency Plan to ensure reliability. Development facilitated by the Housing Element would be subject to green building and water conservation requirements, including the MWELO, and would include multi-family housing, which generally uses less water per capita than single-family housing; therefore, with EBMUD-required demand management during multi-year droughts, impacts related to water supply and water supply infrastructure would be less than significant.

As discussed in Section 4.16, *Utilities and Service Systems*, of the CAPI EIR, the Housing Element would generate approximately 185,850 gallons per day (gpd) of wastewater, which would constitute approximately 1 percent of the remaining capacity of the Central Contra Costa Sanitary District (Central

San) wastewater treatment plant. The increased wastewater generation would be within the remaining capacity of the Central San wastewater treatment plant. Development facilitated by the Housing Element would be required to comply with the 2002 General Plan Policy GM 1.5 which requires projects to have the capacity to transport and treat wastewater as indicated by Central San. As described in the CAPI EIR, if the Central San standards cannot be met, a project would be required to develop mitigation. With adherence to General Plan policies, impacts related to wastewater conveyance and the construction of new or expanded wastewater facilities were found to be less than significant.

As discussed in the CAPI EIR, development facilitated by the Housing Element would connect to existing natural gas, electrical, and telecommunications infrastructure to meet the needs of site residents and tenants. In addition, existing stormwater infrastructure and facilities would be adequate to accommodate the increased demand. Therefore, impacts related to natural gas, electrical, telecommunications, and stormwater infrastructure would be less than significant.

Last, the CAPI EIR found that the Housing Element would generate an estimated 7 cubic yards of solid waste per day or 2,665 cubic yards of solid waste per year, which would be 0.00004 percent of the total remaining capacity of 63.4 million cubic yards of the Keller Canyon Landfill. Based on the adequate remaining capacity of the Keller Canyon Landfill, impacts related to solid waste would be less than significant.

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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?*

The project would include utility connections to existing infrastructure in the vicinity of the site in accordance with requirements of the applicable utility providers for water, wastewater, stormwater drainage, power, and telecommunications services. The project site does not contain unique conditions or features that would result in project-specific impacts beyond those identified in the CAPI EIR. The proposed project would be a housing project consistent with the assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. MCE would provide electrical services via PG&E infrastructure, PG&E would provide natural gas services, EBMUD would provide domestic water supply, and Central San would collect and treat wastewater. Installation of utilities would be conducted in compliance with California Government Code Section 4216 et seq., which establishes requirements for safe excavation practices. These include marking the proposed work area, notifying utility operators, allowing time for utilities to respond and mark underground facilities, and promptly reporting any damage to existing utility lines. In addition, the project would be required to comply with applicable provisions of the MMC, including Title 8 (Planning and Zoning, which establishes requirements for the provision and undergrounding of utilities.

Water Supply

As discussed in the CAPI EIR, the Town is served by existing EBMUD infrastructure. Development facilitated by the Housing Element would require new water supply connections and associated infrastructure to deliver potable water. However, these upgrades would be constructed during individual project construction and generally within the disturbance area of the project or the rights-of-way of roadways. The proposed project is located on a developed site in a developed area with existing water connections and infrastructure. The project would require construction of additional new water conveyance facilities located within the street rights-of-way to convey water to the residential units. The new water pipes would connect to existing domestic water supply infrastructure. The CAPI EIR determined that although the Housing Element Update would incrementally exceed the UWMP estimated 2040 service population of 1,704,000 by approximately 5,035 people (0.3 percent), the increase would be negligible (less than 1 percent increase) and would be accounted for as the UWMP does not factor in anticipated levels of additional conserved and recycled water into its planning level of water demand (EBMUD 2020). Because the proposed project falls within the development assumptions analyzed in the CAPI EIR, would result in fewer residences than assumed for the site in the CAPI EIR, and does not introduce new population or housing growth beyond what was previously anticipated, it is not expected that EBMUD would require new or expanded water supply entitlements to serve the project.

In the 2020 UWMP, EBMUD updated its Drought Management Program Guidelines to incorporate new measures such as a staged system of drought rates, new ordinances and penalties, and a supersaver recognition program. With implementation of the updated Drought Management Program, the 2020 UWMP predicts that available supply would meet demand during normal years and both a one-year and two-year drought through the year 2050. However, the 2020 UWMP found that, in the event of a three-year drought under an extreme drought scenario, the utility's water supply would be insufficient to meet demand in future years and would require supplementation beyond that already identified (EBMUD 2021). Due to future potential water scarcity, future users of the project site (and all EBMUD customers) should plan for shortages and both voluntary and mandatory water use reductions in times of drought. Despite deficits projected for multi-year droughts, compliance with the water conservation regulations and policies would help to maintain sufficient supplies.

The project would be required to adhere to the California Code of Regulations concerning water-efficient landscapes (Division 2, Title 23, CCR, Chapter 2.7, Sections 490 through 495), which the Town adopted in 2022 as the MWELO in Chapter 8.178 of the MMC. The project would comply with MWELO by incorporating drought-tolerant landscaping and low-flow irrigation systems. The CAPI EIR acknowledged that increasing development would increase the demand on water supply resources; however, the Town requires water conservation measures and BMPs to reduce water use. Through the project's water-efficient measures described above, the Town's existing water entitlements would be sufficient to serve the project consistent with the CAPI EIR, and the construction of new water treatment facilities or the expansion of existing facilities would not be required. Water system impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to water supply.

Wastewater

The Town's sanitary sewer lines feed into the wastewater treatment plant operated by Central San, which provides the collection and treatment of wastewater from the Town. It has a designed capacity of 54 million gallons per day (mgd) and 240 mgd of wet weather flow. The treatment plant cleans an average of 34 mgd of wastewater (Central San 2022). The plant's permitted design capacity of 54 mgd was developed to accommodate buildout in Central San's service area and would be sufficient to treat buildout flows through 2040. The proposed project would include development of 49 residential units and is consistent with the buildout assumptions evaluated in the CAPI EIR. Therefore, the project's demand for wastewater services would fall within the scope of impacts already analyzed. Prior to building permit issuance, the project would undergo review by Central San to ensure that development would not

encroach on easements for sewer pipes. The project applicant would be responsible for the payment of standard sewer connection fees (Town of Moraga 2022). Wastewater system impacts would be less than significant and would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to wastewater systems.

Stormwater Runoff

As discussed in Section 10, *Hydrology and Water Quality*, the project site is currently developed and contains approximately 66,210 square feet of impervious surfaces. The project would introduce 10,135 square feet of new impervious surfaces to the project site. The project would adhere to General Plan Policy CON-2.2 which requires storm water retention for new developments, and with CalGreen and MMC Chapter 13.04 which require stormwater management during the construction of new developments. Stormwater on-site is collected through a network of field inlets and conveyed via 12-inch storm drain pipes and a 30-inch main line that also receives runoff from adjacent streets, ultimately discharging to Laguna Creek which runs along the northwest boundary of the site. A Stormwater Control Plan was prepared for the project in accordance with the requirements of the RWQCB (Carlson, Barbee, and Gibson, Inc. 2026). The project's stormwater management design would be constructed consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook, which sets guidelines for design of stormwater infrastructure for development in Contra Costa County. The project would direct stormwater flows to the existing drainage infrastructure and Laguna Creek and would incorporate drainage features that maintain effective onsite conveyance while meeting applicable stormwater treatment requirements through participation in the Contra Costa County Regional Alternative Compliance program, administered through a Joint Powers Authority, including the purchase of stormwater treatment credits at approved regional facilities. Therefore, the project would not require the construction of new or expanded stormwater drainage facilities and impacts would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to stormwater drainage facilities.

Gas/Electricity/Telecommunications

As the project is consistent with the CAPI EIR, and would result in fewer residences than assumed for the site in the CAPI EIR, the project would not result in substantial population or housing growth beyond that already anticipated under the CAPI EIR. Therefore, service by and consumption of these utilities would be within that considered in the CAPI EIR. New connections required to serve the project would be provided in accordance with the rules and regulations of MCE and PG&E and under the authority of CPUC. Because the project would be within the buildout assumptions in the CAPI EIR, existing natural gas, electrical, and telecommunications facilities would be adequate to serve the project, and impacts related to potential new natural gas, electrical, or telecommunications facilities would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to natural gas, electrical, or telecommunications facilities.

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 Town would provide solid waste services to the project site. The CAPI EIR determined that the Keller Canyon Landfill would have sufficient capacity to accommodate solid waste from the Housing Element. Based on a solid waste generation rate of 3.3 pounds per dwelling per day (CalRecycle 2019), the Housing Element would generate an estimated 5,841 pounds of solid waste per day. This would equate to

approximately 1,059 tons per year, 2,665 cubic yards per year, or 7 cubic yards per day[4]. Solid waste generated from development of the Housing Element would account for less than approximately 0.00004 percent of the remaining capacity of the Keller Canyon Landfill. As the project is generally consistent with the CAPI EIR, and would result in fewer residences than assumed for the site in the CAPI EIR, the solid waste generated by the project would be within that considered in the CAPI EIR. As a result, disposal of operational solid waste would not exceed the capacity of local solid waste disposal facilities. The project would comply with AB 939, which requires the Town to divert 50 percent of solid waste from landfills, and SB 1383, which requires the Town to reduce organic waste disposal by 75 percent by 2025. In addition, the project would comply with General Plan Policy CON-4.4, which encourages residents to participate in source reduction and recycling programs. Project construction would adhere to MMC Section 8.156, which would require recycling and diversion of at least 65 percent construction and demolition debris. As discussed above, local infrastructure would have the capacity to accommodate solid waste generated by project, and the project would comply with all applicable regulations. Therefore, the project would not result in greater impacts on landfill capacity or regulatory compliance related to solid waste than anticipated in the CAPI EIR, and impacts would be less than significant. Impacts would not be greater than those identified in the CAPI EIR. Consistent with CEQA Guidelines Section 15183(b), the project would not result in effects that are peculiar to the project or site, and would not result in new significant off-site or cumulative impacts related to solid waste.

Conclusion

The project would have less than significant impacts on utilities and service systems, similar to those identified in the CAPI EIR. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to utilities and service systems. No new mitigation measures are warranted. This issue **does not require further study**.

[4] Household trash is approximately 800 pounds per cubic yard (CalRecycle 2019).

20 Wildfire

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	□	□	□	■	■
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?	□	□	□	■	■
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?	□	□	□	■	■
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?	□	□	□	■	■

Analysis in Previous Environmental Documents

As discussed in Section 4.17, *Wildfire*, of the CAPI EIR, the Housing Element includes areas located in and near moderate, high, and very high FHSZs and would result in population growth that could increase traffic congestion, which could impair emergency response and evacuation routes in the Town and surrounding areas. As stated in the CAPI EIR, wildfire risks associated with cumulative development in the Town are a substantial concern to the community. Development would be subject to the updated Safety Element policies, including policies S-1 through S-10, S1.13, and S1.14, compliance with the County Emergency Operations Plan, and would adhere to Town road standards that establish emergency access routes and facilitate review by MOFD. In addition, Mitigation Measure WFR-1 would require a Wildfire Assessment Plan and Guidelines prior to approval of projects where public safety may be impacted. Although implementation of Mitigation Measure WFR-1 could reduce potential impairment of an adopted emergency evacuation plan, it is not possible to ensure that all development facilitated by the Housing Element would not substantially impair an adopted emergency response plan or emergency evacuation plan; therefore, impacts were found to be significant and unavoidable.

Development under the Housing Element would be served by existing electrical infrastructure, and would adhere to applicable provisions of the MMC, including Title 8 (Planning and Zoning), which requires that any new electrical lines are installed underground. Therefore, wildfire risks would not be exacerbated by the installation of additional electrical infrastructure.

By facilitating development, the Housing Element would increase residential occupancy in wildfire-prone areas, exposing new residents and structures to an elevated risk of loss, injury, or death from wildfires. Future development would be required to comply with the MOFD Fire Code, CBC Chapter 7A and CCR Title 24 requirements related to exterior wildfire exposure, CCR Title 14 standards established by the Board of Forestry for emergency access, fuel modification, setbacks, and water supply, and applicable Town review processes. In addition, proposed Safety Element policies S3.2 through S3.4, S3.7, S3.8, S3.13, S3.16, and S3.19 through S3.24 would maintain fire protection standards, require adequate fire and emergency access, preserve evacuation routes, and support ongoing wildfire mitigation strategies and coordination with MOFD such as fuel reduction and fire access easements. Implementation of Mitigation Measure WFR-2, addressing wildfire risk during construction, and Mitigation Measure WFR-3, addressing project landscaping, would reduce potential wildfire ignition and spread. However, while compliance with applicable fire codes, regulations, Safety Element policies, and mitigation would reduce wildfire risk, these measures cannot fully eliminate the potential for wildfires to damage structures or threaten occupants. Therefore, impacts related to exposure of people and structures to wildfire hazards would remain significant and unavoidable.

Table 9 lists the mitigation measures from the CAPI EIR related to wildfire.

Table 9 CAPI EIR Mitigation Measures: Wildfire

Mitigation Measure #	Mitigation Text
Impact WFR-1. Development facilitated by the Housing Element would be in and near a State Responsibility Area (SRA) or VERY HIGH FHSZs. Compliance with applicable state and local regulations relating to evacuation would reduce the extent to which the project would impair emergency response and evacuation. Implementation of Mitigation Measure WFR-1 would reduce impacts, however this impact would be significant and unavoidable.	
WFR-1	**Develop Wildfire Assessment Plan and Guidelines.** The Town shall require a Wildfire Assessment Plan and Guidelines prior to approval of projects where deemed necessary to protect public safety. The Plan and Guidelines shall be developed for the project site, approved by MOFD, and shall address but shall not be limited to the following: • Well-maintained, fire district approved landscape and vegetation management plan. • Adequate roadway and driveway widths, designed to accommodate two-way traffic and large firefighting apparatus. • Adequate water supply and water flow for firefighting efforts. • Vegetation modification zones surrounding the community. • Buildings are built to current Building Code standards, ignition-resistant eaves, ember resistant construction, defensible space, residential fire sprinklers, a Class A ignition-resistant roof, dual pane (one being tempered) glass windows, and chimneys with spark arrestors containing a minimum of 0.5-inch screen.
Impact WFR-3. Development facilitated by the Housing Element would expose project occupants and structures to wildfire risks for sites located in or near Very High FHSZs. Wildfire risk would be significant and unavoidable.	
WFR-2	**Construction Wildfire Risk Reduction.** The Town of Moraga shall require the following measures during project construction: 1. Construction activities with potential to ignite wildfires shall be prohibited during red-flag warnings issued by the National Weather Service for the site. Example activities include welding and grinding outside of enclosed buildings. 2. Portable pumps shall be available on-site during project construction. Portable pumps shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. 3. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance. At the Town's discretion, additional wildfire risk reduction requirements may be required during construction. The Town shall review and approve the project-specific methods to be employed prior to building permit approval.

Mitigation Measure #	Mitigation Text
WFR-3	**Project Design Wildfire Risk Reduction.** Project landscape plans shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species, especially non-native, invasive species.

Source: Town of Moraga 2022

The following describes applicable analysis in the CAPI EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in 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.

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 project site is located within a Local Responsibility Area, approximately 0.25 miles from SRA lands classified as Very High FHSZ (CAL FIRE 2026). The project would result in population growth consistent with the assumptions used in the analysis for the CAPI EIR, which found that population growth because of the Housing Element could result in adverse effects related to the implementation of emergency plans due to increased congestion along evacuation routes and other emergency response resources in the event of a wildfire. As with assumptions for development discussed in the CAPI EIR, the project would be accessed by existing roadways and would generally rely on Moraga Way and Moraga Road for potential evacuation. The project represents approximately six percent of the total housing growth analyzed under the CAPI EIR would result in fewer residences than assumed for the site in the CAPI EIR. Thus its associated traffic or evacuation impacts would be minimal in the context of the broader Housing Element. The broader traffic congestion impacts identified in the CAPI EIR are programmatic issues attributed to cumulative growth, and are not attributed to one specific project.

In accordance with Mitigation Measure WFR-1 of the CAPI EIR and with General Plan policies S1.9 and S3.7, the proposed project was reviewed by the MOFD and Contra Costa County Department of Conservation and Development as part of the technical review process. Based on the review, the project was determined to be below the thresholds outlined in the fire code for projects that would require a Wildfire Assessment Plan. As a result, MOFD determined that an additional Wildfire Assessment Plan (currently called a Fire Protection Plan) under CAPI EIR Mitigation Measure WFR-1 was not necessary (MOFD, 6/8/2026). In addition, the Town adopted policy S1.2, which incorporates the Contra Costa County Hazard Mitigation Plan and the Town of Moraga Annex into the proposed Safety Element, to ensure that emergency response and evacuation routes remain accessible throughout the Town. The project would be required to adhere to federal, state, regional and local requirements, including General Plan Policy 3.14, which requires the maintenance of evacuation routes at all times to reduce physical interference with evacuation or emergency response plans. Therefore, the project would not result in impacts related to impairment of an adopted emergency response or evacuation plan that are peculiar to the project or more severe than those analyzed in the CAPI EIR. The CAPI EIR determined such impacts to be significant and unavoidable, and the Town adopted a Statement of Overriding Considerations for those impacts. Accordingly, while it cannot be guaranteed that implementation of the project would not impair adopted emergency response or evacuation plans, this impact remains within the scope of the CAPI EIR determination, and no new or substantially more severe impacts related to emergency response or evacuation plans would occur.

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?*

As detailed under Checklist Item 20.a, the project site is located within a Local Responsibility Area, approximately 0.25 miles from SRA lands classified as Very High FHSZ (CAL FIRE 2026). The project site is developed within an built-out area served by existing infrastructure, including roads and utilities as further discussed in Section 19, *Utilities and Service Systems*. Primary access for the project would be via Country Club Drive and School Street. The project would be served by new underground connections to existing utilities in the project area and would not require the installation or maintenance of associated infrastructure within FHSZs that may exacerbate fire risk. Therefore, wildfire risk would not be exacerbated by the installation of additional electrical infrastructure.

As discussed in Section 7, *Geology and Soils*, the project site is not located within a landslide zone (California Geological Survey 2025). The project site and surrounding area are generally level and are not at high risk of downslope failure or landslides. Laguna creek runs adjacent along the northwestern boundary of the project site, which is designated as a floodway in Zone AE (Federal Emergency Management Agency 2026). As detailed in Section 10, *Hydrology and Water Quality,* the project would include a retaining wall at the eastern edge of Laguna Creek which would reduce the potential for inundation or flooding of the project site compared to the existing condition. Based on the nearly flat topography of the project site, surrounding and downstream area, the risk of downstream flooding would be negligible and because little soil would be exposed due to the developed conditions. The project site does not contain unique conditions or features that would result in project-specific impacts beyond those identified in the CAPI EIR. Risks to project occupants would be reduced through conformance with the 2022 California Fire Code, 2022 CBC, and California Health and Safety Code, which establishes provisions for fire safety related to construction, maintenance and design of building, and land uses. Therefore, the project would not exacerbate wildfire risks or expose people or structures to risk due to runoff, post-fire slope instability, or drainage changes.

The project was reviewed by MOFD pursuant to General Plan policies S1.9 and S3.7 ensure that design features would not exacerbate fire risk. The project would adhere to the MOFD Fire Code and Safety Element policies including S3.3, S3.8, S3.6, and S3.11 that would maintain MOFD fire protection standards and safety measures intended to minimize the threat of fire, including ignition-resistant construction, fire-resistant landscaping, fuel breaks in open spaces, fire access easements and maintaining evacuation routes. Project development would also be required to meet CBC requirements that would prevent loss of structures or life by reducing wildfire hazards risk, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure and CCR Title 14, which sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply. Compliance with existing regulatory requirements for implementation of fire protection measures (e.g., ignition-resistant construction materials and measures) would further reduce impacts associated with wildfire spread.

Although development of the project would not exacerbate existing environmental conditions, existing fire codes and regulations cannot fully prevent wildfires from damaging structures or occupants. The project would adhere to the required implementation of CAPI EIR Mitigation Measure WFR-2 to reduce the risk of wildfire during project construction and WFR-3, which includes landscaping considerations to reduce wildfire risk. Because the project is not within or adjacent to a designated Very High FHSZ, was reviewed by MOFD pursuant to General Plan policies S1.9 and S3.7, and would be compliant with fire

safety regulations, the specific contribution of this project to potentially adverse effects would be negligible and would remain within the scope of impacts analyzed in the CAPI EIR. As such, the project would not result in impacts that would exacerbate wildfire risk or expose project occupants due to new infrastructure or environmental conditions including slope, winds, flooding, or landslides that are peculiar to the project or more severe than those analyzed in the CAPI EIR. The CAPI EIR determined such impacts to be significant and unavoidable, and the Town adopted a Statement of Overriding Considerations for those impacts. Accordingly, while it cannot be guaranteed that implementation of the project would not expose residents to wildfire risk, this impact remains within the scope of the CAPI EIR determination, and no new or substantially more severe impacts related to wildfire risks would occur.

Conclusion

With incorporation of the CAPI EIR Mitigation Measures WFR-1, WFR-2, and WFR-3, and MOFD requirements, the project would not result in wildfire impacts that are peculiar to the project or more severe than those identified in the CAPI EIR. As disclosed in the CAPI EIR, wildfire impacts remain significant and unavoidable, and the Town adopted a Statement of Overriding Considerations for those impacts. Pursuant to CEQA Guidelines Section 15183(b), the project would not result in new significant effects that are peculiar to the project or site, new significant impacts not addressed in the prior EIR, or a substantial increase in the severity of previously identified significant effects related to wildfire. No new mitigation measures are warranted. This issue **does not require further study**.

21 CEQA Guidelines Section 15065 Findings

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Does the project:					
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	□	□	□	■	■
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	□	■	□	■	□
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	□	□	□	■	■

Project-Specific Impacts

a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Consistent with the findings of the CAPI EIR and as discussed in Section 4, *Biological Resources*, with incorporation of the CAPI EIR BIO-1 Mitigation Measure – Required CRLF Avoidance and Minimization, BIO-1, BIO-2, and BIO-3, the project would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife species population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources,* the project would not eliminate important examples of the major periods of California history or prehistory, including archaeological or paleontological resources. As such, the project would not result in impacts peculiar to the project beyond those identified in the CAPI EIR and subsequent environmental documents.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Required conformance with General Plan policies, conditions of approval, and CAPI EIR mitigation measures specified in this document would ensure that potential impacts are individually limited and not cumulatively considerable in the context of impacts associated with other pending and planned development projects. As part of the CAPI EIR, cumulative impacts associated with buildout of infill projects were analyzed. The project involves residential development on a site analyzed in the CAPI EIR and identified in the Town's 2023-2031 Housing Element of the General Plan as Housing Opportunity Site F-3; the site would be developed consistent with that designation. Allowable land uses near the project are not significantly different from those studied in the cumulative analysis of the CAPI EIR. The Housing Element is a document that establishes goals and policies for residential development and growth throughout the Town, through the year 2031. Thus, the impact analyses in the CAPI EIR effectively constitute cumulative analyses of the approved land uses in the planning boundaries. The project would not result in significant impacts peculiar to the project site, as indicated in sections 1 through 20 above. Nearby development would be required to be consistent with the local planning documents or mitigation would be required to address impacts that were not addressed in the CAPI EIR. Therefore, the project's consistency with the Housing Element and subsequent analysis above in sections 1 through 20 indicate that the project would not result in significant cumulative impacts that were not addressed in the CAPI EIR.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, impacts to human beings are associated with air quality, geology and soils, hazards and hazardous materials, noise, transportation safety, and wildfire. The analysis below evaluates whether the proposed project would result in substantial direct or indirect adverse effects on human beings, consistent with CEQA Guidelines Section 15065. The project is consistent with the development assumptions evaluated in the CAPI EIR and is slightly smaller in scale than the development assumed for the site in that analysis. The project site is also identified as Housing Opportunity Site F-3 in the Town's 2023–2031 Housing Element and would be developed in accordance with that designation. As such, the project represents development that was contemplated and analyzed at the program level. As discussed in the preceding sections, the project would not result in substantial adverse impacts related to air quality, geology and soils, hazards and hazardous materials, or transportation safety. Impacts in these areas would be less than significant with compliance with applicable regulations and implementation of mitigation measures identified in the CAPI EIR.

As described in Section 13, *Noise*, the project would contribute vehicle trips to nearby roadways. Cumulative traffic-related noise impacts were identified in the CAPI EIR as significant and unavoidable along certain roadway segments, including Canyon Road south of Constance Place. Although the project site is located several blocks from this roadway, it would contribute incrementally to these cumulative noise increases. Consistent with the CAPI EIR, even with implementation of CAPI EIR Mitigation Measure TRA-1, traffic noise impacts would remain significant and unavoidable.

As described in Section 20, *Wildfire,* the project site is located within a Local Responsibility Area and approximately 0.25 miles from State Responsibility Area lands classified as VHFHSZ (CAL FIRE 2026). The project would accommodate population growth consistent with the assumptions analyzed in the CAPI EIR. That analysis determined that buildout under the Housing Element could expose additional people and structures to wildfire hazards. Although compliance with CAPI EIR Mitigation Measures WFR-1, WFR-2, and WFR-3 would reduce wildfire risk, such risk cannot be fully mitigated. Therefore, wildfire-related impacts to human beings would remain significant and unavoidable, consistent with the findings of the CAPI EIR.

The project would not result in new or more severe substantial adverse effects on human beings beyond those identified in the CAPI EIR. Identified significant and unavoidable impacts related to traffic noise and wildfire risk are consistent with and within the scope of the CAPI EIR. Accordingly, the project would not result in substantial direct or indirect adverse effects on human beings beyond those previously disclosed.

Conclusion

The proposed project would be consistent with the buildout assumptions used in the analysis for the CAPI EIR, and would be slightly smaller in size than that assumed for the site in the CAPI EIR. Accordingly, based on the assessments presented in the environmental checklist, the project does not require additional environmental review as the impacts:

1. Are not peculiar to the project or the parcel on which the project would be located
2. Were analyzed as significant effects in a prior EIR on the zoning action, General Plan, and specific plan, with which the project is consistent where applicable
3. Are not potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the General Plan and specific plan; or
4. Are not previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The majority of impacts would be less than significant and were analyzed previously in the CAPI EIR. Additional impacts would be reduced or mitigated by the imposition of uniformly applied development policies or standards. Accordingly, implementation of the project complies with Section 15183 of the CEQA Guidelines and no further environmental review is required.

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Appendix A

Cultural Resources Assessment

Rincon Consultants, Inc.
66 Franklin Street, Suite 300
Oakland, California 94607
805-644-4455

April 16, 2026
Project No: 25-18395

Brian Horn, Principal Planner
Town of Moraga
329 Rheem Boulevard
Moraga, California 94556
Via email: b.horn@moraga.ca.us

Subject: Cultural Resources Assessment for the 1600-1660 School Street (School Street Towns) Project, 1600-1660 School Street, Moraga, California, 94556

Dear Mr. Horn:

This letter report presents the findings of a cultural resources assessment completed in support of the 1600 School Street Residential Project (hereafter, project) on APNs 257-190-050, 257-190-049, 257-190-051, and 257-190-052 in the Town of Moraga, Contra Costa County. The Town of Moraga retained Rincon Consultants, Inc. (Rincon) to support the project's compliance with the California Environmental Quality Act (CEQA) and considers the project's consistency with the Comprehensive Advanced Planning Initiative (CAPI) EIR findings pertaining to cultural resources (Moraga, Town of 2022). Projects with proposed development on parcels containing buildings that meet the threshold for potential historical resources and could be determined to qualify as historical resources pursuant CEQA require the preparation of a historical and archaeological resources survey pursuant to CAPI Implementation Program CR-A: Historical and Archaeological Survey. This letter report documents the methods and results of a cultural resources records search, archival and background research, Sacred Lands File search, field survey, geoarchaeological review, and National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and Town of Moraga Landmark eligibility evaluations. The intent of the study is to identify historical resources, as defined by CEQA Section 15064.5(a), within the project site.

Architectural Historian Josh Bevan, AICP, MSHP conducted archival research, pedestrian survey of the subject property, and was the primary author of this assessment. Cultural Resources Principal Steven Treffers, MHP, provided senior oversight and review of the built environment components of this assessment. Archaeologist Lucas Nichols, BA prepared the geoarchaeological review. Cultural Resources Director Justin Wisely, MA, Registered Professional Archaeologist (RPA), provided senior oversight for the archeological and geoarcheological review. Geographic Information Systems Analyst Vivian Phan prepared the figures found in this report. Mr. Bevan and Mr. Treffers meet the Secretary of the Interior's Professional Qualifications Standards (PQS) for history and architectural history (36 CFR, Part 61). Mr. Wisely meets the PQS for archeology and history (National Park Service [NPS] 1983).

Project Site and Description

The project site is comprised of four contiguous and functionally related parcels spanning approximately 2.95 acres, with each parcel containing a single one-story building. The property is known as Moraga Office Park and is located on the southwest corner of School Street and Country Club Drive in the Town of Moraga (Attachment 1, Figure 1). Specifically, the project encompasses portions of Township 01S, Range 02W, Section 19 on the *Oakland East* United States Geological Survey (USGS) 7.5-minute topographic quadrangles.

The project would involve demolition of the four existing buildings, landscaping, and surface parking areas on the project site and construction of 11 townhome residential buildings containing integrated

garages, on-site guest parking, and access from School Street and Country Club Drive. The majority of grading would involve excavation to a depth of 3 feet for building foundations, with a maximum excavation depth of 10 feet for joint trench utility excavations. The project also includes a minor adjustment to an easement related to the Lafayette-Moraga Trail, a regional recreation trail managed by East Bay Regional Park District, to accurately reference the trail's location and alignment. The trail runs along the western perimeter of the subject property, with partial overlap of the project site and continues around the northern boundary, where a public sidewalk is designated as part of the trail. The project would not involve physical alteration of the trail bordering the western side of the project site. On the north side of the site, an existing driveway entrance would be removed and replaced with new sidewalk, while a new driveway entrance would be constructed further to the west. This work would not alter the existing alignment of the trail, and would only alter a portion of the trail with sidewalk and driveway paving materials and landscaping. (Attachment 1, Figure 2).

Regulatory Setting

This project is subject to review under CEQA, which requires lead agencies to consider a project's potential impacts to the significance of historical resources, unique archaeological resources, tribal cultural resources, and human remains. The following paragraphs summarize CEQA guidelines as they pertain to cultural resources, as well as the statutes addressing human remains discoveries.

California Environmental Quality Act

California Public Resources Code (PRC) Section 21084.1 requires lead agencies to determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR, as are California Historical Landmarks 770 and above; both are therefore historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: 1) it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information, 2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines Section 15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a][b]).

The requirements for mitigation measures under CEQA are outlined in CEQA Guidelines Section 15126.4(a)(1). In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impact of the project. Generally, a project which is found to comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4[b][3]).

California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC Sections 5024.1 and Title 14 Section 4852. The CRHR is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (PRC 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (PRC 5024.1[b]). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation [OHP] 2011). Furthermore, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (OHP 2011). Generally, the OHP recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (OHP 1995: 2).

A property is eligible for listing in the CRHR if it meets one of more of the following criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: Is associated with the lives of persons important to our past.

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the County Coroner has determined if the remains are subject to the Coroner's authority. If the human remains are of Native American origin, the Coroner must notify the NAHC within 24 hours of this identification.

California Public Resources Code Section 5097.98

Section 5097.98 of the California PRC states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant [MLD]) that it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

Town of Moraga Historic Preservation Ordinance

Chapter 8.176 Historic Preservation Ordinance of the Town of Moraga's Municipal Code provides criteria for the designation of resources as historical landmarks. The criteria are listed under Chapter 8.176.030 as follows:

A. Criteria. In considering the designation of any area, location, site, place, building, structure, district, natural feature, monument, work of art or similar object or thing as a landmark, the town council shall apply the following criteria with respect to the proposed landmark. In order to designate a landmark, the town must find that the proposed landmark is over fifty (50) years of age (or less than fifty (50) years if it can demonstrated that sufficient time has passed to understand the historical significance of the resource) and that at least one of the following conditions apply:

1. Its character, interest or value is part of the development, heritage or cultural characteristics of the town, the state or the United States of America;
2. Its location is an area, place or site of a significant historic event;
3. It is identified with a person or persons who significantly contributed to the culture, history and development of the town;
4. It exemplifies the cultural, educational, economic, patriotic, social or historic heritage of the town;
5. It portrays the environment of a group of people in an era of history characterized by a distinctive architectural style;
6. It embodies distinguishing characteristics of an architectural type or specimen;
7. It is identified as the work of an architect or master builder whose individual work has influenced the development of the town;
8. It embodies elements of architectural design, detail, materials or craftsmanship which represent a significant architectural innovation;
9. It bears a relationship to other distinctive locations, areas, places and sites which are eligible for preservation according to a plan based on a historic, educational, patriotic, cultural or architectural motif; or

10. It has a unique location or singular physical characteristic representing an established and familiar visual feature of a neighborhood, or of the entire town. (Moraga, Town of 2015)

Methods

This section describes the methodology of the background and archival research, cultural resources records search, Sacred Lands File search, field survey, and CRHR and City Landmark evaluations conducted to identify historical resources with the potential to be impacted by the proposed project.

Background and Archival Research

Rincon completed background and archival research in support of this assessment in March 2026. A variety of primary and secondary source materials were consulted. Sources included, but were not limited to, historical maps, aerial photographs, and written histories of the area. The following sources were utilized to develop an understanding of the project site and its context:

- Contra Costa County Public Works Department property data accessed via public record request
- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder (UCSB)
- Historical United States Geological Survey (USGS) topographic maps accessed online, via USGS topoView
- Historical newspaper clippings obtained from Newspapers.com
- Various historical records via Ancestry.com

California Historical Resources Information System Records Search

Rincon requested a California Historical Resources Information System (CHRIS) records search through the Northwest Information Center (NWIC) housed at Sonoma State University. The NWIC is the official state repository for cultural resources records and studies for Contra Costa County. The purpose of the records search was to identify previously conducted cultural resources studies as well as previously recorded cultural resources within the project site and a 0.5-mile radius. Rincon also reviewed the National Register of Historic Places (NRHP), CRHR, California Historical Landmarks list, Built Environment Resources Directory (BERD) for Contra Costa County, and the Archaeological Determination of Eligibility list.

Sacred Lands File Search

Rincon contacted the Native American Heritage Commission (NAHC) on March 3, 2026 to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project site vicinity.

Field Survey

Rincon Architectural Historian Josh Bevan, AICP, MSHP conducted a combined built environment and archaeological survey of the project site on March 24, 2026. The built environment survey focused on existing structures and their associated features. Pursuant to OHP Guidelines (California OHP 1995: 2), properties within the project site that are over 45 years of age were evaluated for historical resources eligibility and recorded on California Department of Parks (DPR) 523 series forms.

The archaeological survey was conducted by Mr. Bevan under the direct supervision of Mr. Wisely, MA, RPA. A majority of the project site is developed with commercial structures and associated infrastructure and pavement, limiting ground surface visibility. The archaeological survey therefore focused on areas of exposed ground surface, including landscaped areas and planting beds. Mr. Bevan examined these areas for artifacts (e.g., flaked stone tools and debitage, ground stone tools, ceramics, and fire-affected rock), ecofacts (e.g., marine shell and bone), soil discoloration indicative of cultural middens, and features suggesting former structures (e.g., walls, postholes, and foundations) or historical debris (e.g., metal, glass, and ceramics). Ground disturbances such as burrows were also visually inspected. Site characteristics and survey conditions were documented using field notes and a digital camera. Copies of the survey notes and digital photographs are maintained by Rincon.

Findings

This section describes the findings of the background and archival research, cultural resources records search, SLF search, field survey, and historical resources evaluation conducted to identify historical resources within the project site.

California Historical Resources Information System Records Search

On March 20, 2026, Rincon received records search results (NWIC File No. 25-1335) from the NWIC (Attachment 2).

Previous Cultural Resources Studies

The records search identified 10 previous studies within a 0.5-mile radius of the project site. Two of these studies (S-000712 and S-015812) overlap the project site and are described in further detail below.

S-000712

Study S-000712, *An Archaeological Field Reconnaissance of the Proposed Moraga Office Park*, was prepared in 1977 by David Chavez (Chavez 1977). The study included background research and a reconnaissance survey of the entire property corresponding to the current project site, prior to construction of the existing office park. At the time of the survey, Mr. Chavez described the parcel as an open field, noting that a "small wood house [was] located in the northeast corner of the parcel." The survey was conducted under good visibility conditions using 2- to 3-meter transect intervals. No archaeological resources were identified as a result of the study, and no further work was recommended beyond standard protocols for unanticipated discoveries.

S-015812

Study S-015812, *Archival Research and Field Inspection of the Proposed Country Club Drive Bridge Replacement Project, Moraga, Contra Costa County, California*, was prepared in 1993 by Miley Holman of Holman & Associates (Holman 1993). The study was conducted for the replacement of the bridge immediately north of the project site, with the study area extending approximately 100 feet into the northern portion of the current project site. The study included background and archival research and a "visual inspection" of the project site, including both banks of the creek along the western edge of the project site. No archaeological resources were identified, and no further work was recommended beyond standard protocols for unanticipated discoveries.

Previously Recorded Cultural Resources

The records search identified one previously recorded cultural resource (P-07-000489) within a 0.5-mile radius of the project site, however, it is not located within or immediately adjacent to the project site. P-07-000489 consists of a historic-period railroad grade, and in some segments, associated track and ballast, located approximately 360 feet east of and entirely outside the project site. The resource can be identified as the Oakland, Antioch, and Eastern Railroad and is also known as the Sacramento Northern Railroad. Railroad service began in 1913 and extended approximately 85 miles between Oakland and Sacramento, carrying both passengers and freight. The resource was first recorded in 1994 and has been updated multiple times through 2024. A portion of the resource has been evaluated and listed on the National Register of Historic Places (NRHP) under Criterion A. In some segments, the historic alignment is overlain or incorporated into the trackway of the Bay Area Rapid Transit (BART) system (Melvin, Greenberg, Muller, JRP Historical Consulting LLC 2024).

Sacred Lands File Search

The NAHC responded to Rincon's request for an SLF search on March 10, 2026 and indicated results of the search were negative. See Attachment 3 for the NAHC response, including Tribal contacts list(s). No outreach was completed in support of this study.

Aerial Imagery and Historical Map Review

Rincon conducted a review of historical topographic maps and aerial imagery to characterize the development history of the project site and to assess the potential for subsurface archaeological deposits. Sources reviewed included historic-period aerial photographs accessed through Nationwide Environmental Title Research (NETR) Online, aerial imagery from the University of California, Santa Barbara Library FrameFinder, and United States Geological Survey (USGS) topographic maps accessed via the Historical Topographic Map Explorer.

Historical USGS topographic maps reviewed for the project included the *Concord, California* maps (1897, 1900, 1905, 1910, 1915, 1923, 1932, 1939, 1942) and *Oakland East, California* topographic maps (1949) (USGS 2026). Historical aerial imagery of the project was reviewed for the years 1940, 1946, 1958, 1968, 1980, 1987, 2005, 2012, 2024 (UCSB 1940; NETR Online 2026).

Topographic maps from 1891 through 1939 depict the project site as undeveloped, with an unnamed creek located immediately to the west. The surrounding area is depicted as largely undeveloped, with a road west on the creek and railroad tracks and a road to the east. Aerial imagery from 1940 and a topographic map from 1942 continue to depict the project site as undeveloped, with the creek in its current alignment. Two tree-lined roads are depicted: one crossing the creek to the north (east–west), and another extending along the eastern edge of the project site in a southwest–northeast orientation. Aerial imagery from 1946 depicts a structure in the northwestern portion of the project site, along with agricultural use and development within the general vicinity. Imagery from 1958 and 1968 depicts two additional structures in the northern-central and northeastern portion of the project site and increasing adjacent development. One of these nonextant structures was potentially the residence Chavez observed in 1977, as noted in Study S-000712, above. In aerial imagery from 1980, the earlier structures are no longer present in the northern portion of the project site and the current structures and project site layout is largely established within the project site.

Geoarchaeological Review

The following section identifies the subsurface sensitivity of the project site in order to assess the likelihood for the APE to contain subsurface/buried archaeological deposits and/or features. Sources

utilized as part of this assessment included Geologic maps accessed via USGS National Geologic Map Database, United States Department of Agriculture Web Soil Survey, and a Geotechnical report for the project site titled *Geotechnical Investigation Proposed Residential Building 1600 School Street, Moraga, California* (Rockridge Geotechnical 2024).

Geologic Map Review

According to published geologic mapping, the project site is underlain by Holocene-age surficial sediments consisting of alluvial gravel, sand and clay from alluvial fan deposits near foothills (Dibblee and Minch 2005). Given that these sediments were deposited during the Holocene epoch, a period spanning the entirety of human occupation of the region, and representing cumulative deposition associated with alluvial processes, they are of sufficient age and depositional context to support the potential burial and preservation of archaeological materials.

Soil Map Review

Soil mapping identifies one soil series, the Conejo Series, as mapped within the project site. The Conejo series is formed from alluvium comprised of igneous or sedimentary sources and is found on alluvial fans and stream terraces with slopes ranging from 0 to 9 percent. A standard profile includes a clayey loam Ap horizon (topsoil disturbed by cultivation) from the ground surface to a depth of 5 inches, an underlying clay loam A horizon (topsoil) from 5 to 30 inches, and loam and clay loam B horizon (subsoil) from 30 to 79 inches below ground surface. B Horizon soils generally predate human occupation of the region (USDA 2006).

As noted by Waters (1992), A horizons form on relatively stable landforms and represent the primary soil horizons in which archaeological materials are typically deposited. Ap horizons reflect agricultural disturbance and generally represent mixed or displaced archaeological contexts. Ab horizons (buried A horizons) have the greatest potential to contain intact subsurface archaeological deposits; however, no Ab horizons are mapped within the APE. Nevertheless, the alluvial origin of these soils indicates the potential for burial and preservation of archaeological deposits and materials

Geotechnical Report Review

A geotechnical investigation report was prepared for the project in February 2024, which documents the methods and results of three mechanical cone penetration tests and two hand-auger borings, placed throughout the project site (Rockridge Geotechnical 2024). The cone penetration tests extended to depths of approximately 50 feet, well below the level that has the potential to contain subsurface archaeological materials, and the hand-auger borings extending to a depth of 6.5 feet. The report indicates the project site is generally underlain by 5 to 8 feet of varying combinations of sand and clay alluvium that were deposited during past creek flooding events, prior to any development. Below depths of 5 to 8 feet soils consisted of stiff clay. No disturbed or artificial fill soils are specifically called out within the testing logs.

Discussion

The potential for precontact archaeological sites has been positively correlated with proximity to water resources and can vary depending on the size, accessibility, and perennial availability of water, as well as to Holocene-age depositional landforms (Meyer and Rosenthal 2007). The project site is located within the vicinity of Moraga Creek (also referred to as San Pablo Creek) and Laguna Creek, which meet at a confluence approximately 500 feet southwest of the project site. Laguna Creek, extends north-south along the western edge of the project site.

A landform's topography affects the sensitivity for subsurface archaeological deposits. Landforms with steep topography have less sensitivity than those with generally flat topography due to the erosional nature of slopes and their limited suitability for habitation or long-term use. In contrast, areas of generally flat topography represent depositional contexts and are conducive to habitation and longer-term use. Therefore, areas with slopes of 10 degrees or less, including the project site, have greater potential for buried resources.

The geologic map review identified Holocene-age alluvial fan deposits which represent a depositional environment capable of burying and preserving archaeological materials. Similarly, soil mapping and a geotechnical report indicate that the project site is underlain by alluvial soils. The soil mapping does not identify buried A (Ab) horizons within the project site; however, the alluvial context suggests that intact subsurface deposits are possible.

The results of the record search and background research did not identify any known archaeological resources within or immediately adjacent to the project site and the project site has been previously surveyed in two prior archaeological studies. A review of historic topographic maps and aerial imagery indicates that the project site remained undeveloped until sometime between 1942 and 1946 when a structure was first built, followed by several additional small ancillary structures until between 1977 and 1980, when the parcel was redeveloped into its current use. While the disturbances associated with these developments may not extend to substantial depths, they reduce the likelihood that intact archaeological deposits, both precontact and historic period, remain within the upper soil horizons. Accordingly, while the potential for deeply buried archaeological deposits may remain in portions of the site, prior development has likely reduced the integrity of near-surface deposits within previously disturbed areas.

Based on the absence of recorded resources, evidence of prior disturbance, and the results of background research, the project site is considered to have potential to contain intact subsurface, precontact archaeological deposits. Although deeply buried deposits within alluvial sediments cannot be entirely ruled out, the likelihood of encountering significant intact precontact archaeological resources during project implementation is moderate. The potential for encountering historic period archaeological resources is low, given that the earliest known structure to exist on the property was constructed after the implementation of municipal waste removal, which reduced the likelihood of encountering subsurface features such as privies and/or trash pits less likely.

Field Survey

The topography throughout the project site is generally level with evidence of substantial alterations to the natural topography, for past construction activities associated with building foundations, pavement, and landscaping. A majority of the ground surface within the project site are covered in buildings or pavement, limiting ground surface visibility to landscaped areas. In these landscaped areas, visibility was limited by annual grasses, ornamental shrubs, ivy, and wood chips resulting zero to very good (0 to 60 percent) ground surface visibility. Rodent burrow tailings were observed throughout the project site and afforded examination of subsurface soils. No archaeological resources were identified within the project site.

The field work resulted in the identification of four historic-age commercial-office buildings and related landscaping within the project site: 1600, 1620, 1640, and 1660 School Street, which collectively comprise the Moraga Office Park complex constructed in 1979-1980. In accordance with OHP guidelines, the buildings were recorded and evaluated for historical resources eligibility as a single property on DPR 523 Series Forms, which are included in Attachment 4 and provide architectural descriptions, photographs, historical context on the Town of Moraga, a property development history, and full historical resources evaluation.

Historical Resources Evaluation

As a result of background research and field survey for this study, Rincon recommends the Moraga Office Park complex ineligible for listing in the CRHR and as a Town of Moraga Landmark due to a lack of historical and architectural significance. The property is also recommended ineligible for the NRHR as the property is less than 50 years old and does not possess exceptional significance, as is required for such properties under NRHP Criterion Consideration G: Properties that Have Achieved Significance Within the Past Fifty Years (National Park Service 1995). Please refer to Attachment 4 for DPR 523 Series Forms for a full evaluation of the subject property.

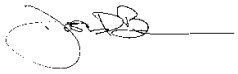
Conclusion

As detailed above, the one historic-age property within the project site, the Moraga Office Park complex at 1600, 1620, 1640, and 1660 School Street, is recommended ineligible for listing in the CRHR and as Town of Moraga Landmark as a result of this study. As such, it does not qualify as a historical resource and its demolition would not result in a significant adverse impact as defined by Section 15064.5 of the CEQA Guidelines.

Further, research completed for this study found that the segments of the Lafayette-Moraga Trail bordering the project site do not align with historically significant segments of former railroad alignments, namely the Oakland, Antioch, and Eastern Railroad/Sacramento Northern Railroad. As such, alteration of a driveway and public sidewalk designated as a segment of the trail along the northern boundary of the project site does not have the potential to impact a historical resource.

No archaeological resources are known to be located within or immediately adjacent (60 feet) to the project site, based on background research and the field survey. Therefore, Implementation Program CR-C: Construction Monitoring of the CAPI EIR does not apply. The project site has moderate sensitivity for subsurface precontact archaeological resources and low sensitivity for subsurface historic period archaeological resources. Ground disturbing activities associated with the proposed project have the potential to encounter unanticipated archaeological resources. Therefore, CAPI EIR Implementation Program CR-D: Unanticipated Discovery of Cultural Resources applies (Moraga, Town of 2022). With adherence to Implementation Program CR-D, impacts to archaeological resources would be mitigated to a less than significant level. Should you have any questions concerning this study, please do not hesitate to contact the undersigned at jbevan@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.



Josh Bevan AICP, MSHP
Architectural Historian

Steven Treffers, MHP
Cultural Resources Principal

Attachments

Attachment 1 Figures

Attachment 2 Northwest Information Center CHRIS Search Results

Attachment 3 Native American Heritage Commission Sacred Lands File Search Results

Attachment 4 DPR 523 Series Forms

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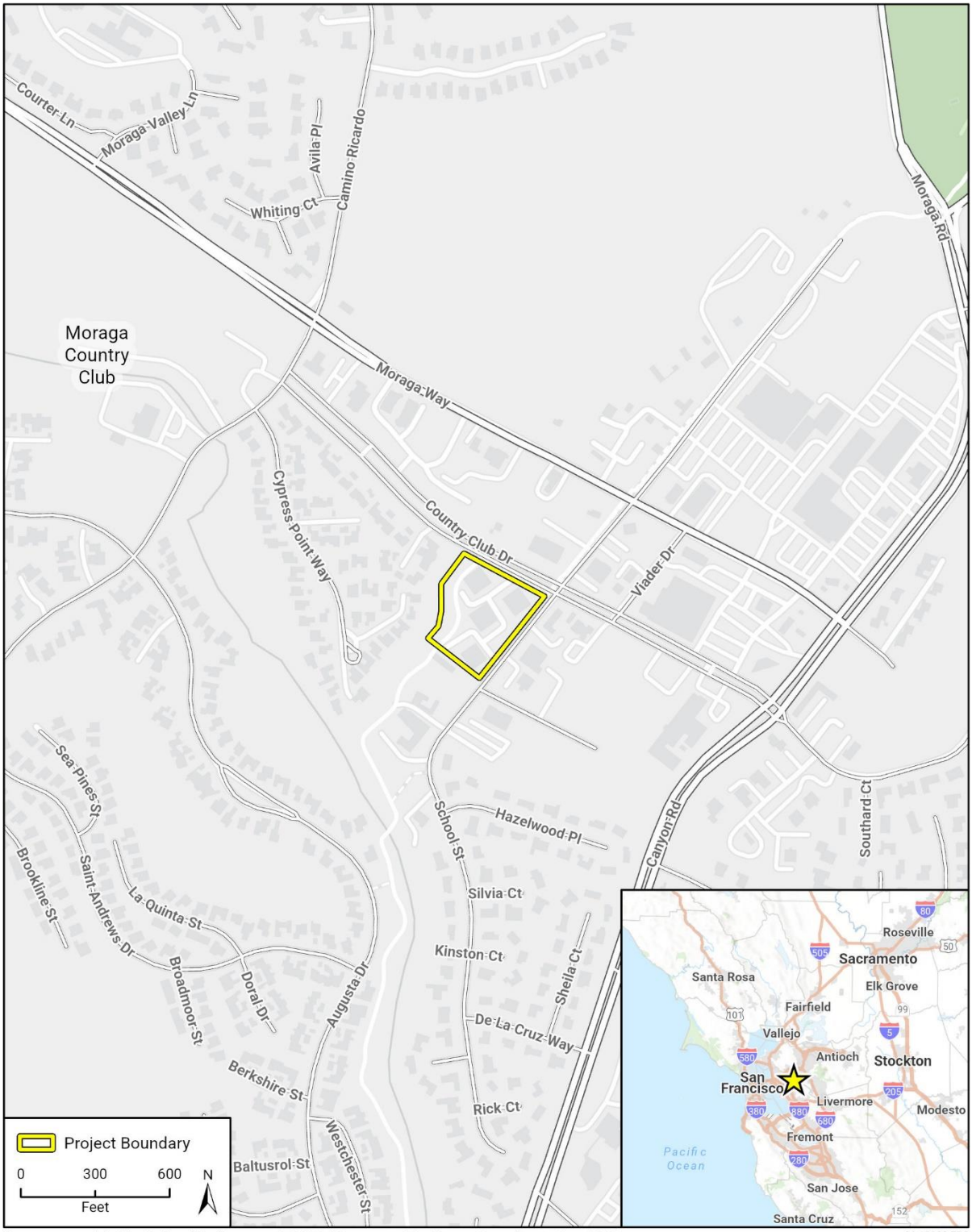
Attachment 1

Figures

Figure 1 Regional Location Map



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26-18833 EPS
EIRFig 1 Regional Location

Figure 2 Project Location Map

Imagery provided by Esri and its licensors © 2026. Map created by Rincon Consultants, Inc., 2026.

26-18833 CR
Fig 2 Project Location

Attachment 2

Northwest Information Center CHRIS Search Results

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

3/20/2026 NWIC File No.: 25-1335

Josh Bevan
Rincon Consultants Inc.
66 Franklin Street Suite 300
Oakland, CA 94607

Re: 1600 School St Moraga/ 26-18833

The Northwest Information Center received your record search request for the project area referenced above, located on the Oakland East USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a 0.5 mi. radius:

Resources within project area:	None listed
Resources within 0.5 mi. radius:	P-07-000489
Reports within project area:	S-712, 15812
Reports within 0.5 mi. radius:	S-1316, 7831, 10356, 10475, 10809, 17472, 22702, 48546

Resource Database Printout (list):		☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):		☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:		☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):		☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):		☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:		☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:		☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	[within]	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:		☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:		☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):		☐ enclosed	☐ not requested	☒ nothing listed
GLO and/or Rancho Plat Maps:		☐ enclosed	☒ not requested	☐ nothing listed

Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Notes:

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, please reference the record search number listed above. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Annette Neal

Researcher

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-07-000489	CA-CCO-000843H	Resource Name - Sacramento Northern Railway; Other - Oakland, Antioch & Eastern Railway; Other - SN-1, SN-2, SN-3; Voided - P-07-000490; Voided - P-07-000488	Structure	Historic	AH07; HP39	1994 (Hatoff, Voss, Waechter, Wee, Bente, Woodward-Clyde Consultants); 1994 (Hatoff, Voss, Waechter, Wee, Bente, Woodward-Clyde Consultants); 1994 (Hatoff, Voss, Waechter, Wee, Bente, Woodward-Clyde Consultants); 2010 (Kim Tremaine, John Lopez, Tremaine & Associates, Inc.); 2019 (Ashleigh Sims, ESA); 2019 (Matthew Wetherbee; Donald Craig, TRC Solutions); 2023 (Eileen Barrow, Tom Origer & Associates); 2024 (Steven Melvin; M. Greenberg; G. Muller, JRP Historical Consulting LLC)	S-017993, S-051534, S-056690, S-056864, S-057622, S-058324

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-000712		1977	David Chavez	An archaeological field reconnaissance of the proposed Moraga Office Park (letter report).		
S-001316		1978	Cindy Desgrandchamp	Archaeology Survey Report, Rescinded Route 04-CC-77, Excess Parcels 24524-07-01, 24524-08-01, 24524-16-01, 19575-01-01, 24524-10-01, 24524-17-01, 24524-18-01, 19560-03-01, 24524-11-01, 24524-13-01, In Moraga, Contra Costa County, Calif.	Caltrans District 04	
S-007831		1986	Robert Cartier	Addendum to the Cultural Resource Evaluation of a Parcel on Grade Canyon Road in the Town of Moraga, County of Contra Costa.	Archeological Resource Management	
S-010356	Agency Nbr - PN 17514E76	1988	Leigh Jordan	Archaeological Survey of the East Bay Municipal Utility District Property, Located along a 600-foot Section of Moraga Creek, Situated at the End of Westchester Drive, Moraga, Contra Costa County, California, PN 17514E76 (letter report)	Cultural Resources Facility, Sonoma State University	
S-010475		1988	Miley Paul Holman	Moraga Country Club Golf Course Expansion Plans, Moraga, Contra Costa County, California (letter report)	Holman & Associates	
S-010809		1989	Miley Paul Holman	Archaeological Field Inspection of the Proposed Moraga Recycling Center, Moraga, Contra Costa County, California (letter report)	Holman & Associates	
S-015812		1993	Miley Paul Holman	Archival Research and Field Inspection of the Proposed Country Club Drive Bridge Replacement Project, Moraga, Contra Costa County, California (letter report)	Holman & Associates	
S-017472		1979	Stephen A. Dietz	An archaeological reconnaissance of the Moraga Commons project site near Moraga, Contra Costa County, California (letter report)	Archaeological Consulting and Research Services	
S-022702	Submitter - Project J167	2000	Jeffrey Hall, Eduardo Serafin, and Christopher D. Dore	Cultural Resources Inventory for the Lamorinda Recycled Water Project, Contra Costa County, California. A study on the Briones Valley, Las Trampas Ridge, Oakland East, Vine Hill, and Walnut Creek U.S.G.S. 7.5' Topographic Quadrangles	Garcia and Associates	07-000048, 07-000110, 07-000117, 07-000118, 07-000119, 07-000186, 07-000956, 07-000963, 07-001007, 07-001010, 07-001011, 07-001015, 07-001016, 07-001017, 07-001018, 07-001021, 07-001023, 07-001044, 07-001048, 07-001049, 07-001279

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-048546	Caltrans - BRLS 5415 (011)	2016	John Kelley	Historic Property Survey Report; Canyon Road Bridge Replacement Over the West Branch of San Leandro Creek (also called Moraga Creek)	LSA Associates, Inc.	
S-048546a		2016	John Kelley	Archaeological Survey Report; Canyon Road Bridge Replacement Over the West Branch of San Leandro Creek (also called Moraga Creek)	LSA Associates, Inc	

Attachment 3

Native American Heritage Commission Sacred Lands File Search Results

Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

☐ **CEQA Tribal Consultation List (AB 52)** – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

☐ **General Plan (SB 18)** - *Per Government Code § 65352.3.*

Local Action Type:

___ **General Plan** ___ **General Plan Element** ___ **General Plan Amendment**

___ **Specific Plan** ___ **Specific Plan Amendment** ___ **Pre-planning Outreach Activity**

Required Information

Project Title: DRB-05-25 - 49 Unit Townhomes

Local Government/Lead Agency: Town of Moraga

Contact Person: Josh Bevan (Rincon Consultants, Inc.)

Street Address: 66 Franklin Street, Suite 300

City: Oakland **Zip:** 94607

Phone: 805-644-4455 **Fax:**

Email: jbevan@rinconconsultants.com

Specific Area Subject to Proposed Action

County: Contra Costa County **City/Community:** Town of Moraga

Project Description:

Project proposes a 49-unit townhouse condominium development on a 2.95-acre site at 1600, 1620, 1640, and 1660 School Street. Four one-story commercial buildings would be demolished to accommodate construction of 11 new buildings. The northern property line roughly follows Laguna Creek.

Additional Request

■ **Sacred Lands File Search** - *Required Information:*

USGS Quadrangle Name(s): Oakland East

Township: 01S **Range:** 02W **Section(s):** 19

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

March 10, 2026

Josh Bevan
Rincon Consultants Inc.

Via Email to: jbevan@rinconconsultants.com

Re: DRB-05-25-49 Unit Townhomes Project, Contra Costa County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at Mathew.lin@nahc.ca.gov.

Sincerely,

Mathew Lin

Mathew Lin, MPP
Cultural Resources Analyst

Attachment

Attachment 4

DPR 523 Series Forms

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

***Resource Name or #:** Moraga Office Park

P1. Other Identifier: None.

*P2. **Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Contra Costa **and *b. USGS 7.5' Quad** *Oakland East, Calif.* **Date** 1993 (1997 Edition) **T** 01S **R** 02W; **Sec** 19 M.D.B.M

c. Address 1600, 1620, 1640, and 1660 School Street City Town of Moraga Zip 94542

d. UTM: Zone 10S - N: 576334.60 mE, 4187817.49 mN; S: 576333.15 mE, 4187678.19 mN; E: 576410.16 mE, 4187776.75 mN W: 576301.24 mE, 4187752.10 m N

e. Other Locational Data: APNs (associated street address) – 257-190-050 (1600); 257-190-049 (1620); 257-190-051 (1640); 257-190-052 (1660)

***P3a. Description:** This resource is a four-building, commercial-office complex known as Moraga Office Park (P5a. Photograph 1). The property consists of four contiguous parcels (one building per parcel) totaling roughly 2.95 acres at the southwest corner of School Street and Country Club Way in the Town of Moraga's Moraga Center Specific Plan area. Laguna Creek generally aligns with the northwest property boundary, with School Street paralleling the southeast boundary and Country Club Way to the northeast. A trail easement for East Bay Regional Park's Lafayette-Moraga Trail passes the western perimeter of the complex and the public sidewalk bordering the north side of the property is also designated as part of the recreational trail. The southwest side of the property borders the Saklan School. Constructed in 1979-1980, the four (4) single-story buildings have collectively functioned as one office complex since their origination; thus, they are recorded and evaluated as a single resource. Each building has a similar pavilion-like form, concrete foundation, approximately square footprint, smooth stucco exterior, and a broad hip roof (Photograph 2 through Photograph 5, Page 4). The roofs have moderate overhangs with open eaves and exposed rafters. Each roof also has two chimneys located near the outer walls that project through the eave to just below roof peak height, a hipped lantern at the peak of roof. One building, 1620, features non-original composition shingle roofing, while the remaining three buildings feature original roof tiles that have a similarly appearance to shingles. (Continued on Page 4)

***P3b. Resource Attributes:** HP6. 1-3 Story Commercial Building (4); HP29. Landscape Architecture

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other

P5a. Photograph 1

P5b. Description of Photograph 1: Moraga Office Park, viewed from Country Club Drive, facing southwest. March 24, 2026.

P6. Date Constructed/Age and Source: 1979-1980 (Contra Costa County Assessor)
☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Outdo Country Club Drive and JBBADTN LLC
P.O. Box 477, Lafayette, CA 94549

***P8. Recorded by:**
Josh Bevan, AICP, MSHP
Rincon Consultants, Inc.
66 Franklin Street, Suite 300
Oakland, CA 94607

***P9. Date Recorded**: March 24, 2026

***P10. Survey Type:** Intensive

***P11. Report Citation**: Rincon Consultants 2026. Cultural Resources Assessment for the 1600-1660 School Street (School Street Towns) Project, 1600-1660 School Street, Moraga, California, 94556.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐Sketch Map ☐Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z
***Resource Name or #** Moraga Office Park

B1. Historic Name: Moraga Office Park
B2. Common Name: Moraga Office Park
B3. Original Use: Commercial-Office
B4. Present Use: Commercial-Office
***B5. Architectural Style:** Pavilion
***B6. Construction History:** The following construction history is compiled from review records on file with the Northwest Information Center at Sonoma State University, historical building permit records on file with Contra Costa County Conservation & Development Records Research Division and provided to Rincon through public record request in March 2026 (CCCCD 2026)

1979: A6950 – Application for construction permit filed by contractor Stephen E. Block Co. (CCCCD 2026)
1980: A2715 – Interior partition removal for new tenant in 1620 School Street building. (CCCCD 2026)
2017: PR17D04067 – Roofing tile replacement with composition roofing materials(CCCCD 2026)

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:** Yes

***B8. Related Features:** None.

B9a. Architect: Unknown b. Builder: The Stephen E. Block Co. (original owner)
***B10. Significance: Themes** Community Planning and Development, Architecture **Area:** Town of Moraga
Period of Significance 1979-1980 **Property Type** Commercial **Applicable Criteria** None.

The subject property is recommended ineligible for listing in the California Register of Historical Resources (CRHR) and as a Town of Moraga Landmark, due to a lack of historical and architectural significance. The buildings and associated site features within the subject property are also less than 50 years old. Therefore, in order to qualify for listing in the National Register of Historic Places (NRHP), the property would need to possess exceptional significance per NRHP Criterion Consideration G (National Park Service 1995). As detailed in the historical evaluation presented on Page 8, the property does not possess exceptional architectural or historical significance and is therefore ineligible for the NRHP.

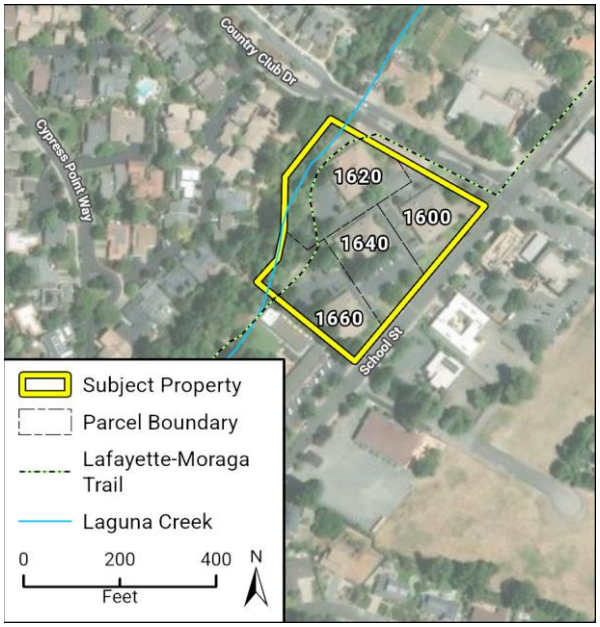
B11. Additional Resource Attributes: None.

***B12. References:** See Page 9

B13. Remarks: None.

***B14. Evaluator:** Josh Bevan, AICP, MSHP - Rincon Consultants, Inc.

***Date of Evaluation:** April 2, 2026



(This space reserved for official comments.)

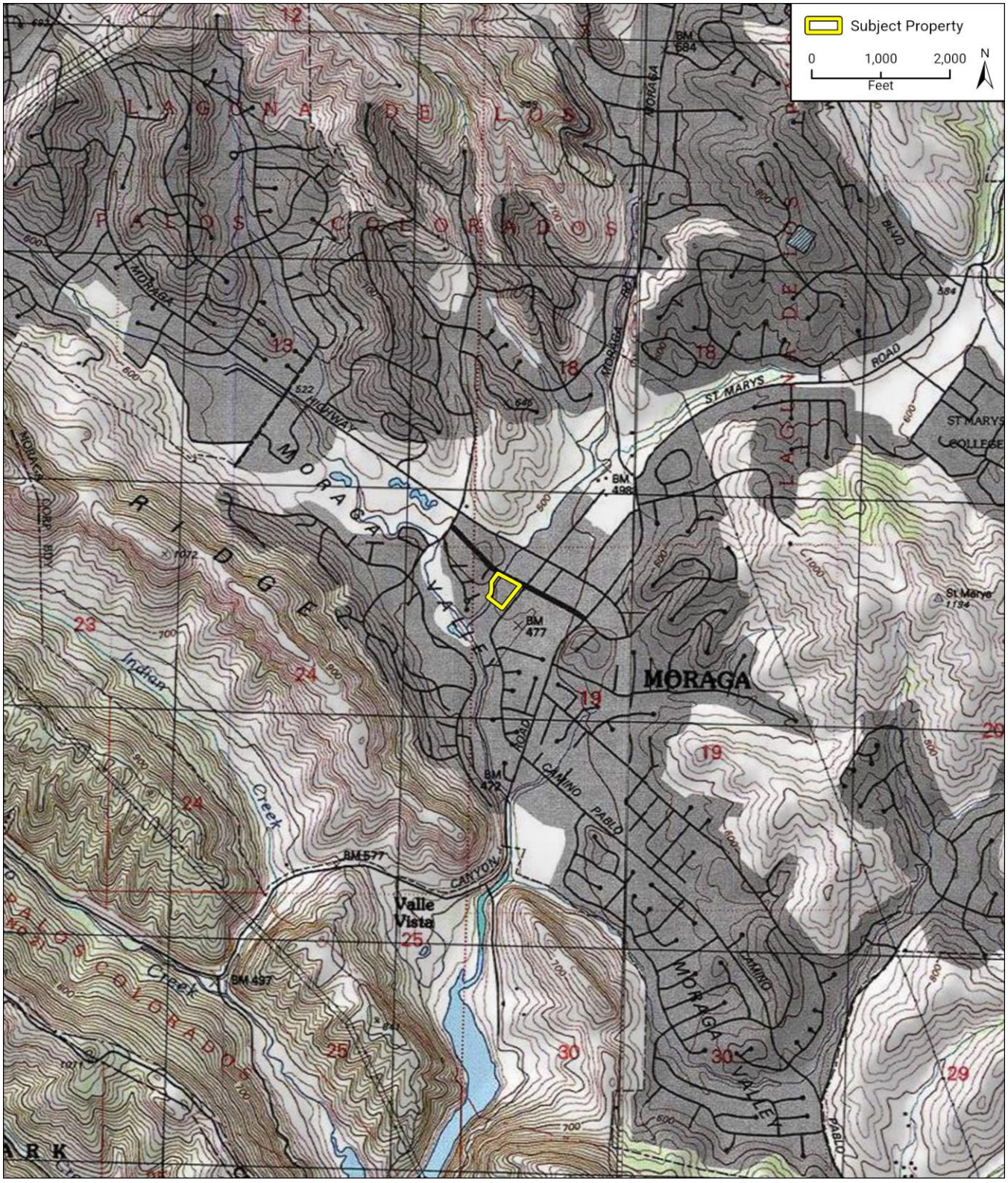
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 3 **of** 10 ***Resource Name or #** Moraga Office Park

***Map Name:** *Oakland East, Calif.* ***Scale:** 1:24,000 ***Date of map:** 1993 (1997 Edition)



***P3a. Description (Continued from Page 1):**

Photograph 2. 1600 School Street building, view facing northeast.

Photograph 3. 1620 School Street building, view facing west.

Photograph 4. 1640 School Street building, view facing west.

Photograph 5. 1660 School Street building, view facing southeast.

Entrances to each building are accessed by concrete walkways that project into the parking lots and feature exposed aggregate concrete and square tile, as well as integrated planting beds with a combination of small and larger trees, ground covering vegetation, ornamental plantings, and mulch (Photograph 6). The entry walkways also feature lumber or metal post lights in varying degrees of repair. The entrances are deeply recessed into the building footprint and feature wood doors with six narrow, vertically oriented lites flanked by sidelites with two vertical lites of similar dimension (Photograph 7). Additional exterior doors are located on secondary sides of each building and are utilitarian; either single-entry flush wood, vented doors, or doors with a single tall lite. Each building also features an exterior landings on one of the secondary exteriors, constructed of modern lumber and set behind a short board-formed concrete wall (Photograph 8). Windows consists of replacement aluminum-sash with faux/internal muntins set into rectangular openings with flat wood surrounds (Photograph 9) The roof monitors also appear to have aluminum-sash glazing. Additional landscaping consists of planting beds alongside the building exteriors, which include mulch, ornamental shrubs and both specimen and taller trees. Additional site features include planting beds that extend along the site's northern and eastern boundaries along Country Club Drive and School Street, with one driveway on each frontage interrupting the landscaping. The surface parking areas within the site are entirely paved with asphalt and area separated from the planting beds abutting the buildings by concrete curbs. Each of the buildings within the complex appears to be in good condition.

Photograph 6. Typical entrance pathway from parking lot to recessed entrance; 1600 School Street pictured.

Photograph 7. Typical recessed entrance door with sidelites; 1660 School Street pictured.

Photograph 8. Typical secondary exterior doors and window arrangement; 1640 School Street pictured.

Photograph 9. Detail view of typical replacement windows found throughout complex, 1640 School Street pictured.

Significance (Continued from Page 2):

History of Moraga

The Town of Moraga was named for Don Joaquín Moraga, a descendant of Spanish explorer Joseph Joaquín Moraga, who was associated with the De Anza expedition of 1776 and was the founder and first commandante of the Presidio of San Francisco (Friends of the Moraga Adobe 2026; California Office of Historic Preservation 2026). In 1835, Don Joaquín Moraga and his cousin Don Juan Bernal were granted the Rancho Laguna de los Palos Colorados by Mexican Governor Alvarado, in return for their military service (Architectural Resources Group [ARG] 2011). The grant spanned over 13,000 acres, including portions of the present-day Contra Costa County communities of Orinda, Moraga, Lafayette, Canyon, and Rheem Valley. Moraga and Bernal divided their ranch between themselves and in 1841 Moraga built an adobe that now bears his name. By 1878, lawyer and land speculator Horace Carpentier gained control of all but six parcels of the Rancho Laguna de los Palos Colorados. He also acquired the Moraga Adobe property that members of the Moraga family resided in until 1885. Between the 1890s and early 1900s, the

former rancho lands were leased out by owners James Williamson, Angus Grant, and Carpentier; the latter of whom still retained around 10,000 acres of the rancho (California Office of Historic Preservation 2026, ARG 2011).

In 1911, the announcement that the Oakland, Antioch and Eastern Railway (later consolidated under the Sacramento Northern Railroad) would be built through the Moraga Valley stirred interest in developing the still rural area and Carpentier sold around 10,000 acres to Charles A. Hooper (ARG 2011). The railway would connect passengers between San Francisco and Sacramento, passing through Oakland and Berkeley before connecting Moraga and other Contra Costa County communities to points northward (Cowell Historical Society 2022). In the same year, Hooper and James Irvine reached an agreement that brought Irvine into ownership. Irvine then acquired most of the available land in the former rancho and conveyed parcels through subdivision to his Moraga Company (ARG 2011). This momentum spurred plans for a town site in 1913, to be located near the train station and a local inn; however, the town center was never developed, with a lack of water access a primary factor. Willow Spring School was built on School Street in 1918, and replaced a smaller building; it remains in use as a church and is not located within or adjacent to the subject property (Skilton n.d.). Beyond these developments, the Moraga Company's ownership drastically shifted agricultural practices in the Moraga Valley from dairying to oat and hay cultivation, as well as crops such as fruit, nut, beans, and corn (ARG 2011). The extent of development in Moraga remained similar post-World War II and into the 1950s based upon review of historical topographic maps and aerial photographs (UCSB 1947, 1958). During this period, development within the site containing the subject property consisted of one non-extant building of unknown use at the north-northwest corner of the site. It also appears that a nonextant driveway flanked by trees or nonextant short branch off Moraga Creek entered the site of the subject property (UCSB 1947, 1958). Moraga's rural agricultural development began to give way to suburban development increasingly in the 1960s. By 1965, a subdivision to the southeast of present-day Moraga Center was built out with tract houses along present-day Larch Avenue and Camino Pablo. A new shopping center (now Moraga Shopping Center) was also under development along Canyon Road, immediately north of Moraga Way by the same year. Orchards persisted in the area (UCSB 1965). The Town of Moraga incorporated in 1974 (Skilton n.d.).

By 1980, a significant amount of residential development occurred throughout the area, with subdivisions arranged with curvilinear streets spreading across formerly undeveloped terrain, including much of the orchard land that remained in the area a decade earlier. Commercial development along School Street and continued growth of commercial uses along Canyon Road occurred during the same period, along with the development of Moraga Country Club in the mid-1970s. While periodic commercial and residential development has occurred since the early 1980s, Moraga still retains some apparently active orchards in the vicinity of Moraga Center (NETR 2026).

Property Development History

Building construction records for the subject property indicate it was developed by The Stephen E. Block Co., a Contra Costa County-based real estate development company headed by Stephen E. Block (1936-2021) (CCCD 2026). A hearing regarding potential development of "four to six residential style office buildings for professional and business uses" occurred in 1977 (*Contra Costa Times* 1977). As of 1977, the property consisted of "an approximately 300 foot x 350 foot parcel located at the intersection of Country Club Drive and School Street […] bound on the north by Country Club Drive; on the east by School Street; on the south by the Moraga Country Day School grounds; and on the west by an existing creek bed which has been channeled […with] an open field partially covered by dry grasses and thistles [and] a small wood house is located in the northeast corner of the parcel," as described in an archeological survey report prepared in advance of the proposed project (Chavez 1977). No additional documentation relating to nonextant, small house present in 1977, or other buildings that had been on the property before that time was found.

Construction of the existing four buildings appears to have been completed in 1979, but may have continued into 1980, as an aerial view of the property from 1980 clearly shows three of the existing building, while the forth building at the northwest corner of the property may have still been under construction (UCSB 1980, Figure 1). By 1983 the property was referred to as Moraga Office Park, a name that continues to appear on signage at the property's southeast driveway (*Oakland Tribune* 1983). The Stephen E. Block Co. was listed as the original contractor for construction, while no architect

or other design professionals associated with the property's original development are identified in available records (CCCD 2026). Available records accessed via public record request also redact historical owner names. Documented alterations to the buildings include interior tenant improvements in the early 1980s and roofing material replacement for the building addressed 1620 School Street in 2017 (CCCD 2026, Google 2016, 2019). Research of historical newspapers produced no additional information relating to the subject property, beyond common commercial leasing ads that described the buildings as having atrium forms (*Oakland Tribune* 1983).

Figure 1. Aerial view showing subject property (outlined) and vicinity, 1980.

Source: UCSB 1980

Stephen E. Block

Stephen Edward Block 1936-2021) was born and raised in Piedmont, Alameda County. He earned a Bachelor of Science in Civil Engineering from University of California, Berkeley, where he was a member of the U.S. Army Reserve Officer Training Corps. He served as an Officer in the Army's Counterintelligence Corps and pursued a career in the real estate industry after graduation. Block was engaged with the East Bay chapter of the Associated Home Builders and his 2021 obituary notes he developed office, industrial, and residential projects, including Moraga Country Club (ca. 1975). Newspaper research found that his company was responsible for developing the courtyard office building at 1635 School Street in Moraga, located opposite School Street from the subject property, in 1976 (*Contra Costa Times* 1976).

Commercial-Office Architecture

While newspaper advertisements ca. 1983 referred to the subject buildings as having atrium forms, they appear to be more appropriately categorized as pavilion-like commercial-office buildings, based upon professional scholarship on commercial architecture of the mid-twentieth century and later Modern era (ca. 1950s to ca. 1980) (Washington State Department of Archaeology and Historic Preservation 2026). Pavilion type buildings were popularized in the United States primarily through restaurant architecture, such as Pizza Hut's iconic forms of the late 1960s designed by architect Richard Burke; however, pavilion forms were utilized for residential, commercial, and educational/institutional architecture by the early 1960s, for example, at Foothill College, where architect Ernest Kump, Jr. applied pavilion massing with concrete and rustic redwood materials (DOCOMOMO n.d.). The subject buildings apply the low-wide massing and hip roofs common to pavilion styling with a projecting monitor with a similar profile, but with modestly adorned and detailed stucco exteriors that were to have been commonplace to regional commercial architecture ca. late 1970s.

Historical Resources Evaluation

California Register of Historical Resources (CRHR)

Criterion 1 (Events)

The subject property was developed as Moraga Office Park in 1979. It was built during a period of continued development in the Town of Moraga, which incorporated in 1974, following several decades of limited development as the community retained its rural character into the 1950s. While the subject property's development was part of a trend of increasing commercial development in the present-day Moraga Center area of the community, research did not identify it as having played an individually significant role in Moraga's commercial development or community planning. By 1979, increased commercial development was underway, along with an uptick in residential development. Research of the subject property's history found no evidence that it was the location of any singular historic events of significance to local, state, or national history. Additionally, while one building was apparently present on the property prior to its development as Moraga Office Park, that building is not extant and none of the existing built environment features of the property are documented as associated with the property's use prior to 1979. Therefore, the subject property is recommended ineligible under Criterion 1 (Events) for listing in the CRHR.

Criterion 2 (Persons)

Research of the early and subsequent owners of the property did not identify any individuals who made significant contributions to history that are represented by the subject property. Original owner Stephen E. Block, whose eponymous company developed the property, was a well-known developer in the Moraga area. However, this property was not unique in its association to Block, and, although Block was an apparently successful developer, his contributions to history do not appear to rise to the level of significance. Therefore, the subject property is recommended ineligible under Criterion 2 (Persons) for listing in the CRHR.

Criterion 3 (Architecture)

The subject property consists of four similarly designed, pavilion-like commercial-office buildings that form Moraga Office Park. The buildings and their integrated landscape features were constructed in 1979 during the property's development by The Stephen E. Block Co. Each of the buildings features a square footprint, stucco exterior walls with aluminum-sash windows and recessed entrances, as well as hip roofs with a broad profile, central monitor, and roof tiles or composition shingles. Although the buildings feature elements of the pavilion typology, they do not stand out individually, nor as a four-building group, for exhibiting the distinctive characteristics of a type, period, region, or method of construction. By 1979, the pavilion typology had been utilized for roughly two decades, with earlier and more influential examples existing in the region. The original developer was responsible for several projects locally, including a commercial building at 1635 School Street and Moraga Country Club, with both built ca. 1975-1976. Nonetheless, research did not identify The Stephen E. Block Co., Block, or other design professionals associated with the company as master-level design professionals. The subject property does not possess high artistic values as it does not express the aesthetic ideal of a style or artistic movement in an individually significant way. Therefore, the subject property is recommended ineligible for listing in the CRHR under Criterion 3.

Criterion 4 (Information Potential)

The built environment of the subject property is not likely to yield valuable information which will contribute to our understanding of human history because the property is not and never was the principal source of information pertaining to significant events, people, architectural style, or commercial buildings constructed in the late 1970s. Therefore, the property is recommended ineligible for listing under Criterion 4.

Town of Moraga Landmark

The subject property is recommended ineligible for listing as a Town of Moraga Landmark. The property is less than 50 years old and available documentation on the developmental history and architectural design of the property, as presented in the analysis above, finds that the property does not possess historical or architectural significance. The property has not been

found to possess character, interest, or value as part of the Town, State, or nation's historical or cultural development; is not identified as the place of a significant event; is not identified with a historically significant individual; and, does not exemplify aspects of the Town's heritage. Thus, it does not rise to significance under local criteria 1 through 4.

Further, the property is not identified as a distinctive example of an architectural style, nor as the work of a master architect, craftsman, or other design professional; therefore, it does not rise to significance under local criteria 5 through 8. While the property is located in the Moraga Center Planning Area, its relationship to surrounding properties does not relate or contribute to the significance of other properties that are eligible for historic preservation; therefore, it is not eligible under local criterion 9. Finally, the property has existed since 1979 to 1980, and although the property is potentially familiar to local residents, it does not represent the Town's character or a particular neighborhood in a unique or individually significant way. Therefore, it does not rise to significance under local criterion 10.

***B12. References (Continued from Page 2):**

Ancestry.com
2026 Various occupancy and genealogical records. https://www.ancestry.com/ (accessed January 2026).

Architectural Resources Group (ARG)
2011 Appendix 7: Cultural Resources Joaquin Moraga Adobe. 24 Adobe Lane, Orinda, California. Historical/Cultural Resources Study in J&J Ranch Draft Environmental Impact Report, Technical Appendices. SCH #2013112022. August 26, 2010. Updated March 30, 2011. Online. https://www.cityoforinda.gov/DocumentCenter/View/1084/J--J-Ranch-Draft-Environmental-Impact-Report---Technical-Appendices-PDF (accessed March 2026).

California Office of Historic Preservation
2026 "No. 509 Joaquin Moraga Adobe." Landmarks By County: Contra Costa. Online. https://ohp.parks.ca.gov/?page_id=21415 (accessed March 2026).

Chavez, David
1977 An archaeological field reconnaissance of the proposed Moraga Office Park (letter report). Study S-000712. September 26, 1977. On file at Northwest Information Center, Sonoma State University.

Contra Costa County Conservation & Development Records Research Division (CCCCD)
2026 Public Records Request: Building Permit Records for 1600, 1620, 1640, and 1660 School Street, Moraga, CA. Submitted March 5, 2026, results received March 10, 2026.

Contra Costa Times
1976 "Developer Offers Office Space." January 25, 43. https://www.newspapers.com/image/746809475 (accessed March 2026).

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Appendix B (See Attachment G of Staff Report)

Geotechnical Report

Appendix C-1 (See Attachment H of Staff Report)

Traffic Impact Study

Appendix C-2 (See Attachment H of Staff Report)

Traffic Impact Study Memorandum

TOWN OF MORAGA
REQUEST FOR COMMENTS

ROUTING DATE: January 22, 2026

APPLICATIONS SUBMITTED: Design Review Board (DRB-05-25). Density Bonus, Condominium Map (SUB 01-26), Grading (01-26) Application materials and project plans can be reviewed using the link below:

https://www.dropbox.com/scl/fo/jph9af989u0guvlgq8yq2/AMEMV6DoFdEMPx326M7ZBRo?rlkey=9az0jvs7yii1lisubvmu9ob5e&st=lc9ex54r&dl=0

PROJECT LOCATION: 1600, 1620, 1640 AND 1660 School Street, Moraga, CA 94556

APN(s): 257-190-049, 257-190-050, 257-190-051, and 257-190-052

APPLICANT: Outdo Country Club Drive, 1127 Rahara Dr., Lafayette, CA 94549

PROPERTY OWNER: Outdo Country Club Drive and JBJBADTN LLC, P.O. Box 477, Lafayette, CA 94549

DEPOSIT ACCOUNT #: D25-020

PROJECT DESCRIPTION:
Note: Similar versions of this project were routed for review on September 16, 2025, and November 13, 2025. If your comments have not changed, you can reply via email with "see previous comments", "no new comments" or something similar. If you do not reply and no new comments are provided, we will assume that the previous comments still apply.

The proposed project is a 49-unit townhouse condominium development. The project site is 2.95 gross acres consisting of four contiguous parcels (1600, 1620, 1640, and 1660 School Street) currently developed with four single story office buildings, with a shared parking lot and landscaping. The existing office buildings would be demolished and replaced with 49 townhouse units, with new driveways, parking areas, landscaping and associated improvements

The Zoning of the property is MCSP Mixed Office/Residential with a Moraga Center general plan designation which allows for a maximum density of 24 dwelling units per acre. The proposed project is 49 units, which includes five inclusionary units. The preliminary plans propose 11 buildings, they include one eight-unit building, seven four-unit buildings, two five-unit buildings and one three-unit building. All the buildings are three stories with the tallest building proposed at 41' 8" in height. All units will be three bedrooms or four bedrooms, each unit will have a two-car garage (98 total parking spaces), and there will be 14 off-site guest parking spaces on School Street and two on-site uncovered guest parking spaces for a total of 114 parking spaces. Per the site plan, the buildings would be setback at least 10 feet from School Street, 10 feet from Country Club Drive, 15' from the southern property line adjacent to the Saklan School at 1678 School Street and over 65' from the northern property line, which is north of the Lafayette Moraga Trail and roughly follows Laguna Creek. The nearest building would be 1.9' from the Lafayette Moraga Regional Trail, which runs along the northern property line within the Country Club Drive right-of-way and within the western portion of the project property, where it is located within an easement. Further North of this portion of the trail is Laguna Creek.

The above project is referred to your agency/department for review and comment. To maintain our schedule for processing this application, **please provide comments by February 10, 2026.** Please note that a previous entitlement for a 66-unit apartment building was approved by the Town on January 15, 2025, located on 1600, 1640 and 1660 School Street. That entitlement is still active, but the applicant can only proceed with one project, should this one be approved as well. If you have any questions, please contact the Planning staff person identified below.

PLANNING STAFF CONTACT: Brian Horn, Principal Planner; 925-888-7044; bhorn@moraga.ca.us

TOWN DEPARTMENTS			
	Engineering		Park & Recreation
	Police		Finance

OTHER AGENCIES

- ☐ Moraga-Orinda Fire District
- ☐ Moraga School District
- ☐ Acalanes Union High School District
- ☐ Contra Costa County Building Department
- ☐ Contra Costa Transportation Authority
- ☐ East Bay Municipal Utility District
- ☐ Central Contra Costa Sanitary District
- ☐ Association of Bay Area Governments
- ☐ Bay Area Air Quality Management District
- ☐ City of Lafayette
- ☐ City of Orinda
- ☐ East Bay Regional Park District (if project abuts Lafayette-Moraga Trail or other Park District property)
- ☐ Control County Connection
- ☐ Local Agency Formation Commission
- ☐ Native American Heritage Commission (SB 18 / AB 52 Notification)
- ☐ State Department of Fish and Wildlife
- ☐ Other: Regional Water Quality Army Corp of Engineers

This Agency/City department has comments, see attached. **This Agency/City department has no comments.**

NAME OF AGENCY/CITY DEPARTMENT Regional Water Quality Control Board

SIGNATURE OF REPRESENTATIVE Kathryn Hart DATE April 13, 2026

PHONE OR E-MAIL kathryn.hart@waterboards.ca.gov

Outdo Country Club Drive
Condominium Development

Setback of Development to Moraga Creek

Thank you for the opportunity to comment on the plans for the subject project.

All developed structures, including bioretention treatment and parking areas, should be located with a setback to the creek that is adequate to allow for lateral creek migration over the long term. Lateral migration and bank instability could occur and when sites such as this one are redeveloped a generous creek setback allows for protection of the structures and the creek habitat over the long term. The existing trail is situated directly at the top of the bank with little or no room for the creek's lateral migration. The development should be setback sufficiently to allow for relocation of the trail in the future, should creek bank instability become an issue.

We generally do not support placement of bioretention treatment facilities near the top of a creek bank. Even when lined these facilities can leak over the long term, thus oversaturating the bank soils, which may cause slumping to occur. These facilities should be situated away from the creek.

From: Irving, Casey
To: Brian Horn
Subject: School Street Project
Date: Friday, April 17, 2026 8:58:01 AM

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Good morning!

The 1600–1660 School Street project is cleared to move forward, as the major fire and life safety issues have been addressed.

Thank you!

Ms. Casey Irving
Fire Marshal
Moraga-Orinda Fire Protection District
1280 Moraga Way| Moraga, CA 94556
www.mofd.org| 925-258-4513

From: Irving, Casey
To: Brian Horn
Subject: Re: School Street Project
Date: Monday, June 8, 2026 2:20:37 PM
Attachments: image001.png

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Good afternoon,

No, a Wildfire Hazard and Assessment Plan (WHAP) is not required for this project.

Thank you for checking!

Ms. Casey Irving
Fire Marshal
Moraga-Orinda Fire Protection District
1280 Moraga Way| Moraga, CA 94556
www.mofd.org| 925-258-4513

From: Brian Horn <bhorn@moraga.ca.us>
Sent: Monday, June 8, 2026 2:16 PM
To: Irving, Casey <cirving@mofd.org>
Subject: RE: School Street Project

Casey,

Can you please confirm whether MOFD is requiring this project to prepare a Wildfire Assessment Plan/Wildfire Protection Plan?

Thanks,

Brian

Brian Horn
Principal Planner
329 Rheem Boulevard
Moraga, CA 94556
(925) 888-7044

From: Philip Coffin
To: Brian Horn
Cc: Suzanne Wilson; David Kendall
Subject: Conditions of Approval and Easement at Townhouse Project site
Date: Tuesday, June 23, 2026 11:53:21 AM
Attachments: image001.png

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Hi Brian,

Good talking to you just now.

As requested, here are some conditions that we have discussed and would like to see. I'm cc'ing my colleagues, in case they have any last-minute conditions to add, or any revisions to these conditions.

1. Trail Easement recordation: thanks for sharing your approach. Confirming that we would like to review and approve the developer's draft Trail Easement prior to recordation, to ensure that it is 7' on either side of the centerline of the existing trail, among other details.
2. Retaining wall: confirming that the Town will require a 3' setback from the existing trail edge, so that we can have our 2' shoulder for weedwhacking and buffer space for trail users and staff vehicles. And confirming that the Town will require the developer to maintain the trail-facing side of the retaining wall, and not the Town or Park District.
3. Two-rail fence: confirming that the Town will require the developer to remove the two-rail fence where the builder installs a retaining wall. Since the retaining wall will serve as a barrier, there will be no need for fencing, and this should save us on maintenance costs.
   Secondly, confirming that the Town will require the developer to repair or replace deteriorated or damaged two-rail fence along other portions of the trail easement, to Park District specs found here: https://www.ebparks.org/public-info/bids-rfps/district-standard-plans#fences
4. Trail construction access: confirming that the Town will require the developer to apply for a Temporary Access Permit if they need to use or impact our trail in any way.

Thanks a lot for working with us on this one.

Best regards,

East Bay Regional Park District

Philip Coffin
Real Property Specialist | *Land Acquisition*
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA 94605
T: 510-544-2604
pcoffin@ebparks.org | www.ebparks.org
Participate in the District Plan – learn more here.

STATEMENT OF CONFIDENTIALITY | This electronic message and any files or attachments transmitted with it may be confidential, privileged, or proprietary information of the East Bay Regional Park District. The information is solely for the use of the individual or entity to which it was intended to be addressed. If the reader of this message is not the intended recipient, you are hereby notified that use, distribution, or copying of this e-mail is strictly prohibited. If you received this e-mail in error, please notify the sender immediately, destroy any copies, and delete it from your system.

Please consider the environment before you print

REVIEW OF AGENCY PLANNING APPLICATION

THIS IS NOT A PROPOSAL TO PROVIDE WATER SERVICES

The technical data supplied herein is based on preliminary information, is subject to revision and is to be used for planning purpose ONLY

DATE: 11/26/2025	EBMUD MAP(S): 1527B488	EBMUD FILE:S-11844
AGENCY: Town of Moraga Planning Department Attn: Brian Horn 329 Rheem Blvd. MORAGA, CA 94556	AGENCY FILE: D25-020	FILE TYPE: Tentative Map
APPLICANT: Outdo Country Club Drive 1127 Rahara Drive Lafayette, CA 94549		OWNER: Outdo Country Club Drive and JBJBADTN LLC P.O. Box 477 Lafayette, CA 94559

DEVELOPMENT DATA

ADDRESS/LOCATION: 1600, 1620, 1640 AND 1660 School Street City:MORAGA Zip Code: 94556

ZONING:MCSP Mixed Office/Residential PREVIOUS LAND USE: Office building.

DESCRIPTION: Preliminary application to subdivide the property into 11 lots each with their own residential building, with five road parcels and a creek parcel. Existing office buildings would be demolished and replaced with 49 townhouse units.	TOTAL ACREAGE:2.75 ac.

TYPE OF DEVELOPMENT:
Multi Family Residential:49 Units

WATER SERVICES DATA

PROPERTY: in EBMUD	ELEVATION RANGES OF STREETS: 476-480	ELEVATION RANGE OF PROPERTY TO BE DEVELOPED: 476-486

Part of development may be served from existing main(s)
Location of Main(s):School Street, Country Club Drive

PRESSURE ZONE	SERVICE ELEVATION RANGE
D5A	450-650

Part of development must be served from main extension(s)
Location of Existing Main(s):School Street, Country Club Drive

PRESSURE ZONE	SERVICE ELEVATION RANGE
D5A	450-650

COMMENTS

See attached.

CHARGES & OTHER REQUIREMENTS FOR SERVICE:
Contact the EBMUD New Business Office at (510)287-1008.

12/2/25

Chien Wang,Associate Civil Engineer; DATE
WATER SERVICE PLANNING SECTION

Attachment
Review of Agency Planning Application

City File: D25-020
EBMUD File: S-11844

Effective January 1, 2018, water service for new multiunit structures shall be individually metered or sub-metered in compliance with Section 537 of California's Water Code & Section 1954.201-219 of California's Civil Code, which encourages conservation of water in multifamily residential and mixed-use multi-family and commercial buildings by requiring metering infrastructure for each dwelling unit, including appropriate water billing safeguards for both tenants and landlords. EBMUD water services shall be conditioned for all development projects that are subject to these metering requirements and will be released only after the project sponsor has satisfied all requirements and provided evidence of conformance with Section 537 of California's Water Code & Section 1954.201-2019 of California's Civil Code.

Once the property is subdivided, separate meters for each lot will be required. A main extension at the project sponsor's expense will be required to serve the proposed development. Please see the attached EBMUD documents for California (Waterworks Standards) Code of Regulations, Title 22, Section 64572 (Water Main Separation) and EBMUD requirements for placement of water mains. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine the costs and conditions of providing water service to the development. Engineering and installation of water mains and meters requires substantial lead time, which should be provided for in the project sponsor's development schedule. No water meters are allowed to be located in driveways. The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense. Due to EBMUD's limited water supply, all customers should plan for shortages in time of drought.

EBMUD’s Moraga No. 2 Aqueduct (Aqueduct), located in EBMUD property owned in fee (Property No. CC-569) are located within the project limits (see enclosed EBMUD distribution map 1527B488). The Moraga Aqueduct is critical for supplemental supply to the Upper San Leandro Reservoir. The integrity of this pipeline needs to be maintained at all times. Any projects being planned within or immediately adjacent to EBMUD property will need to follow EBMUD’s Procedure 718 – Authorized Uses of Pipeline Right-of-Way. A copy of the procedure is enclosed for your reference. Design drawings for any project encroachment (roadway, utility, facility, etc.) or restoration projects crossing or within the Aqueduct property or right-of-way will need to be submitted to EBMUD for review of possible drainage, site grading, fencing, construction access, and other conditions that may impact EBMUD property. If the project

involves the construction of retaining walls and fences along the property line; these must be constructed completely outside of EBMUD property, including all footings. The project sponsor shall contact EBMUD's Survey Section to coordinate identifying, locating and marking correct property lines.

EBMUD requires a full set of drawings (full size or 11" x 17") as well as an electronic copy in PDF format. All submittals shall be sent to the attention of Douglas Hooper, Superintendent of Aqueduct Section, 1804 West Main Street, Stockton, CA 95203. Additional information and an encroachment package are included in EBMUD's Procedure 718. Applications for non-EBMUD uses will not be processed unless accompanied by the appropriate application fees outlined in the current applicable Water and Wastewater System Schedule of Rates and Charges and Fees. Contractors must secure an encroachment permit from EBMUD Aqueduct Section prior to mobilizing and starting construction work. A pre-construction meeting with EBMUD is mandatory.

cc. M. Elawady, D. Hooper

TH

EAST BAY MUNICIPAL UTILITY DISTRICT

Applicant Pipeline Design Criteria

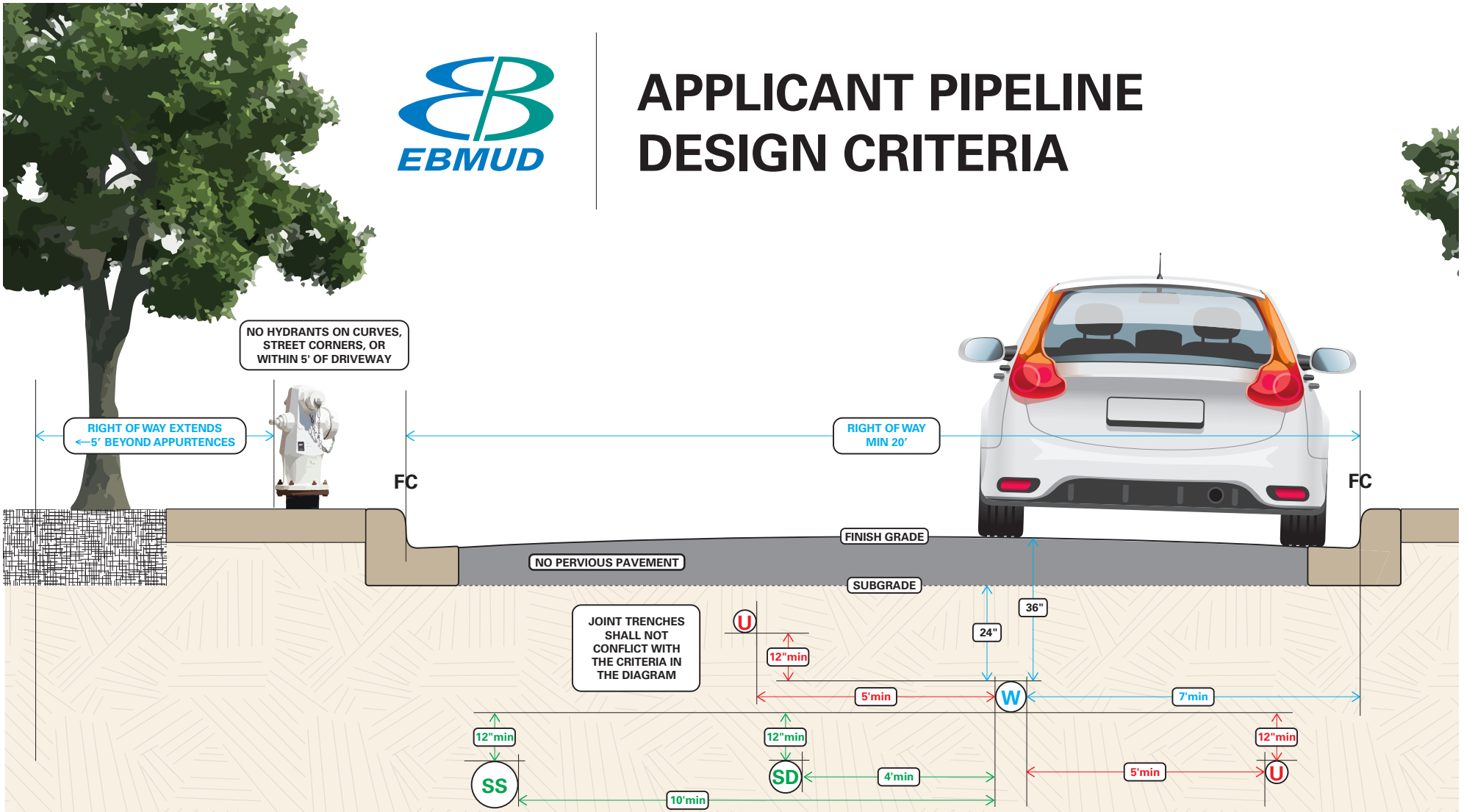
EBMUD values applicant pipeline projects and is committed to providing a thorough and efficient design. To ensure an efficient design process and to avoid significant delays the design criteria below should be adhered to when submitting improvement plans.

Design Criteria

- Water mains shall be seven (7) feet from face of curb.
- Water mains shall maintain a minimum one (1) foot vertical and five (5) foot horizontal clearance from other utilities.
- Gas mains shall meet the one (1) foot vertical separation requirement by installing the gas main below the water main only.
- Water mains shall maintain a minimum ten (10) foot horizontal clearance (O.D. to O.D.) and be located a minimum one (1) foot above any sewer main. Title 22 CCR
- Water mains shall maintain a minimum four (4) feet horizontal clearance (O.D. to O.D.) and be located a minimum one (1) foot above any storm drain. Title 22 CCR
- Water mains shall have a 36-inch cover to final grade and 24-inch cover to pavement subgrade.
- Joint trenches that are in conflict with the criteria above may delay the project. Submit to EBMUD final joint trench plans (no intent plans) which include the size of the joint trench and the utilities located inside.
- Water mains shall not be installed under pervious pavement.
- Water mains installed under decorative pavement, pavers, or stamped concrete will require an additional paving agreement.
- Hydrants shall not be located on curved sections of street, street corners, or within five feet of a driveway.
- Right of ways for 6-inch and 8-inch water mains shall be a minimum of 20 feet wide and extend five (5) feet past the water main centerline.
- Right of ways for 12-inch to 24-inch water mains shall be a minimum of 20 feet wide and extend eight (8) feet past the water main centerline.

Please contact the New Business Office representative assigned to your project if there are any questions regarding the requirements listed above. Meeting this criteria will enable the most efficient design possible.

APPLICANT PIPELINE DESIGN CRITERIA



W = WATER
24" cover to subgrade
36" cover to final grade
7' inset from face of curb

U = UTILITY
min 12" vertical clearance
min 5' horizontal clearance

SS = SANITARY SEWER
min 12" below water
min 10' horizontal clearance

SD = STORM DRAIN
min 12" below water
min 4' horizontal clearance

FC= FACE OF CURB

CENTRAL SAN
CENTRAL CONTRA COSTA SANITARY DISTRICT 5019 IMHOFF PLACE, MARTINEZ, CA 94553-4392

PHONE: (925) 228-9500
FAX: (925) 228-4624
www.centralsan.org

December 3, 2025

ROGER S. BAILEY
General Manager

J. LEAH CASTELLA
Counsel for the District

KATIE YOUNG
Secretary of the District

Brian Horn
Principal Planner – Town of Moraga
925-888-7044
bhorn@moraga.ca.us

SUBJECT: 1600, 1620, 1640, 1660 School St., Moraga
APN: 257-190-049, -050, -051, -052, Central San Response

Dear Mr. Horn,

According to Central Contra Costa Sanitary District (Central San) records, the project site is within Central San's service area and is currently receiving sewer service.

Development Information: (*Based on the information provided)*

- **Existing Use:** Office Buildings
- ***Planned Project Description***: The project site is 2.95 gross acres consisting of four contiguous parcels (1600, 1620, 1640, and 1660 School Street) currently developed with four single story office buildings, with a shared parking lot and landscaping. The project description has changed from the previous submittal, as they are now proposing to subdivide the property into 11 lots each with their own residential building, with five road parcels and a creek parcel. The existing office buildings would be demolished and replaced with 49 townhouse units, with new driveways, parking areas, landscaping and associated improvements

Site-Specific Development Conditions:

- **A public sewer extension is required for this project. The point of connection to Central San's public sewer system has not been determined at this time. A pre-application meeting is required, please email permits@centralsan.org as soon as possible to get this scheduled.**
- Per Central San District Code, each lot / parcel will need its own connection to Central San's public sewer main, and Central San permit(s) will be required for the side sewer work.
- Prior to the existing buildings being demolished, the private side sewers will need to be properly capped or abandoned with a Central San permit.
- Central San anticipates having the capacity to serve the proposed development. However, capacity is not reserved until the development is permitted by Central San. The District may require a subsequent capacity review as part of the sewer permit plan review process.
- Prior to receiving a building permit, the applicant should promptly submit hard-copy, full-size improvement plans to Central San Permit Counter located at 5019 Imhoff Place, Martinez. Staff will review and advise on any applicable fees due. For more information, the applicant should contact the Central San Permit Section at (925) 229-7371.

Sincerely,

Michelle Peon Del Valle
Engineering Assistant

From: Nate Levine
To: Brian Horn
Subject: 1600, 1620, 1640 AND 1660 School Street - November 13th submittal
Date: Tuesday, December 9, 2025 1:44:38 PM
Attachments: image001.png
PW Comments.pdf
Moraga_RFC Routing Form.pdf

Hi Brian – Below are the PW comments for the project mentioned above. I've also attached the relevant forms in the "PW Comments" attachment.

- Location and dimensions for all adjacent streets (public and private), including striping and centerlines
- Existing topography and proposed grading extending 50 feet beyond the property, or 50' public improvements
- Location and dimensions of existing and proposed utilities
- Location and dimensions of parking spaces, back-up, loading areas, and circulation patterns
- FEMA floodwater surface elevation
- Location and type of exterior lighting, both fixed to the building and freestanding, any and all lights for circulation, security, landscaping, or other purposes
- Preliminary utility plan prepared by a licensed Civil Engineer
- Photometric plan
- Update to the previous Traffic Analysis, based on the new project. New Traffic Counts may be required.
- Preliminary drainage information showing spot elevations, pad elevations, existing catch basins, and direction of proposed drainage
- Will the Townhomes be built with an on-site listing office? If so, an ADA path of travel will need to be distinguishable on the development site plan, and provide a connection from the ROW to the office entrance as well as to the required number of ADA parking stalls per CBC.
- MCSP Mixed Use Office Residential shall be a minimum of eight feet in width, or designed according to the School Street guidelines in the Moraga Design Guidelines MMC 8.200.050(A)(14)
- A Stormwater Control Plan must be submitted. Refer the step-by-step guidance in Chapter 2 of the CCCWP Stormwater Guidance for preparation.
- Submit a completed CCCWP Development review checklist, attached.
- Improvements to Country Club Drive, including the regional trail enhancement and intersection crossing improvements at the School St and Country Club Dr intersection.

Thanks,

Nate Levine, PE, TE
Senior Engineer
(925) 888-7023
Town of Moraga

From: Brian Horn <bhorn@moraga.ca.us>
Sent: Tuesday, December 9, 2025 11:54 AM
To: Nate Levine <nlevine@moraga.ca.us>
Subject: Previous Comments

Brian Horn
Principal Planner
329 Rheem Boulevard
Moraga, CA 94556
(925) 888-7044
bhorn@moraga.ca.us
www.moraga.ca.us

Town offices will be closed for the Thanksgiving holiday from November 27 to 28 and for the winter holiday from December 24 to January 2. Messages received during these closures will be answered when offices reopen

From: Dave Rochlin
To: Brian Horn
Subject: Environmental Review and Other Concerns – School Street Townhomes (DRB-05-25, GR-01-26, SUB-01-26)
Date: Sunday, June 21, 2026 1:14:52 PM

You don't often get email from drochlin@hotmail.com. Learn why this is important

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Dear Mr. Horn,

I am a resident of Moraga writing to submit formal comments regarding the proposed 49-unit townhouse development at 1600, 1620, 1640, and 1660 School Street. When walking by the site this morning, I was surprised to see what is being proposed. I am deeply concerned about the potential public, environmental, and safety impacts of this specific location.

While I support responsible growth and the creation of new housing, it is vital that the Town force developers to consider and address the environmental, structural, and safety impacts to the community. The Housing Accountability Act (HAA) does **not** override these issues, and cannot be used to circumvent them. Further, earmarking affordable units for this project is clearly insincere in intent and simply being done to bypass local height and setback rules ... by a developer based outside of the United States, operating behind the shield of an LLC, and with no interest in our community vitality.

I request that the Planning Department and Design Review Board, as part of their fiduciary responsibility, require "Outdo Country Club Drive LLC" to fund and execute a comprehensive, independent EIR and detailed, site-specific studies, including:

- A Site-Specific Geotechnical and Soil Stability Study: Because this project involves significant grading right next to Laguna Creek, a generic soil review is not sufficient. The developer must demonstrate that building so intensely and densely on this site will not cause creek bank failure, soil shifting, or structural impacts that could damage the Lafayette-Moraga Trail or neighboring properties. The creek is already vulnerable, and I do not believe this project as presented addresses this issue.
- A Wildfire Evacuation and Traffic Safety Analysis: The addition of cars and housing units will impact local roads in an area already designated as a high-risk wildfire zone. The developer must verify that adding vehicles will not restrict neighborhood evacuation paths during an emergency. I don't believe that this is the case: Moraga is already access challenged, and the project creates a measurable increase in potential loss of life in the event of a wildfire. This is simply not acceptable.
- A Drainage and Hydrology Study: This site sits directly next to Laguna Creek. To protect

the local watershed from pollution, the developer needs to verify that stormwater capture systems AND that parking waste/oil/gas residue will not run off into the creek -- more-over that increased traffic and street parking activity will not impact the creek in a similar manner

- A Pedestrian Safety and Student Privacy Study: The project shares a direct property line with The Saklan School and sits in one of the most pedestrian-intensive areas of Moraga, including two senior/assisted care housing facilities. The developer needs to conduct an independent school-zone traffic safety analysis to address traffic safety issues and demonstrate that it does not put students, seniors, or other citizens at additional risk.

In addition, I request that the City:

- Reconsider and Expand Street and Trail Setbacks: The proposed modest street setback lack of meaningful setback from the Lafayette-Moraga Trail, is inconsistent with Moraga's general plan and character, and moreover presents significant negative externalities (it is not just an aesthetic issue). The Planning Department and Design Review Board need to ask the developer to redesign the site layout to provide traditional suburban setbacks OR to demonstrate that no harm will be caused by this lack of setback (especially to the public trail). I believe the latter is not possible, because the project does do harm to Moragans.

- Evaluate Cumulative Impacts: The Town must evaluate the cumulative impact on traffic, safety, and the environment. A major housing project was just recently completed almost directly across the street on Country Club Drive . With a school and two senior facilities in the area, as a well as serving as a major student artery to the Junior High School (and bicycle bypass rote), why is this neighborhood being targeted for high-density, semi-urban development? The local infrastructure does not support it and the town seems to be ignoring this issue.

Thank you,

Dave Rochlin
1721 Spyglass Ln, Moraga, CA

From: JANET DOBBS
To: Planning
Subject: School Street Townhouses
Date: Tuesday, June 30, 2026 2:03:38 PM

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Hello Commissioners,

I think these units are too tall. They will not fit in with the surrounding neighborhood and will therefore decrease property values. Please take this into consideration.

Thank you,
Janet Dobbs
Neighbor

From:	Robert Stagg
To:	Brian Horn
Cc:	Steve Woehleke; Lisa Maglio; Brian Dolan; Kerry Hillis; Graham Thiel; Town Clerk; Planning
Subject:	Proposed School Street Townhouse Development
Date:	Wednesday, July 1, 2026 8:29:43 AM

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Dear Mr. Horn,

We are writing this letter to express some concerns that we have about the School Street townhouse development that is currently being reviewed.
While we believe that this is the wrong location for this type of high-density housing due to the traffic congestion and parking that already exists at this location and the proximity to Saklan School, we do feel that the current proposed townhouse development is somewhat better than what was previously planned and thus we are going to focus this letter on what we believe are the two largest issues with the current proposed development.

First, the plan as submitted has inadequate parking. As all of us know, from observing our neighbors, many people fill up their garage with personal items and park their vehicles elsewhere. Thus, we suspect that many of the residents at these townhouses and certainly their guests will need a place to park and as planned the development only has 2 onsite parking places. While the plan mentions 11 additional street parking places, we believe that these parking places are public parking places which are currently often completely occupied by SiSi café customers, workers in the nearby office

buildings and Saklan school employees and parents. Thus, at times there will only be the 2 onsite parking places available for the residents and guests of the townhouses. As a result, we believe that there needs to significantly more onsite overflow parking spaces for the residents and guests.

Second, we believe that this location cannot safely handle the increased traffic that will result from the planned density. This development would significantly increase the number of housing units in the small School Street area. There is already a large amount of traffic on School Street, especially during the week when Saklan and JM Schools begin and end their day. During these peak times, School Street is very crowded by cars, bikes, ebikes, scooters, and children and parents walking on the street. We have previously witnessed some near accidents due to the current congestion and parking. The traffic associated with this development would exacerbate this already dangerous situation. Thus, at a minimum, traffic mitigation measures need to be done such as creating an opening in the island in the middle of Country Club Drive so that cars exiting the development onto Country Club drive can turn left. In addition, the exit out of the development onto School Street should be a left hand turn only exit to direct the traffic away from Saklan School and the School Street community and speed bumps on School Street should be considered. Thank you.

Sincerely,

Robert and Julie Stagg
2 Silvia Court, Moraga, CA

cc: Moraga Town Council

From: Jeffrey Rissman
To: Brian Horn
Subject: Neighbor in Support of the School Street Townhomes
Date: Tuesday, June 30, 2026 11:45:56 PM

You don't often get email from jeff.rissman@gmail.com. Learn why this is important

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

Dear Mr. Horn and Members of the Moraga Planning Commission,

My name is Jeffrey Rissman, and I live on Country Club Drive less than half a block from the proposed 49-unit townhouse development at 1600–1660 School Street. I am writing in support of that project.

I want to be clear about where I'm standing when I say that. I am one of the closest neighbors to this development—exactly the kind of resident who is expected to oppose it, and whom you most often hear from in opposition. I am asking you to approve it.

I have no personal, professional, or financial stake in the project. I'd never heard of the developer before. I am writing simply because I believe approving new housing here is the right thing to do.

Some residents worry that development will change the character of the town. But the character of a town isn't its buildings—it's the people in it, and how open they are to the next family that wants to call this place home. Moraga should build housing for new families, welcome new neighbors, and give the children of current residents a chance to afford homes in the community they grew up in. It is natural for successful towns to evolve, and growth in the town center is a sign of a healthy place where people want to live. Every one of us is here because of past development. I'd rather help hold the door open than pull it shut behind me.

Some residents worry about nearby home values. The evidence on this is reassuring: studies of infill housing generally find that well-designed development in established neighborhoods does not depress the value of surrounding homes, and often reflects the very desirability that makes a place worth investing in. A thriving town center supports property values; it doesn't undermine them.

Some residents worry about traffic. But 49 homes in a walkable town center generate far fewer car trips than the same number of homes pushed to the edges of the region, where every errand requires a drive. Locating housing near shops, services, and transit is how a town accommodates new residents while keeping its roads manageable. Farther-flung development doesn't reduce car trips. It locks them in.

Finally, this project is consistent with the plans and zoning Moraga has already set for itself. The 2.95-acre site is zoned MCSP Mixed Office/Residential, which permits a maximum density of 24 dwelling units per acre—roughly 70 units on a parcel this size. This project proposes just 49, well below what the zoning allows, and it includes five below-market-rate units. Approving it isn't only the right thing to do; it's well within the goals and density this community has already adopted for its town center.

I urge you to approve the project and help us welcome more residents into our community.

Sincerely,
Jeffrey Rissman

1600-1660 SCHOOL STREET SITE

Town of Moraga, California 94556
June 5, 2026

View at Corner at School Street and Country Club Drive

Project Information:

Building Type: VB
Occupancy: R3
Address: 1600-1660 School Street, Moraga California 94556
Parcel Numbers: 257-190-049, 257-190-050, 257-190-051, 257-190-052

Vicinity Map

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Project Team:

OUTDO COUNTRY CLUB DRIVE, LLC
Applicant: OUTDO Country Club Drive, LLC
1620 School Street, Suite 110
Moraga, CA 94556
Contact: Jeff Stone

WHA
Architect: WHA Architects
6101 Bollinger Canyon Road, Suite 210
San Ramon, CA 94583
Contact: Robert Lee
925.463.1700

cbg CARLSON, BARBEE & GIBSON, Inc.
Civil Engineering: CBG
2633 Camino Ramon, Suite 350
San Ramon, CA 94583
Contact: Ryan Hansen
925.866.0322

ENVIRONMENTAL FORESIGHT, INC. Landscape Architecture
Landscape Architecture: Environmental Foresight
2065 N. Broadway, Suite 203
Walnut Creek, CA 94596
Contact: Kevin Proctor
925.945.0300

SITE INFORMATION

Street Addresses	1600,1620, 1640, 1660 School Street	
Current Zone	MCSP-OR	Mixed Office / Residential
Minimum Density	12	du/ac
Maximum Density	24	du/ac
APN / Parcel ID	257-190-049, 257-190-050, 257-190-051, 257-190-052	

6th Cycle Housing Element Update (Draft)

General Plan 2040 Designation	MC	Mixed Use - Moraga Center
Zone	MCSP	Moraga Center Specific Plan
Town of Moraga Special District	PDA	Priority Development Area

SUMMARY: PROPOSED PROJECT

Site Area (Gross)	2.95	Acres	128,474 SF+
Site Net Area (Net)	2.46	Acres	107,046 SF±
Total Number of Base Units	49	Townhomes	
Market Rate	44		
Affordable Units (10%) of Base Units	5	Moderate Income Level	
Unit Type		Townhouse Style Condominiums	
Density (gross)	16.61	Dwelling Units/Gross Acre	
	19.94	Dwelling Units/Net Acre	

BUILDING CODE SUMMARY

Reference	2022 CALIFORNIA RESIDENTIAL CODE, TITLE 24, PART 2.5
Occupancy	R-3
Fire Sprinkler System	NFPA - 13D (sprinklers will be added in attics and garages per MOFD)
Type of Construction	VB NON-RATED
Allowable Height	3 STORIES
Allowable Area	PER C.R.C
Accessibility	PER 2022 C.B.C CHAPTER 11A
Aerial fire apparatus access roads	None required - 32' max eave height per building (approval by MOFD)
California Wildlife Urban Interface	Project construction will comply with CWUIC Chapter 5

MIXED OFFICE / RESIDENTIAL DISTRICT REGULATIONS (MCSP MU-OR)
MMC Chapter 8.42 - Mixed Office / Residential District

DESCRIPTION	REQUIRED			PROPOSED	
Density (Chapter 8.42.040)	Min. 12	Max. 24		16.6	
Minimum Lot Area	10,000 square feet			128,474 square feet	
Minimum Lot Width	30 feet			437 feet	
Minimum Lot Depth	100 feet			259 feet	
Minimum Frontage	30 feet			437 feet (School St) 363 feet (Country Club Dr)	
Setbacks (feet)					
Front-yard [2]	0			10	
Side-yard					
Interior Side	0			15	
Street Side	0			10	
Rear-yard (to trail)	N/A			1.9	
Rear-yard (to PL)	0			66	
Max. Height	Limited to three stories (not to exceed 45 feet)			Three Stories (42'" max height)	
Private Outdoor Space					
Balconies may be provided to fullfill this standard.	>=5% of each unit's floor area (min. 50SF, 5' min. dimension)			**Plan** / **SF** / **5% min** Plan 1 / 72 / 71.9 Plan 2 / 208 / 94.05 Plan 3 / 126 / 103.75 Plan 3X / 107 / 106.35	
Minimum building separation					
3 stories	35 feet			10 feet*	
Max. Lot Coverage (Net SF)	60%			42.1%	
Maximum Floor Area Ratio	0.85 (garages only - residential exempt)			0.19 (garages only - residential exempt)	
PARKING (Chapter 8.76.100)	REQUIRED			PROPOSED	
Parking Ratio	2.0 covered spaces / unit	98 total		2.0 covered spaces / unit	98
				On Site Parking Spaces	2
				Offsite Parking Spaces	14
Guest Parking	1 space per 4 units	13 total		Total Guest Parking	16
Total Parking		111 total		Total Parking	114

*Waiver request from Townhome Building Development Regulations

Building Configurations and Sizes											Site Coverage	
Building Type	Units	Net Living SF (per Bldg.)	Garage SF (per Bldg.)	Open Space (Porch/Decks SF per Bldg.)	Gross SF (per Bldg.)	Number of Bldgs.	Total Living SF.	Total Garage SF	Total Open Space SF	Total Gross SF	Area per Bldg.	Total Bldg. Coverage
200	3X-2-2-3X	8,016	2,024	630	10,250	5	40,080	10,120	3,150	51,250	3,748	18,740
300	3X-1-2-3X	7,573	2,046	422	10,050	1	7,573	2,046	422	10,050	3,551	3,551
400	3X-2-2-2-3X	9,897	2,547	838	12,696	2	19,794	5,094	1,676	25,392	4,710	9,420
500	3X-1-3-2-3-1-3X	13,161	3,569	674	17,570	1	13,161	3,569	674	17,570	6,200	6,200
600	3X-1-2-3-3-2-1-3X	15,042	4,092	882	20,016	1	15,042	4,092	882	20,016	7,103	7,103
Total						10	95,650	24,921		124,278		45,014

UNIT SUMMARY

Plan Types	QTY	Percentage	Bdrm / Bath	Garage Type	Number of Levels	Net Sq. Ft.*	Total Net Sq. Ft.	Garage Sq. Ft	Total Garage Sq Ft.	Private Open Space Sq. Ft.***	Gross Sq. Ft.**	Total Gross Sq. Ft.
Plan 1	5	10%	3 bdrm / 3 bath	Tandem 2-Car	3	1438	7,190	545	2,725	0	2,246	11,230
Plan 2	20	41%	3 bdrm / 2.5 bath	STD. 2-Car	3	1881	37,620	523	10,460	208	2,446	48,920
Plan 3	4	8%	4 bdrm / 3.5 bath	STD. 2-Car	3	2075	8,300	489	1,956	126	2,637	10,548
Plan 3X	20	41%	4 bdrm / 3.5 bath	STD. 2-Car	3	2127	42,540	489	9,780	107	2,679	53,580
TOTAL	49	100%	-		-		95,650		24,921			124,278

*Net SF: Measured to outside face of stud, excludes garage area, deck, and porches. Includes air gap per unit.
**Gross SF: Measured to outside face of stud, includes garage area. Includes air gap per unit. Excludes porches and balconies.
***Open Space includes porches and decks only, with minimum of 5' dimension.
Note: Average market rate unit size: 2013SF; 70% of 2013SF = 1410SF min. affordable unit size (actual: 1438SF)

PROJECT SUMMARY

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

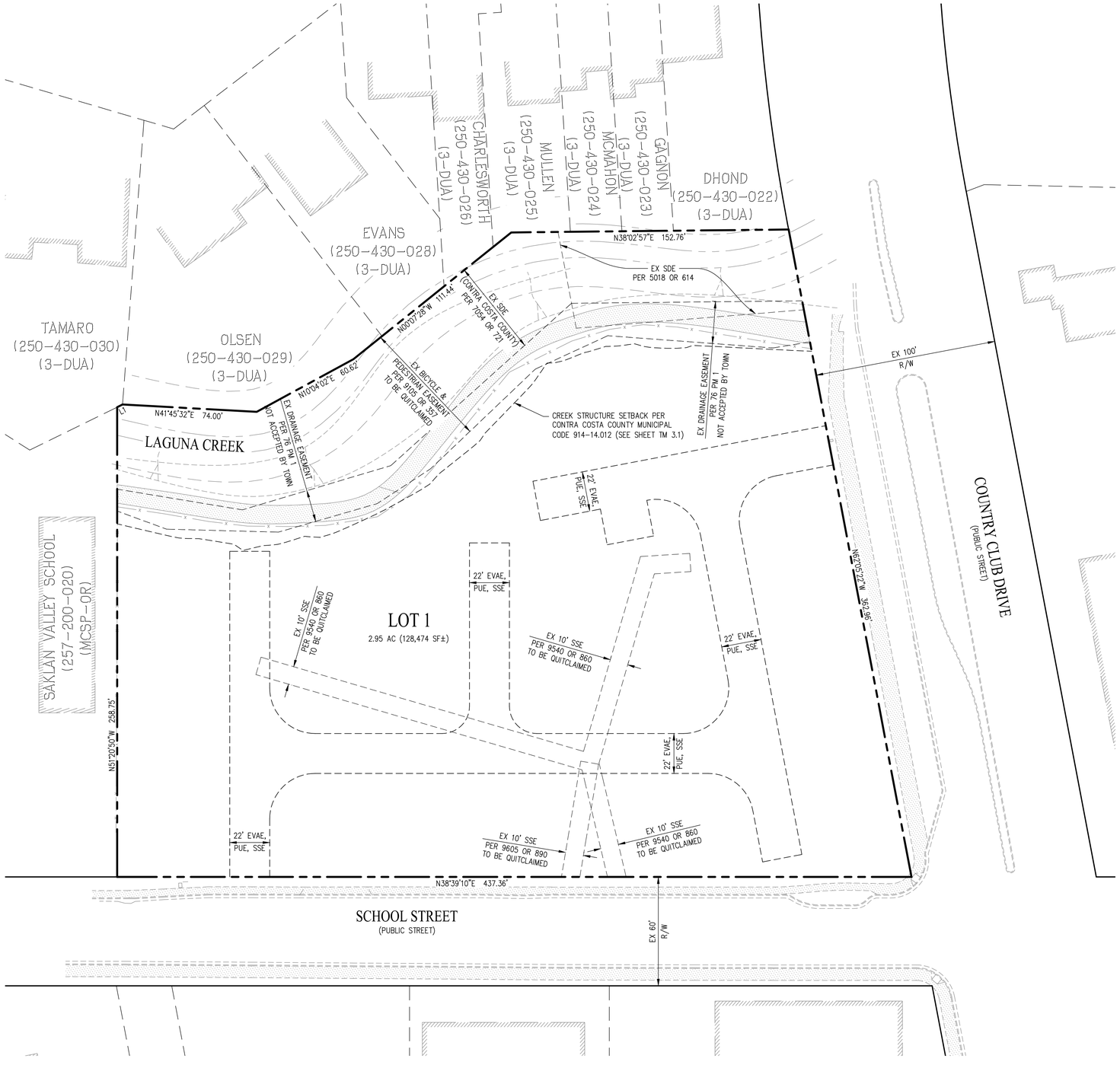
OUTDO COUNTRY CLUB DRIVE, LLC

MOFD STAMP

PS

© 2026 WILLIAM HEZMALHALCH ARCHITECTS, INC. DBA WHA. | 2025182 | 06-05-26

ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

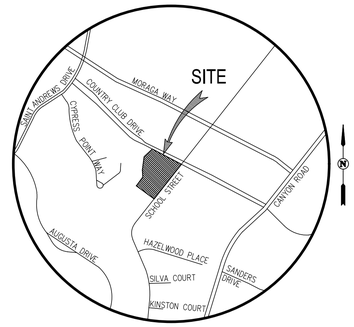
TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

JUNE 19, 2026 JOB NO.: 3346-010

MOFD STAMP

CONTACTS:

1. OWNER: OUTDO COUNTRY CLUB DRIVE, LLC
   1127 RAHARA DR.
   LAFAYETTE, CA 94549
   NIKHIL GERA
2. DEVELOPER: JBJBADTN, LLC
   1009 OAK HILL ROAD
   LAFAYETTE, CA 94549
   JEFF STONE
3. CIVIL ENGINEER: CARLSON, BARBEE & GIBSON, INC.
   2633 CAMINO RAMON, SUITE 350
   SAN RAMON, CA 94583
   (925) 866-0322
   RYAN HANSEN, P.E.
4. ARCHITECT: WHA ARCHITECTS
   5000 EXECUTIVE PARKWAY, SUITE 375
   SAN RAMON, CA 94583
   (925) 216-5555
5. LANDSCAPE ARCHITECT ENVIRONMENTAL FORESIGHT
   2065 N. BROADWAY, SUITE 203
   WALNUT CREEK, CA 94596
   SCOTT FEUER
   (925) 945-0300



VICINITY MAP

NOT TO SCALE

GENERAL NOTES:

1. ASSESSORS PARCEL NUMBERS: 257-190-049, 257-190-050, 257-190-051, 257-190-052
2. CONTRA COSTA SUBDIVISION NUMBER: TRACT 9731
3. ADDRESS: 1600 SCHOOL STREET
   1620 SCHOOL STREET
   1640 SCHOOL STREET
   1660 SCHOOL STREET
4. SITE AREA (GROSS): 2.95 AC± (128,474 SF±)
   SITE AREA (NET): 2.46 AC± (107,046 SF±)
   LESS
   22' WIDTH ACCESS ROADS: 0.50 AC± (21,701 SF±)
5. EXISTING ZONING: MIXED OFFICE/RESIDENTIAL (MCSP-OR)
   PROPOSED ZONING: MIXED OFFICE/RESIDENTIAL (MCSP-OR)
6. EXISTING LAND USE: OFFICES
   PROPOSED LAND USE: RESIDENTIAL
7. EXISTING CONTOUR INTERVAL: 1'
   PROPOSED CONTOUR INTERVAL: 1'
8. NUMBER OF RESIDENTIAL UNITS: 49 MULTI-FAMILY CONDOMINIUM UNITS (ATTACHED)
9. GROSS DENSITY: 16.61 DU/AC
10. EXISTING PARCELS: 4
11. PROPOSED LOTS: 1
12. EXISTING STRUCTURES: ALL EXISTING ONSITE STRUCTURES TO BE REMOVED.
13. IMPERVIOUS SURFACES (SF)
    EXISTING
    BUILDING ROOF: 25,510
    PAVEMENT: 40,700
    PROPOSED
    BUILDING ROOF: 45,296
    PAVEMENT: 25,069
    SIDEWALKS/WALKWAYS: 5,980
14. PERCENTAGE IMPERVIOUS OF LOT (GROSS):
    EXISTING
    PARCEL A: 43%
    PARCEL B: 52%
    PARCEL C: 66%
    PARCEL D: 47%
    PROPOSED: 59%
15. PROPOSED LOT COVERAGE: 42% (BUILDING SF/NET AREA)
16. MRP C.3 COMPLIANCE: THE PROJECT WILL UTILIZE THE CONTRA COSTA COUNTY NEW REGIONAL ALTERNATIVE COMPLIANCE (RAC) SYSTEM FOR STORMWATER TREATMENT COMPLIANCE.
17. EXISTING UTILITIES: ALL EXISTING ONSITE UTILITIES TO BE REMOVED UNLESS OTHERWISE NOTED.
18. UTILITIES
    WATER: EAST BAY MUNICIPAL DISTRICT (EBMUD)
    SANITARY SEWER: CENTRAL CONTRA COSTA SANITARY DISTRICT (CENTRAL SAN)
    STORM DRAIN: TOWN OF MORAGA
    GAS AND ELECTRIC: PG&E
    TELEPHONE: AT&T
19. FLOOD ZONE: ZONE X, AREA OF MINIMAL FLOOD HAZARD
    (FEMA MAP NUMBER: 06013C0409F, DATED JUNE 16, 2009)
20. STREETS: ALL STREETS AND DRIVE AISLES ON-SITE SHALL BE PRIVATE WITH PUBLIC ACCESS EASEMENT WHERE NOTED.
21. PARCEL EASEMENTS: ALL ONSITE PRIVATE STREETS SHALL INCLUDE AN EVAE, PUE AND SSE.
22. LANDSCAPING/LIGHTING: ALL LANDSCAPING AND LIGHTING WITHIN THE PROJECT BOUNDARY WILL BE PRIVATE AND PRIVATELY MAINTAINED.
23. RETAINING WALLS: ALL INTERNAL PROJECT WALLS WILL BE PRIVATE AND PRIVATELY OWNED.
24. PHASING: PROJECT MAY BE PHASED AND HAVE MULTIPLE FINAL MAPS.
25. CONDOMINIUM MAP: A CONDOMINIUM MAP WILL BE RECORDED FOR LOT 1 AND THE SUBDIVISION IS A CONDOMINIUM PROJECT PROJECT AS DEFINED IN SECTIONS 9125 AND 9285 ET SEQ- OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND FILED PURSUANT TO THE SUBDIVISION MAP ACT. THE TOTAL NUMBER OF CONDOMINIUM DWELLINGS UNITS SHALL BE NO MORE THAN 49 RESIDENTIAL CONDOMINIUM UNITS FOR LOT 1.

LEGEND

	EXISTING PROPERTY LINE
	EXISTING LOT LINE
	EXISTING ADJOINER
	EXISTING RIGHT OF WAY LINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	CREEK STRUCTURE SETBACK LINE
EBMUD	EAST BAY MUNICIPAL UTILITY DISTRICT EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
PAE	PUBLIC ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
R/W	RIGHT OF WAY
SSE	CENTRAL SANITARY SEWER DISTRICT EASEMENT

LINE TABLE		
NO	BEARING	LENGTH
L1	N12°30'32"E	3.30'

SHEET INDEX

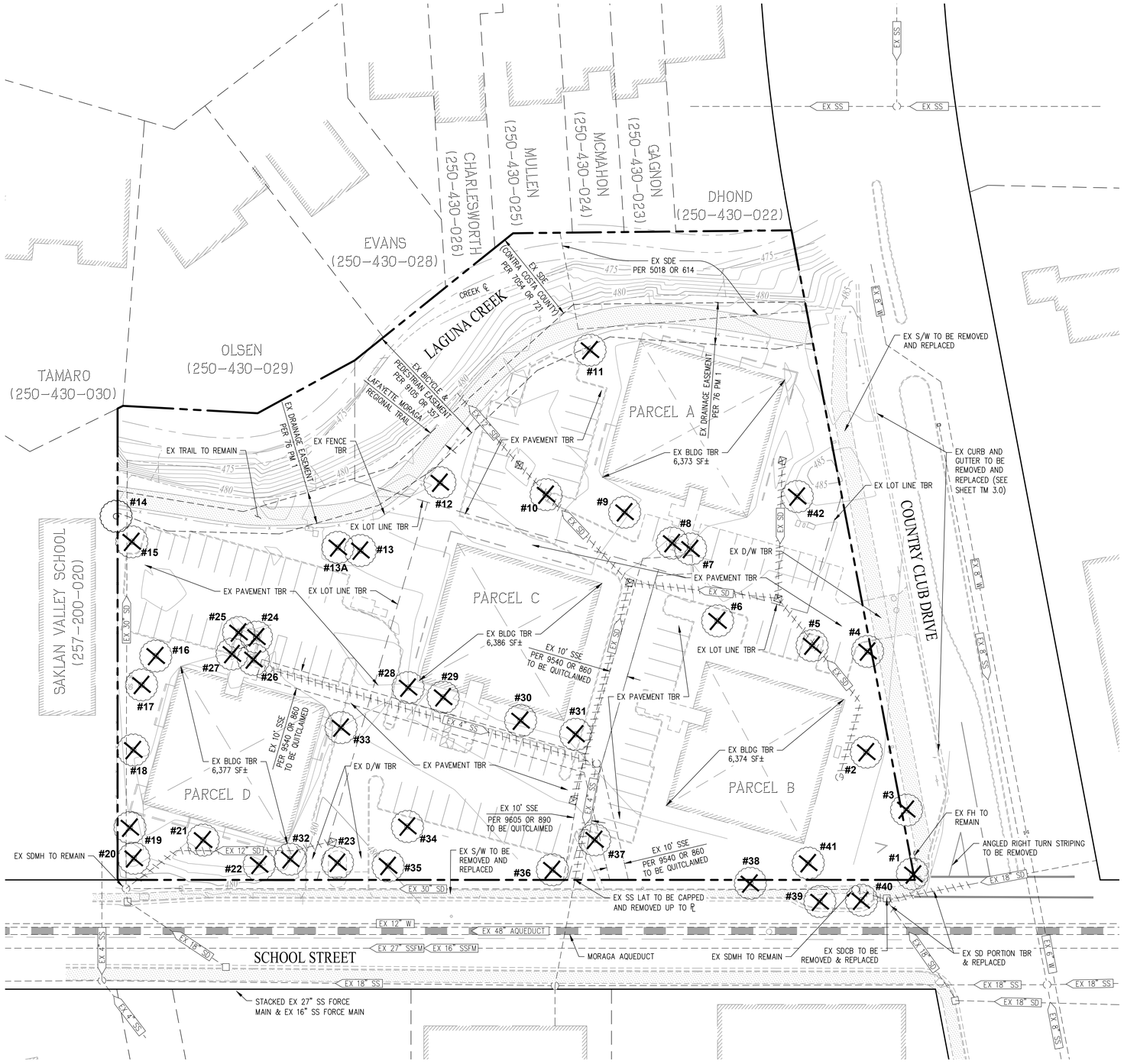
SHEET NO.	SHEET TITLE
TM 1.0	VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES
TM 2.0	EXISTING CONDITIONS & DEMOLITION PLAN
TM 3.0	PRELIMINARY SITE PLAN
TM 3.1	CREEK STRUCTURE SETBACK ANALYSIS
TM 4.0	PRELIMINARY GRADING & DRAINAGE PLAN
TM 5.0	PRELIMINARY UTILITY PLAN
TM 6.0	FIRE ACCESS PLAN
TM 6.1	FIRE ACCESS TURNING TEMPLATE

0 30 60 90

SCALE: 1" = 30'

cbg CIVIL ENGINEERS ▪ SURVEYORS ▪ PLANNERS
SAN RAMON ▪ (925) 866-0322
ROSEVILLE ▪ (916) 788-4456
WWW.CBANDG.COM

TM 1.0



LEGEND

- EXISTING PROPERTY LINE
- EXISTING LOT LINE
- EXISTING ADJOINER
- EXISTING RIGHT OF WAY LINE
- EXISTING CREEK STRUCTURE SETBACK LINE
- EXISTING UTILITY TO BE REMOVED
- EX 30" SD — EXISTING STORM DRAIN
- EX 48" SD — EXISTING STORM DRAIN AQUEDUCT
- EX 18" SS — EXISTING SANITARY SEWER
- EX 27" SSFM — EXISTING SANITARY SEWER FORCE MAIN
- EX 12" W — EXISTING DOMESTIC WATER MAIN
- EXISTING STORM DRAIN CATCH BASIN
- EXISTING STORM DRAIN FIELD INLET
- EXISTING MANHOLE
- EXISTING BLOW-OFF VALVE
- #38 EXISTING TREE TO REMAIN
- #41 EXISTING TREE TO BE REMOVED
- 485 EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MINOR CONTOUR (1' INTERVAL)

NOTE: ALL EXISTING ON-SITE UTILITIES ARE TO BE REMOVED UNLESS OTHERWISE NOTED. LOCATIONS ARE APPROXIMATE AND SHOWN FOR REFERENCE ONLY, SUBJECT TO FIELD VERIFICATION.

EXISTING TREE INVENTORY

TAG NO.	SPECIES	DIAMETER AT BREAST HEIGHT (INCHES)
1	RED MAPLE	20.1
2	RED MAPLE	14.3
3	HONEY LOCUST	12.5
4	CRAPEMYRTLE	4.2
5	CRAPEMYRTLE	5.2
6	CRAPEMYRTLE	6.1
7	SYCAMORE TREE	15
8	SYCAMORE TREE	10.7
9	CRAPEMYRTLE	3
10	MEXICAN FAN PALM	20
11	REDWOOD TREE	44.8
12	REDWOOD TREE	38.6
13	REDWOOD TREE	38.2
14	REDWOOD TREE	39.2
15	REDWOOD TREE	49.7
16	REDWOOD TREE	48
17	HONEY LOCUST	9.5
18	REDWOOD TREE	50.8
19	REDWOOD TREE	44.2
20	REDWOOD TREE	47.5
21	HONEY LOCUST	10
22	HONEY LOCUST	8.5
23	HONEY LOCUST	7
24	CRAPEMYRTLE	5.4
25	CRAPEMYRTLE	5.4
26	CRAPEMYRTLE	3
27	CRAPEMYRTLE	4.2
28	REDWOOD TREE	38.5
29	REDWOOD TREE	42.3
30	REDWOOD TREE	18.5
31	REDWOOD TREE	19.5
32	JAPANESE MAPLE (MULTI-TRUNK)	8/10/9/8
33	JAPANESE MAPLE (MULTI-TRUNK)	5/6/6/5/7/6
34	CALIFORNIA JUNIPER	39
35	HONEY LOCUST	5.8
36	WHITE ALDER	25
37	HONEY LOCUST	11.3
38	CHERRY TREE (MULTI-TRUNK)	12/15
39	MEXICAN FAN PALM	19.7
40	COTTONWOOD TREE	42
41	CALIFORNIA JUNIPER	12/16/10
42	HONEY LOCUST	3.3

NOTE: SEE ARBORIST REPORT PREPARED BY BOB PERALTA ARBOR CONSULTING, DATED FEBRUARY 11, 2023, FOR ADDITIONAL DETAILS.

ABBREVIATIONS

BLDG	BUILDING
D/W	DRIVEWAY
EX	EXISTING
FH	FIRE HYDRANT
LAT	LATERAL
S/W	SIDEWALK
TBR	TO BE REMOVED

EXISTING CONDITIONS & DEMOLITION PLAN

TM 2.0

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

JUNE 19, 2026 JOB NO.: 3346-010

MOFD STAMP

0 30 60 90

SCALE: 1" = 30'

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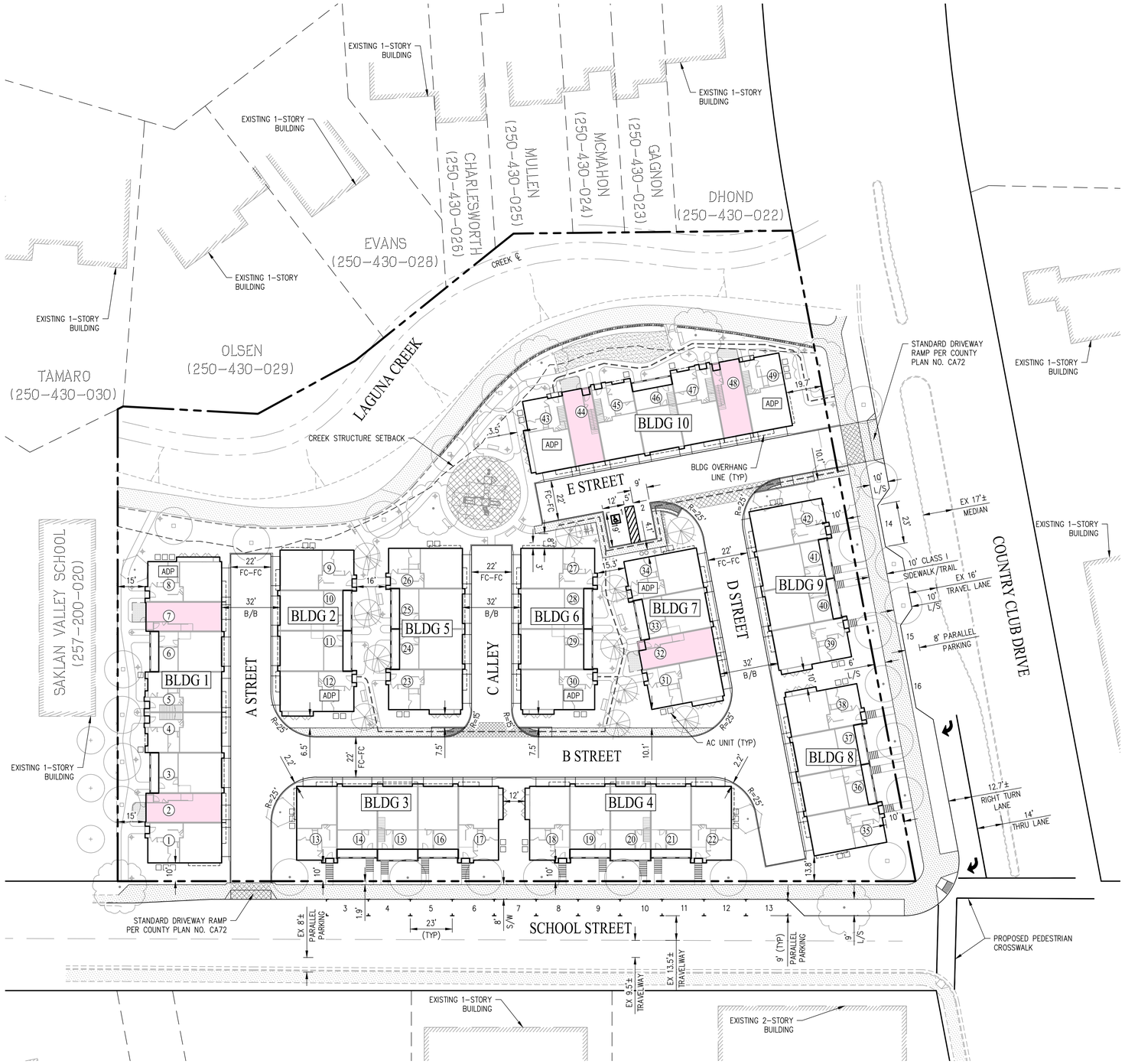
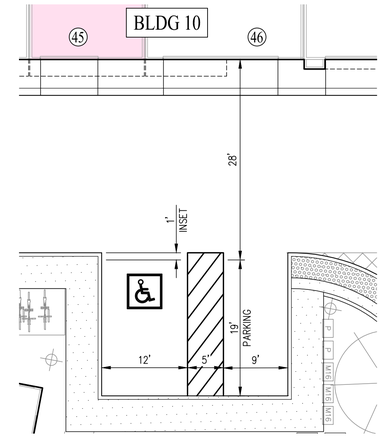


LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER
- EXISTING RIGHT OF WAY LINE
- CREEK STRUCTURE SETBACK LINE
- BUILDING OVERHANG LINE
- ACCESSIBLE PATH OF TRAVEL
- PROPOSED SIDEWALK
- BLDG 1 — PROPOSED BUILDING NUMBER
- (1) — PROPOSED UNIT NUMBER
- BELOW MARKET-RATE UNIT (MODERATE)
- ACCESSIBLE PARKING STALL
- 1 — PARKING STALL COUNT
- BLDG — BUILDING
- D/W — DRIVEWAY
- EX — EXISTING
- L/S — LANDSCAPE
- P — PROPERTY LINE
- PAE — PUBLIC ACCESS EASEMENT
- S/W — SIDEWALK

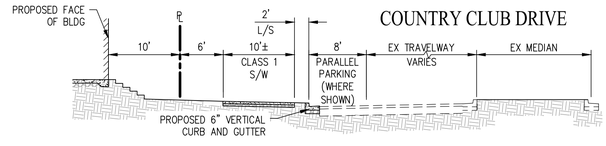


ONSITE GUEST PARKING DETAIL
SCALE: 1" = 10'

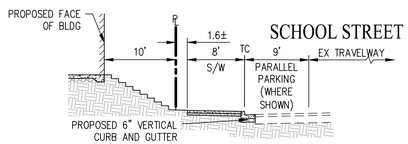
PROVIDED PARKING SUMMARY

DESCRIPTION	STALLS
COVERED GARAGE	98
ONSITE GUEST(1)	2
OFFSITE GUEST(2)	14
TOTAL	114

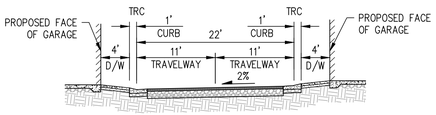
NOTES:
(1) ONSITE GUEST PARKING INCLUDES ONE (1) ADA STALL.
(2) PARKING STALL DESIGN AND LAYOUT SHALL BE PER TOWN OF MORAGA MUNICIPAL CODE 8.76.050.



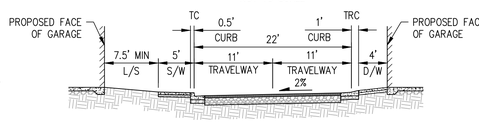
COUNTRY CLUB DRIVE SECTION
NOT TO SCALE



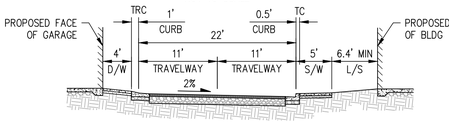
SCHOOL STREET FRONTAGE SECTION
NOT TO SCALE



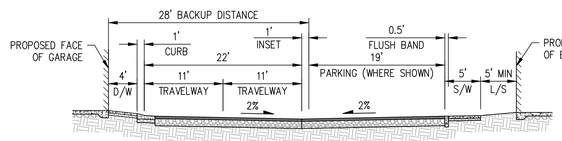
TYPICAL 'A' & 'D' STREET & 'C' ALLEY SECTION
NOT TO SCALE



TYPICAL 'B' STREET SECTION
NOT TO SCALE



TYPICAL 'E' STREET SECTION
NOT TO SCALE



TYPICAL 'E' STREET W/ PARKING SECTION
NOT TO SCALE

NOTE: SEE ARCHITECTURE PLANS FOR ROOF PLANS.

PRELIMINARY SITE PLAN

TM 3.0

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

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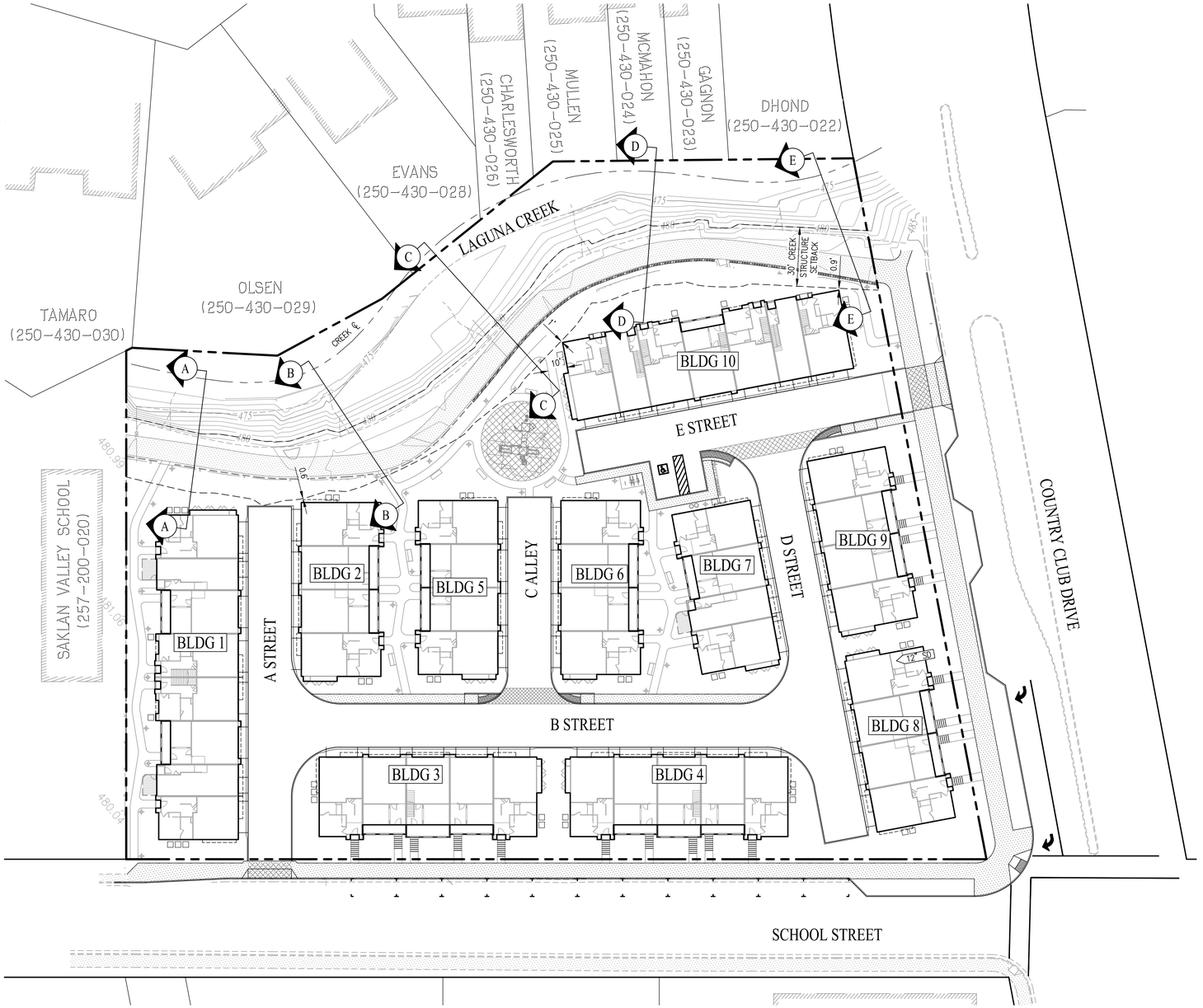
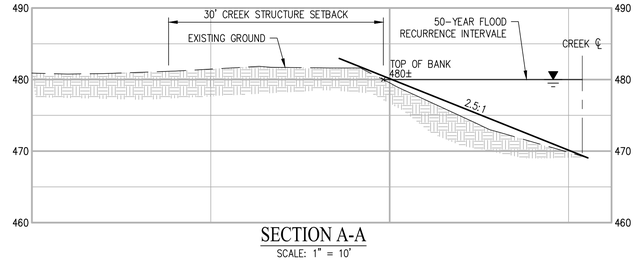
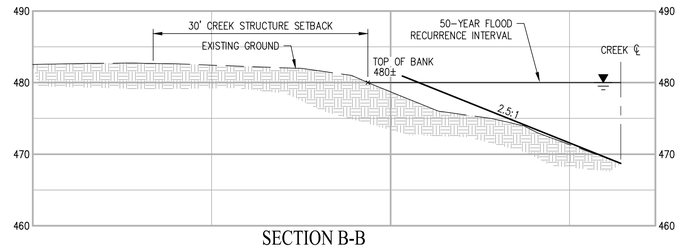
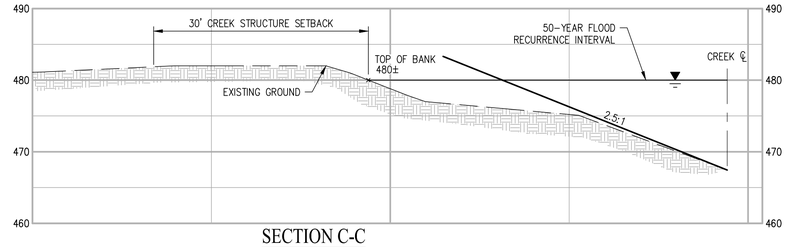




SECTION A-A
SCALE: 1" = 10'

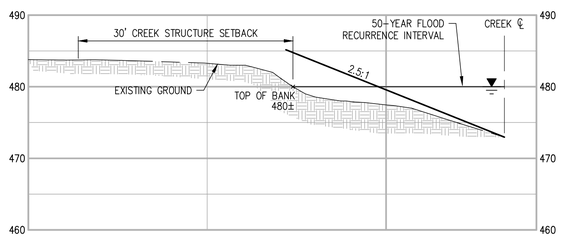


SECTION B-B
SCALE: 1" = 10'



SECTION C-C
SCALE: 1" = 10'

SECTION D-D
SCALE: 1" = 10'



SECTION E-E
SCALE: 1" = 10'

NOTES

1. CREEK STRUCTURE SETBACK PER CONTRA COSTA COUNTY MUNICIPAL CODE 914-14.012.
2. TOP OF BANK PER CONTRA COSTA COUNTY MUNICIPAL CODE 914-2.010 AND 914-14.012(b).
3. BENCHMARK: CONTRA COSTA COUNTY BENCHMARK 0833. C.C.CO. BRASS TABLET SET IN N.E. CORNER OF CONCRETE BRIDGE 100' N. OF INTERSECTION OF MORAGA HIGHWAY AND SAINT MARY'S ROAD.
   ELEVATION: 487.505' (NVD29).
4. 50-YEAR FLOOD RECURRENCE INTERVAL PER FEMA FLOOD INSURANCE STUDY NUMBER 06013CV004B, DATED JUNE 16, 2009, REVISED SEPTEMBER 30, 2015, CONVERTED FROM NAVD88 TO NVD29 TO MATCH TOWN BENCHMARK 0833.

CREEK STRUCTURE SETBACK ANALYSIS

TM 3.1

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

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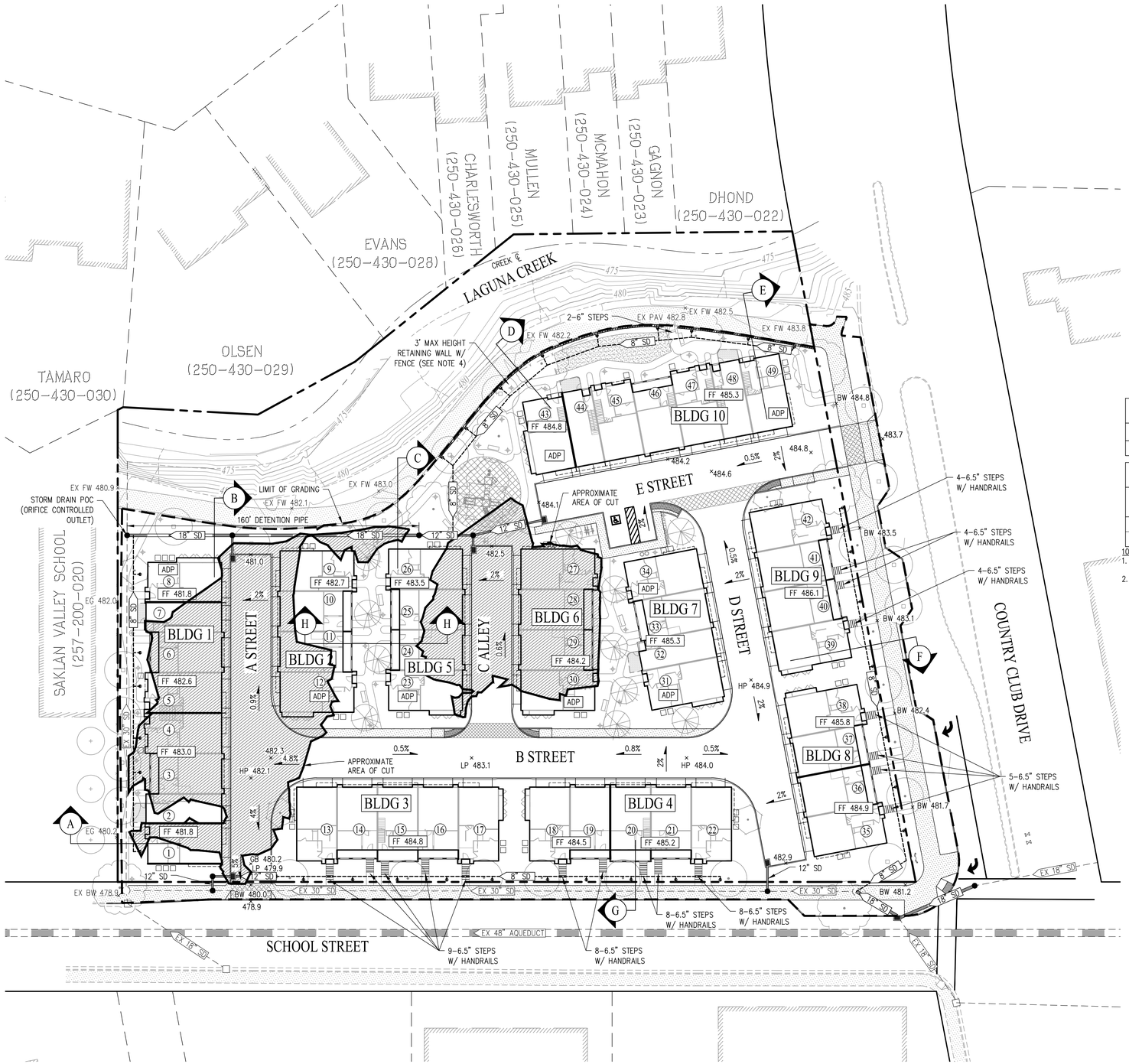
F:\3346-010\ACAD\TM\TM3.1.DWG



LEGEND

- EXISTING PROPERTY LINE
- EXISTING CREEK STRUCTURE SETBACK LINE
- APPROXIMATE LIMIT OF GRADING
- APPROXIMATE CUT/FILL DELINEATION
- APPROXIMATE AREA OF CUT
- RETAINING WALL WITH FENCE
- EXISTING STORM DRAIN
- EXISTING STORM DRAIN AQUEDUCT
- STORM DRAIN
- STORM DRAIN
- STORM DRAIN MANHOLE
- STORM DRAIN FIELD INLET
- STORM DRAIN AREA DRAIN
- STORM DRAIN BUBBLE-UP
- BIORETENTION
- FLOW-THROUGH PLANTER
- FINISHED FLOOR SPLIT/DEEPENED FOOTING
- PROPOSED SLOPE
- SPOT ELEVATION
- EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MINOR CONTOUR (1' INTERVAL)

ABBREVIATIONS

ADP	ADAPTABLE
BLDG	BUILDING
BW	BACK OF WALK
EG	EXISTING GROUND
EX	EXISTING
FF	FINISHED FLOOR ELEVATION
FW	FRONT OF WALK
HP	HIGH POINT
L/S	LANDSCAPE
MIN	MINIMUM
POC	POINT OF CONNECTION
RET	RETAINING WALL
S/W	SIDEWALK
TB	TOP OF BIORETENTION
TSM	TOP OF SOIL MIX

ESTIMATED EARTHWORK SUMMARY(1)

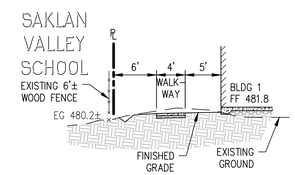
DESCRIPTION	CUT (CY)	FILL (CY)	NET (CY)(2)
ROUGH GRADING	1,000	5,600	4,600 (F)

EARTHWORK NOTES:
1. ESTIMATED EARTHWORK SUMMARY FOR ROUGH GRADING OF PADS AND STREETS. INCLUDES BIORETENTION SUBGRADING; UTILITY SPOILS NOT INCLUDED.
2. APPROXIMATELY 4,600 CY OF SOIL TO BE IMPORTED TO SITE. SUBJECT TO FINAL DESIGN.
3. RETAINING WALLS TO BE HELICAL PIER; SUBJECT TO FINAL DESIGN. SEE LANDSCAPE PLANS FOR PROPOSED FENCING.
4. SEE ARCHITECTURE PLANS FOR ROOF PLANS.

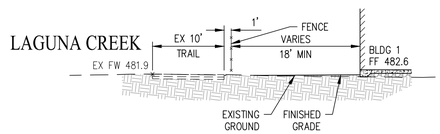
10-YEAR STORM ANALYSIS(1)(2)

DESCRIPTION	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	C	INTENSITY (IN/HR)	AREA (AC)	Q (CFS)
EXISTING CONDITIONS	66,210	37,312	0.68	2.70	2.38	4.39
POST DEVELOPMENT	76,345	27,177	0.79	2.70	2.38	4.76

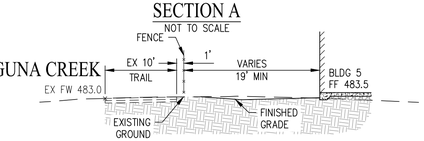
10-YEAR STORM ANALYSIS NOTES:
1. APPROXIMATELY 2.38 ACRES OF THE TOTAL 2.95 SITE IS TO BE RE-DEVELOPED. THE REMAINING 0.6 ACRES IS MADE UP OF THE EXISTING TRAIL AND LAGUNA CREEK.
2. POST PROJECT 10-YEAR PEAK STORM MITIGATION RESULTS IN 160 LINEAR FEET OF 18-INCH STORM DRAIN PIPE WITH ORIFICE CONTROLLED OUTLET TO PRE-PROJECT CONDITIONS.



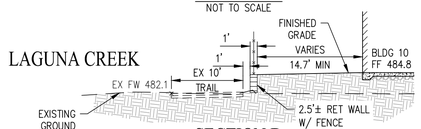
SECTION A
NOT TO SCALE



SECTION B
NOT TO SCALE



SECTION C
NOT TO SCALE



SECTION D
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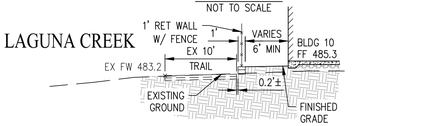

SECTION E
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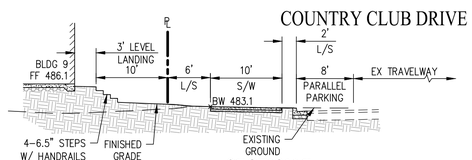
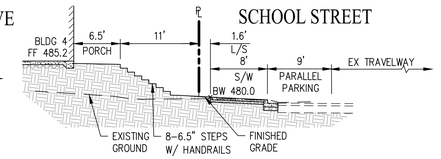
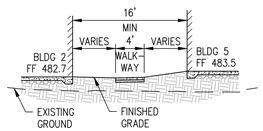


SECTION F
NOT TO SCALE



SECTION G
NOT TO SCALE



SECTION H-H
NOT TO SCALE

PRELIMINARY GRADING & DRAINAGE PLAN

TM 4.0

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TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

JUNE 19, 2026 JOB NO.: 3346-010

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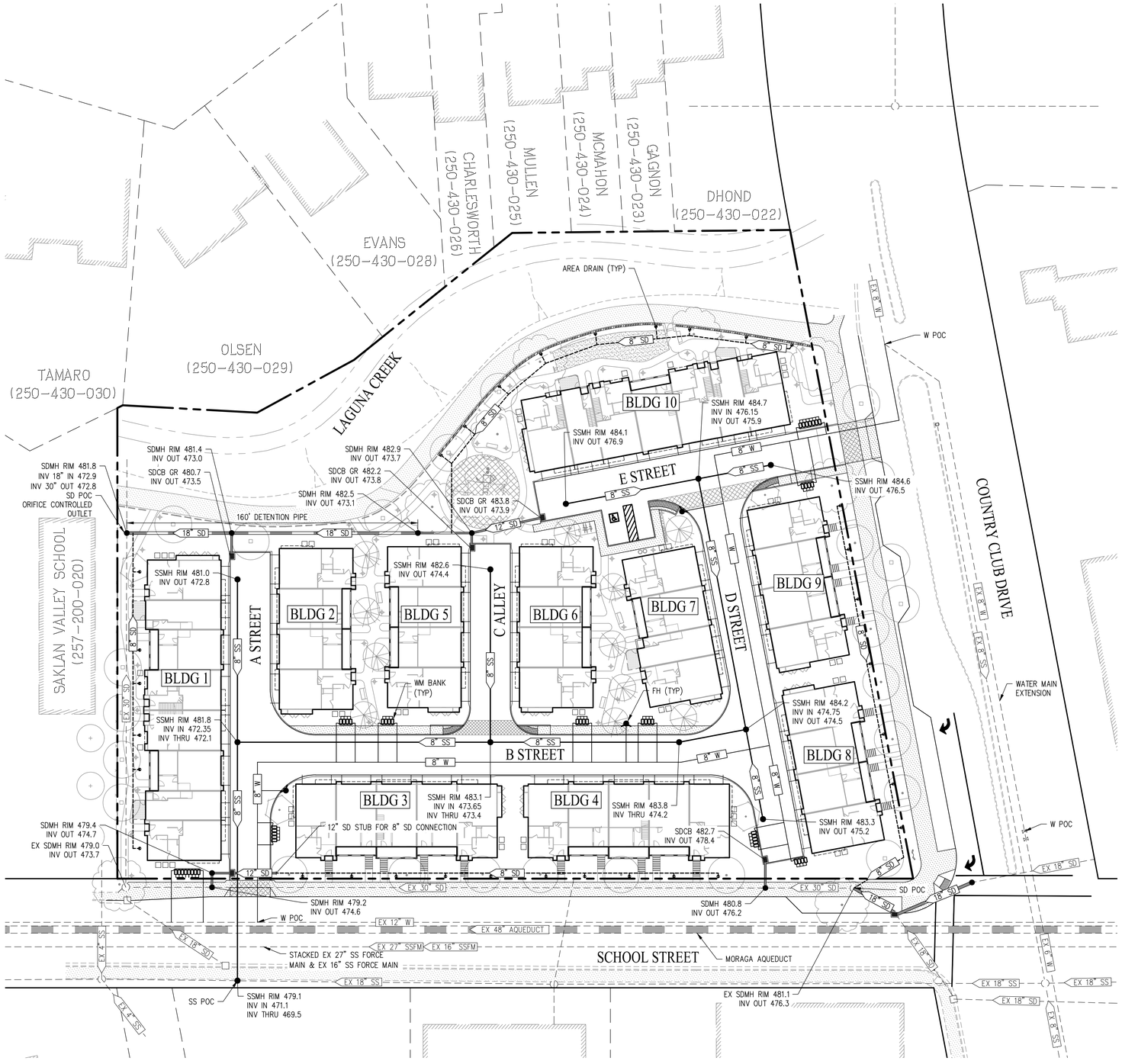
0 30 60 90
SCALE: 1" = 30'



LEGEND

- EXISTING PROPERTY LINE
- EX 30" SD — EXISTING STORM DRAIN
- EX 48" SD — EXISTING STORM DRAIN AQUEDUCT
- EX 18" SS — EXISTING SANITARY SEWER
- EX 27" SSFM — EXISTING SANITARY SEWER FORCE MAIN
- EX 12" W — EXISTING DOMESTIC WATER MAIN
- EXISTING STORM DRAIN CATCH BASIN
- EXISTING STORM DRAIN FIELD INLET
- EXISTING MANHOLE
- EXISTING BLOW-OFF VALVE
- 12" SD — STORM DRAIN
- 8" SD — STORM DRAIN
- 8" SS — SANITARY SEWER
- W — DOMESTIC WATER MAIN
- STORM DRAIN MANHOLE
- STORM DRAIN FIELD INLET
- STORM DRAIN AREA DRAIN
- STORM DRAIN BUBBLE-UP
- WATER METER
- FIRE HYDRANT
- BIORETENTION
- FLOW-THROUGH PLANTER

NOTES:

1. ALL SANITARY SEWER DESIGN TO CONFORM WITH CENTRAL SAN STANDARD SPECIFICATIONS. PROPOSED PIPE TO BE SDR-26 PVC UNLESS OTHERWISE NOTED. ALL UNITS TO HAVE INDIVIDUAL LATERALS. SUBJECT TO FINAL DESIGN.
2. ALL UNITS TO BE INDIVIDUALLY METERED AND UTILIZE NFPA 13D COMBINATION FIRE SERVICE SYSTEM. SUBJECT TO FINAL DESIGN.
3. ALL UTILITY POINTS OF CONNECTION ARE SUBJECT TO FIELD VERIFICATION AND FINAL DESIGN.

PRELIMINARY UTILITY PLAN

TM 5.0

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

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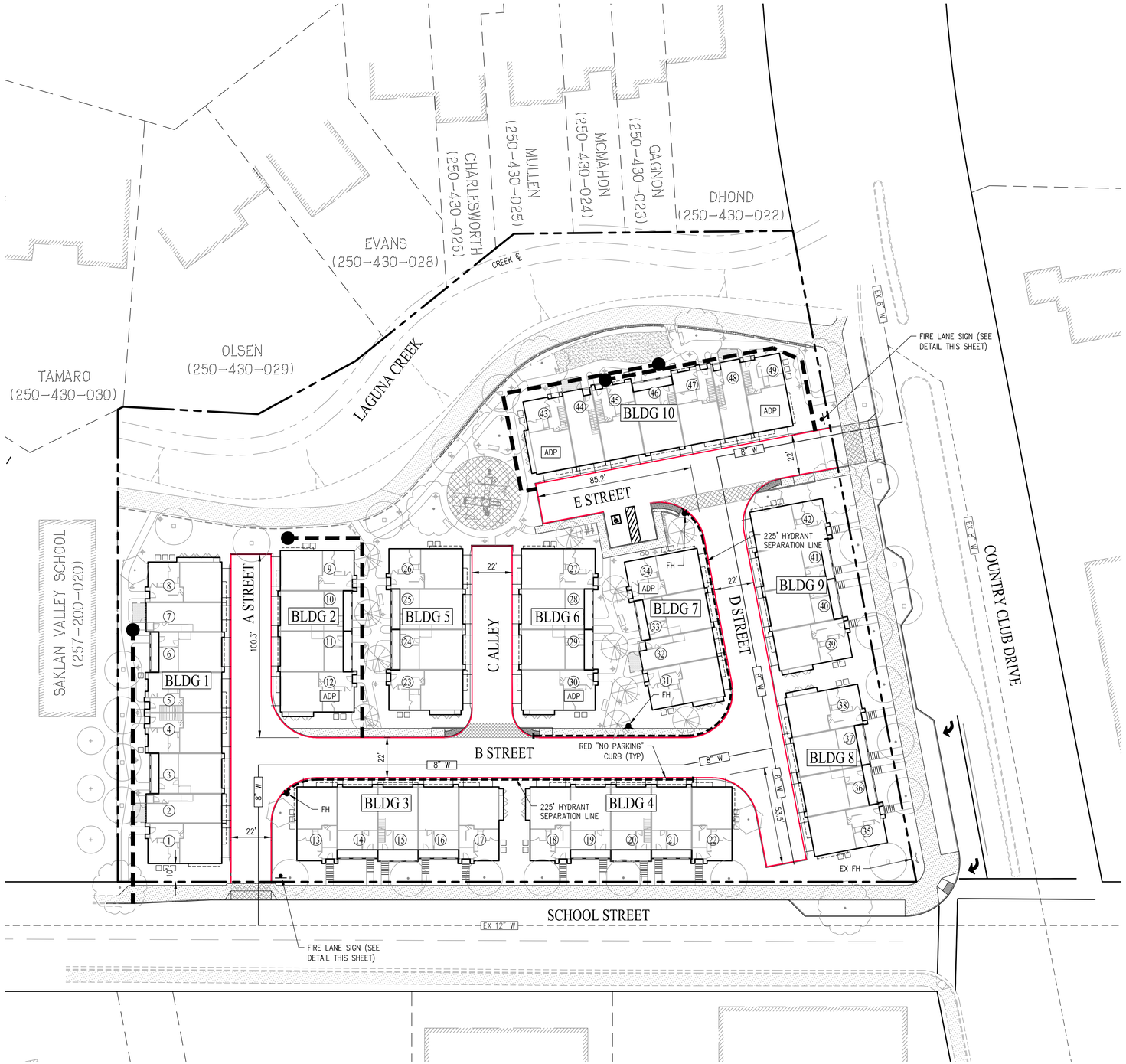


LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER
- EXISTING RIGHT OF WAY LINE
- EXISTING CREEK STRUCTURE SETBACK LINE
- RED "NO PARKING" CURB PAINT
- PROPOSED SIDEWALK
- BLDG 1 — PROPOSED BUILDING NUMBER
- (1) — PROPOSED UNIT NUMBER
- ACCESSIBLE PARKING STALL
- W — DOMESTIC WATER MAIN
- FIRE HYDRANT
- HOSE PULL (150' MAX)
- FIRE HYDRANT SEPARATION LINE (225')
- FIRE LANE SIGN

NOTE: ALL ON-SITE STREETS TO BE FIRE LANES, NO PARKING ALLOWED, EXCEPT IN DESIGNATED PARKING STALLS.

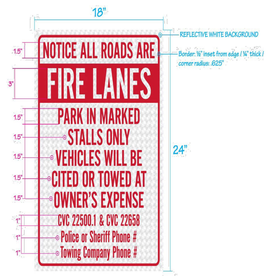
FIRE HYDRANT REQUIREMENTS[1]

1.	BUILDING CONSTRUCTION TYPE	V-B
2.	BUILDING SQUARE FOOTAGE (GROSS)(SF)	
	BUILDING 200 (BLDG'S 2, 6, 8, & 9)	10,250
	BUILDING 300 (BLDG'S 5 & 7)	10,050
	BUILDING 400 (BLDG'S 3 & 4)	12,696
	BUILDING 500 (BLDG 10)	17,570
	BUILDING 600 (BLDG 1)	20,016
3.	BUILDING FIRE SPRINKLER SYSTEM	NFPA 13D
4.	FIRE-FLOW CALCULATION (TABLE B105.1(1))	
	AREA (SF)	20,016
	FIRE FLOW (GPM)	1,875[2]
	FLOW DURATION (HOURS)	1
5.	MINIMUM NUMBER OF HYDRANTS (TABLE C102.1)	2
6.	AVERAGE SPACING BETWEEN HYDRANTS (FT)	450
7.	MAXIMUM DISTANCE FROM STREET/FRONTAGE (FT)	225

NOTES:

(1) PER THE 2025 CALIFORNIA FIRE CODE APPENDIX B AND APPENDIX C.

(2) FOR TYPE V-B CONSTRUCTIONS BETWEEN 18,001-20,600 SF, FIRE FLOW SHALL BE 3,750 GPM PER TABLE B105.1(2), HOWEVER, ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4, AND TOWNHOUSES EQUIPPED WITH A SPRINKLER SYSTEMS SHALL USE HALF THIS VALUE (1,875 GPM) PER TABLE B105.1(1).



FIRE LANE SIGN
NOT TO SCALE

FIRE ACCESS PLAN

TM 6.0

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

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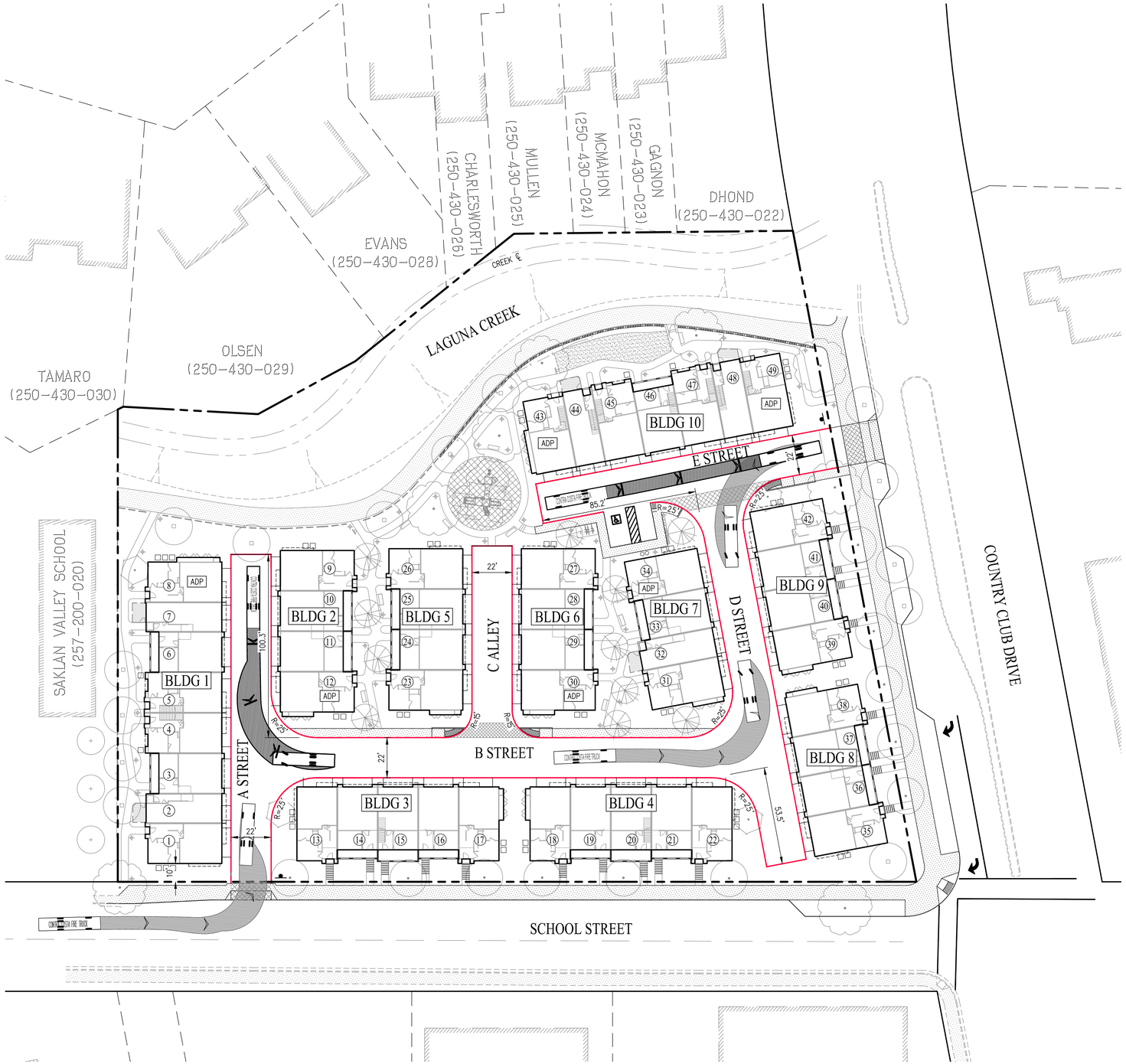
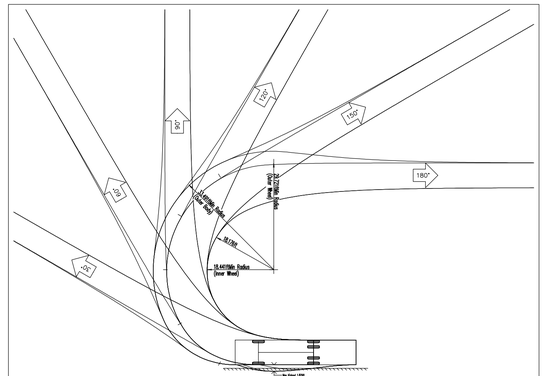
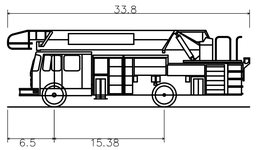




CONTRA COSTA FIRE TRUCK TURNING TEMPLATE

NOT TO SCALE



Overall Length	33.800ft
Overall Width	6.910ft
Overall Body Height	10.698ft
Min Body Ground Clearance	1.129ft
Track Width	6.920ft
Lock-to-lock time	6.00s
Max Wheel Angle	39.20°

CONTRA COSTA COUNTY FIRE TRUCK

NOT TO SCALE

FIRE ACCESS TURNING TEMPLATE

TM 6.1

1600 SCHOOL STREET | TRACT 9731 | VESTING TENTATIVE MAP

TOWN OF MORAGA, CONTRA COSTA COUNTY, CALIFORNIA

JUNE 19, 2026 JOB NO.: 3346-010

MOFD STAMP

0 30 60 90

SCALE: 1" = 30'

cbg CIVIL ENGINEERS ▪ SURVEYORS ▪ PLANNERS
SAN RAMON ▪ (925) 866-0322
ROSEVILLE ▪ (916) 788-4456
WWW.CBANDG.COM

PROGRAM LEGEND

1. PEDESTRIAN CONCRETE PAVING
2. CLUSTER MAILBOXES & PARCEL BOXES
3. PLAYGROUND AMENITY SPACE
   PLAY STRUCTURE (AGES 2-12) W/ RUBBER MAT SAFETY SURFACING
4. WOOD & METAL BENCH - 6 FT. LENGTH
5. CONTEMPORARY TRASH & RECYCLING RECEPTACLES
6. CONTEMPORARY BIKE RACKS (6 PARKING SPOTS TOTAL)
7. BOLLARD LIGHT (COMPLIES W/ DARK SKY REQMTS.).
   SEE DETAIL CUT-SHEET #1 ON SHEET L-2
8. (E) SIDEWALK TO REMAIN
9. EXISTING 6' HT. SOLID WOOD FENCE @ PROPERTY LINE TO REMAIN, TYP.
10. FLEXIBLE LAWN SPACE FOR INFORMAL PLAY (SOD)
11. EAST BAY REGIONAL PARKS WOOD RAIL FENCE
12. SHRUB AND GROUNDCOVER PLANTINGS TYPICAL OF ALL PLANTING AREAS ON-SITE. SEE PRELIM. PLANT MATERIAL PALETTE ON SHEET L-2
13. STAIRCASE ENTRY TO REGIONAL TRAIL, INCORPORATED INTO RETAINING WALL. SEE CIVIL DRAWINGS
14. DOG WASTE BAG DISPENSER
15. NOT USED
16. EXISTING PARKWAY STRIP TO BE IMPROVED WITH PARALLEL PARKING STALLS
17. EXISTING VEGETATION @ CREEK TO REMAIN
18. POSSIBLE ADDITIONAL TREES FOR SCREENING TO BE COORDINATED AND PLANTED ON THE ADJACENT PROPERTY PER ON-GOING DISCUSSION WITH APPLICANT AND ADJACENT PROPERTY OWNER
19. PRIVATE OPEN SPACE GROUND LEVEL PATIOS AT ALL PLAN 1s (7 FT MIN. X 11 FT, MINIMUM 72 SQ. FT.) WITH DECORATIVE PEBBLE PAVING ENCLOSED WITH A 36" HT. ORNAMENTAL METAL TUBULAR LOW FENCE AND MATCHING GATE.
20. SPECIAL PAVING AT PEDESTRIAN/VEHICULAR CROSSINGS (DECORATIVE COLORED STAMPED ASPHALT)

PRELIMINARY TREE PLANT MATERIAL KEY

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS *	FIRE RESIS.	APPEN. B
	STREET TREES						
	Arbutus x. 'Marina'	Strawberry Tree	15 GAL-STD.	SEE PLANS	L	X	X
	Pyrus calleryana 'Bradford'	Bradford Pear	15 GAL-STD.	SEE PLANS	M	X	X
	Prunus c. 'Krauter Vesuvius'	Flowering Plum	15 GAL-STD.	SEE PLANS	L	X	X
	Pistachia chinensis 'Keith Davey'	Chinese Pistache	15 GAL-STD.	SEE PLANS	L	X	X
	Quercus agrifolia	Coast Live Oak	15 GAL-STD.	SEE PLANS	VL	X	X

NOTES:
1. * - WUCOLS V RATING IS AN INDUSTRY STANDARD FOR IRRIGATION WATER NEEDS OF LANDSCAPE PLANTINGS IN SPECIFIC CALIFORNIA REGIONS. THE MAJORITY OF PLANTS FOR THIS REGION ARE VERY LOW (VL) TO Medium (M) WATER REQUIREMENTS AND PLANTED IN SPECIFIC HYDROZONES. ABBREVIATIONS FOR WUCOLS WATER NEEDS ARE: VL - VERY LOW, L - LOW, M - MEDIUM, H - HIGH.
2. ALL PROPOSED PLANT SPECIES ARE CONSIDERED NONINVASIVE, FIRE-RESISTANT, AND MOST SELECTED FROM THE TOWN OF MORAGA DESIGN GUIDELINES "APPENDIX B" PLANT LISTS.
3. ALL FIRE RESISTANT PLANTS SELECTED FROM LOCAL BAY AREA INDUSTRY STANDARD LITERATURE.

SCHOOL STREET TOWNS

1600 SCHOOL STREET, MORAGA, CALIFORNIA

PRELIMINARY LANDSCAPE PLAN

NOT FOR CONSTRUCTION

LICENSED LANDSCAPE ARCHITECT · SCOTT E. FEURER No. 4188 · STATE OF CALIFORNIA · RENEWAL 08/31/2027 · DATE

0 10 20 40 FT.

DATE: 06/05/26
JOB# 25025.01

ENVIRONMENTAL FORESIGHT, INC.
Landscape Architecture
2065 N. Broadway, Suite 203
Walnut Creek, CA 94596
T (925) 945-0300
www.environmentalforesight.com

L-1
1 of 2

595

PRELIMINARY SHRUB & GROUNDCOVER PLANT MATERIAL KEY

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS * (1)	NATIVE	APPENDIX B	FIRE RESIS.
SEE PRELIMINARY TREE PLANT MATERIAL KEY FOR TREE SPECIES ON SHEET L-1							
SHRUBS, GROUNDCOVERS & GRASSES							
Arctostaphylos 'John Dourley'	Manzanita	5 GAL	72" O.C.	L	X	X	X
Callistemon v. 'Little John'	Dwarf Bottle Brush	5 GAL	60" O.C.	L		X	X
Carpenteria californica 'Elizabeth'	Compact Bush Anemone	5 GAL	48" O.C.	L	X	X	X
Carex tumulicola	Foothill Sedge	1 GAL	24" O.C.	L	X	X	X
Ceanothus g. h. 'Yankee Point'	Wild Lilac	1 GAL	60" O.C.	L	X	X	X
Cistus 'Sunset'	Rockrose	5 GAL	48" O.C.	L		X	X
Coprosma k. 'Verde Vista'	Prostrate Mirror Plant	1 GAL	48" O.C.	L		X	X
Correa 'Dusky Bells'	Australian Fuchsia	1 GAL	42" O.C.	L		X	X
Cotoneaster d. 'Lowfast'	Bearberry Cotoneaster	5 GAL	60" O.C.	L		X	X
Erigeron karvinskianus	Santa Barbara Daisy	1 GAL	36" O.C.	L	X	X	X
Festuca glauca 'Elijah Blue'	Common Blue Fescue	1 GAL	12" O.C.	L		X	X
Lantana montevidensis	Trailing Lantana	1 GAL	48" O.C.	L		X	X
Lomandra longifolia 'Platinum Beauty'	Spiny Head Mat Rush	1 GAL	36" O.C.	L			X
Loropetalum chinense	White Fringe Flower	5 GAL	48" O.C.	L			X
Muhlenbergia rigens	Deer Grass	1 GAL	42" O.C.	L	X	X	X
Myoporum parvifolium	Myoporum	1 GAL	72" O.C.	L		X	X
Pittosporum tobira 'Wheeler's Dwarf'	Dwarf Tobira	5 GAL	72" O.C.	L		X	X
Rosa x. 'Carpet White'	White Carpet Rose	2 GAL	36" O.C.	M		X	X
Salvia microphylla 'Hot Lips'	Hot Lips Sage	1 GAL	36" O.C.	L		X	X
Salvia l. 'Santa Barbara'	Mexican Sage	1 GAL	48" O.C.	L	X	X	X
Trichostema lanatum	Woolly Bluecurls	5 GAL	48" O.C.	L	X		X
Westringia f. 'Mundi'	Lon Coast Rosemary	1 GAL	72" O.C.	L			X
ACCENT PLANT PALETTE							
Achillea x. 'Moonshine'	Fern Leaf Yarrow	1 GAL	30" O.C.	L	X		X
Anigozanthos x. 'Bush Gold'	Yellow Kangaroo Paw	1 GAL	30" O.C.	L			X
Lavandula a. 'Munstead'	Munstead Lavender	1 GAL	24" O.C.	L		X	X
Salvia g. 'Heatwave Breeze'	Heatwave Breeze Salvia	5 GAL	36" O.C.	L	X	X	X
Santolina r. 'Morning Mist'	Green Lavender Cotton	1 GAL	18" O.C.	L		X	X
Tulbaghia violacea	Society Garlic	1 GAL	30" O.C.	L		X	X
SHADE TOLERANT PLANT PALETTE							
Dietes vegeta	Fortnight Lily	1 GAL	42" O.C.	L		X	X
Heuchera x. 'Citronelle'	Chartreuse Leaf Coral Bells	1 GAL	18"O.C.	M		X	X
Iris douglasiana	Douglas Iris	1 GAL	18" O.C.	L	X	X	X
Liriope m. 'Silvery Sunproof'	Varigated Lily Turf	1 GAL	24" O.C.	M		X	X
Mahonia 'Golden Abundance'	California Holly Grape	5 GAL	48" O.C.	L	X	X	X
Nandina domestica 'Fire Power'	Dwarf Heavenly Bamboo	1 GAL	24" O.C.	L		X	X
Podocarpus m. 'Maki'	Shrubby Yew Pine	15 GAL	36" O.C.	M			X
Polystichum munitum	Western Sword Fern	5 GAL	36" O.C.	M	X	X	X
Ribes viburnifolium	Evergreen Currant	5 GAL	72" O.C.	L	X	X	X
Sarcococca ruscifolia	Sweet Box	5 GAL	48" O.C.	L			X
SCREEN/TALL SHRUBS (at AC UNITS & ADJACENT PROPERTY BOUNDARY)							
Arbutus u. 'Oktoberfest'	Stranberry Tree	15 GAL	60" O.C.	L			X
Lavatera maritima	Tree Mallow	5 GAL	72" O.C.	L			X
Nandina domestica	Heavenly Bamboo	5 GAL	36" O.C.	L		X	X
Pittosporum tobira 'Variegata'	Variegated Tobira	5 GAL	60" O.C.	L		X	X
Prunus c. 'Compacta' Column	Compact Column Cherry Laurel	15 GAL	48" O.C.	L			X
Rhamnus c. 'Eve Case'	Coffeeberry	5 GAL	72" O.C.	L	X	X	X
BIORETENTION PLANT PALETTE **							
Bouteloua gracilis 'Blonde Ambition'	Blonde Ambition Blue Grama	1 GAL	30" O.C.	L			
Chondropetalum tectorum	Cape Rush	5 GAL	36" O.C.	L			X
Festuca californica	California Fescue	1 GAL	18 O.C.	L	X		X
Juncus patens 'Elk's Blue'	California Gray Rush	1 GAL	24" O.C.	L		X	X
Mimulus aurantiacus	Sticky Monkey Flower	5 GAL	48" O.C.	VL	X	X	X
Salvia clevelandii 'Winnifred Gilman'	Cleveland Sage	5 GAL	42" O.C.	L	X		X

NOTES:
1. WUCOLS IV RATING IS AN INDUSTRY STANDARD FOR IRRIGATION WATER NEEDS OF LANDSCAPE PLANTINGS IN SPECIFIC CALIFORNIA REGIONS. THE MAJORITY OF PLANTS FOR THIS REGION ARE VERY LOW (VL) TO Medium (M) WATER REQUIREMENTS AND PLANTED IN SPECIFIC HYDROZONES. ABBREVIATIONS FOR WUCOLS WATER NEEDS ARE: VL - VERY LOW, L - LOW, M - MEDIUM, H - HIGH.
2. ** - PLANT MATERIAL FOR STORM WATER TREATMENT FACILITIES TO BE SELECTED FROM CONTRA COSTA COUNTY'S "STORM WATER C.3 GUIDEBOOK" APPENDIX B-1.
3. ALL PROPOSED PLANT SPECIES ARE CONSIDERED NONINVASIVE, FIRE-RESISTANT, AND MOST SELECTED FROM THE TOWN OF MORAGA DESIGN GUIDELINES "APPENDIX B" PLANT LISTS.
4. ALL PROPOSED PLANTING AREAS SHALL BE PLANTED WITH LAWN, SHRUBS, AND/OR GROUNDCOVERS SPACED TO ACHIEVE FULL PLANT COVERAGE AT MATURITY WITH DETAILED PLANTING PLANS PROVIDED AT BUILDING PERMITTING.
5. ALL FIRE RESISTANT PLANTS SELECTED FROM LOCAL BAY AREA INDUSTRY STANDARD LITERATURE.

PRELIMINARY - WELO WATER EFFICIENT LANDSCAPE WORKSHEET

Maximum Applied Water Allowance (MAWA)	Project Type	ETo	ETAF	Special Landscape Area (SLA)	Total Landscape Area including SLA	MAWA (gal/yr)
	Non-residential	44.7	0.45	-	29,693	370,310

MAWA =(ETo) * (0.62) *[(ETAF*LA) + ((1-ETAF) * SLA)].

Estimated Total Water Use (ETWU)	ETo	(SF * PF) / IE	SLA	ETWU (gal/yr)
	44.7	13,062	-	361,718

ETWU =(ETo) * (0.62) *[(PF*SF/IE) + SLA]

Difference between MAWA and ETWU: 8,592 — Project meets water budget.

ETWU Calculation (Regular landscape areas)	Zone #	Description	Select Irrigation	Square Feet (SF)	Plant Factor (PF)	Irrigation Efficiency (IE)	(SF * PF) / IE
	1	Low Water Plants	Drip	22,916	0.30	0.81	8,487
	2	Moderate Water Plants	Drip	5,929	0.50	0.81	3,660
	3	Lawn	Spray	848	0.80	0.75	905
		Landscape area (not including SLA)		29,693			13,052

ETWU Calculation Special Landscape Areas (SLA)	Description	Square Feet (SF)	Plant Factor / Irrigation Efficiency (PF/IE)	(SF * PF) / IE
	Edible planting area	0	1.0	-
	Multi-use and sports field turf area	0	1.0	-
	Area irrigated with recycled water	0	1.0	-
	Pool	0	1.0	-
	Total SLA	0		0

Total Landscape Area (including SLA) from ETWU Calculation	29,693

IRRIGATION/MWELO DESIGN NOTE

1. A FULLY-AUTOMATIC, HYDROZONED IRRIGATION SYSTEM DESIGN COMPLIANT WITH THE TOWN OF MORAGA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) REQUIREMENTS, SHALL BE PROVIDED DURING THE BUILDING PERMIT APPROVAL PROCESS.

TOTAL LANDSCAPE AREA

- SUBMITTAL REQUIREMENT F.5
INDICATE THE TOTAL LANDSCAPED AREA (SQUARE FEET) INCLUDING ALL PLANTING AREAS, TURF, AND WATER FEATURES.

CATEGORY	SIZE
TOTAL LANDSCAPE AREA	29,693 SQ FT
TURF (LAWN) AREA	848 SQ FT
WATER FEATURES	0 SQ FT

BOLLARD LIGHT:
MANU.: BEGA
MODEL: SHIELDED BOLLARD

HEIGHT: 37.5"
COLOR/FINISH: TBD
AVAIL: www.bega-us.com

1 **37" HT. BOLLARD LIGHT**
1/1 DTI-Bollard.dwg SCALE: NTS

SCHOOL STREET TOWNS

1600 SCHOOL STREET, MORAGA, CALIFORNIA

PRELIMINARY LANDSCAPE PLAN

NOT FOR CONSTRUCTION

LICENSED LANDSCAPE ARCHITECT — SCOTT E. FEURER No. 4249 — SIGNATURE 08/31/2027 RENEWAL DATE — DATE — STATE OF CALIFORNIA

DATE: 06/05/26
JOB# 25025.01

ENVIRONMENTAL FORESIGHT, INC.
Landscape Architecture
2065 N. Broadway, Suite 203
Walnut Creek, CA 94596
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BUILDING 1
Building 600 - Elevation B
Color Scheme #1

A STREET

BUILDING 2
(seen beyond)

BUILDING 3
Building 400 - Elevation B
Color Scheme #2

BUILDING 6
(seen beyond)

BUILDING 4
Building 400 - Elevation A
Color Scheme #1

D STREET

BUILDING 10
(seen beyond)

BUILDING 8
Building 200 - Elevation A
Color Scheme #2

View Along School Street

BUILDING 8
Building 200 - Elevation A
Color Scheme #2

BUILDING 7
(seen beyond)

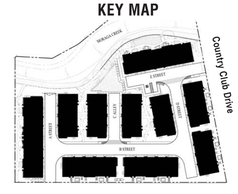
BUILDING 9
Building 200 - Elevation B
Color Scheme #1

E STREET

BUILDING 10
Building 500 - Elevation A
Color Scheme #2

View Along Country Club Drive

KEY MAP



NTS

CONCEPTUAL STREETSCENES

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

OUTDO COUNTRY CLUB DRIVE, LLC

MOFD STAMP

A1

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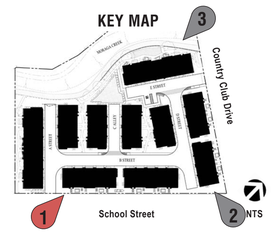
WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



View 1

View Along School Street

PERSPECTIVE RENDERING

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

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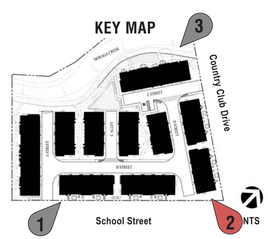

View 2

Corner at School Street and Country Club Drive

PERSPECTIVE RENDERING

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

OUTDO COUNTRY CLUB DRIVE, LLC

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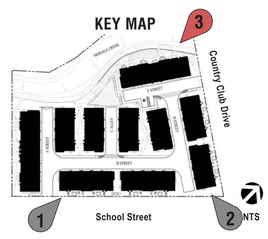
View 3

View Along the Creek

PERSPECTIVE RENDERING



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1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

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ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

10 A.M.

12 P.M.

2 P.M.

December 21

SOLAR ORIENTATION

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A5

0 4 8 16

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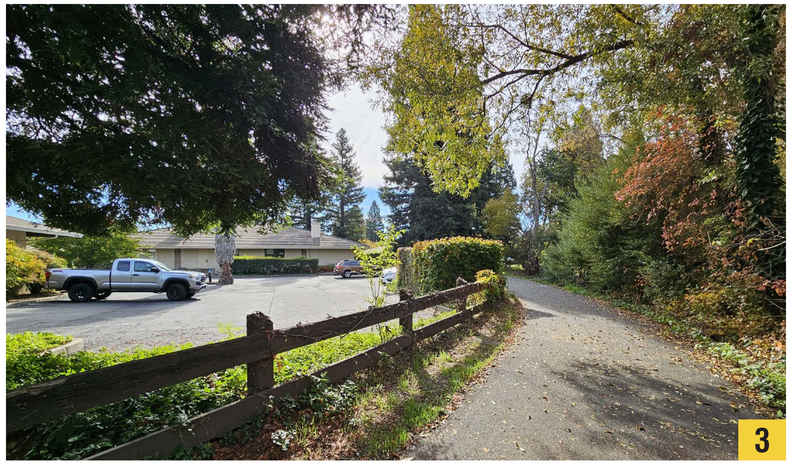
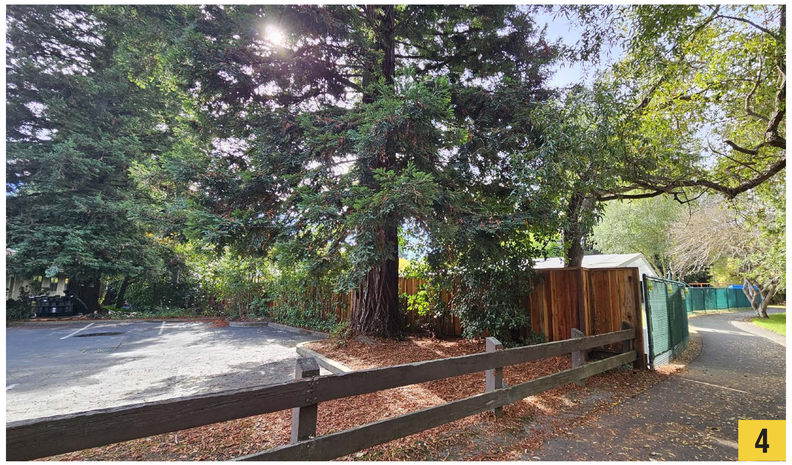
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO





CONTEXT MAP

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

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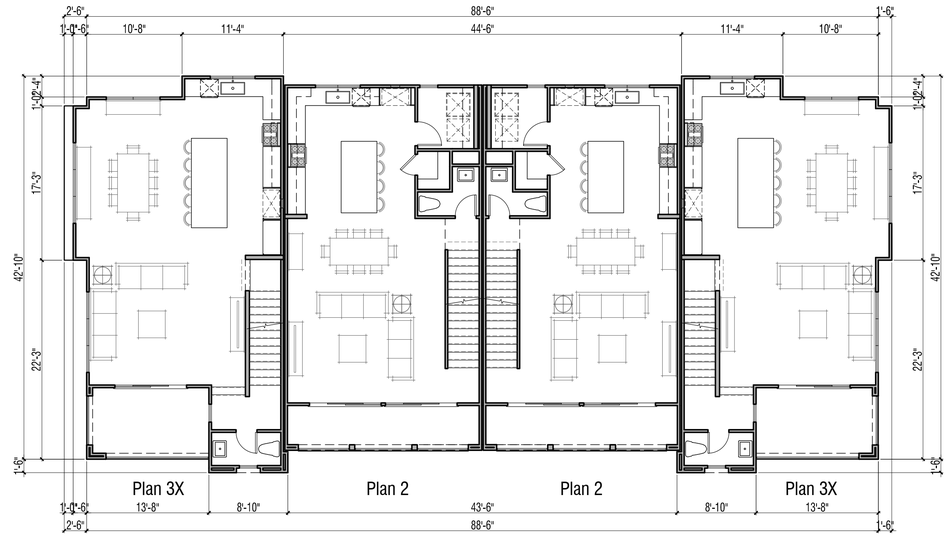
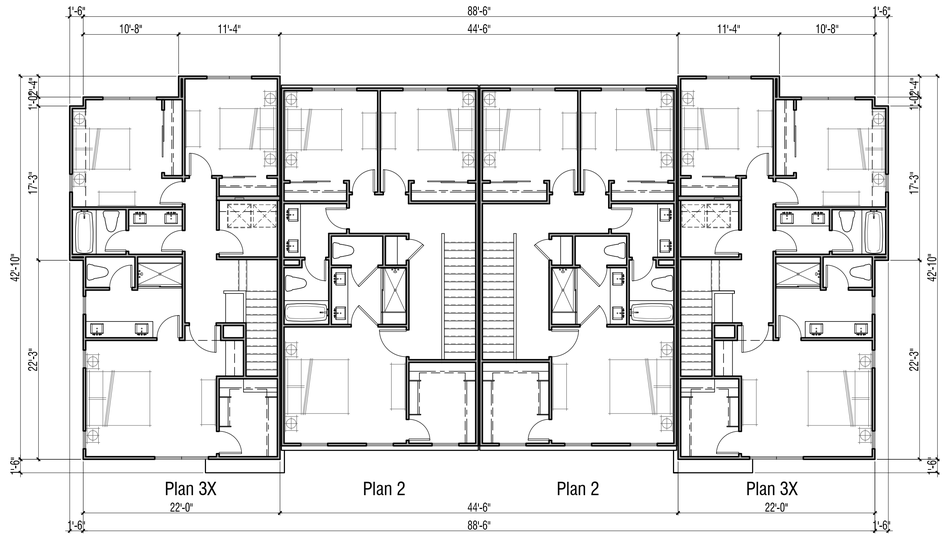
WHA.

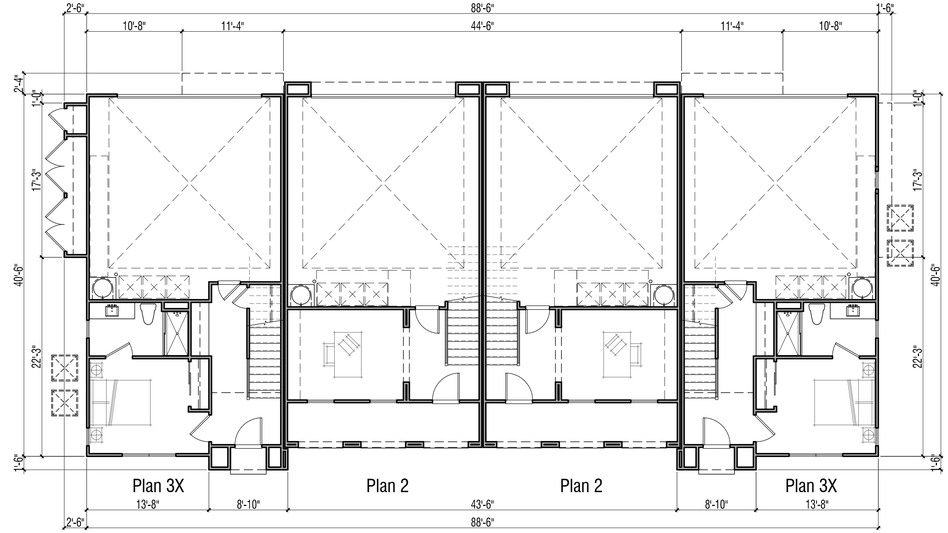
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



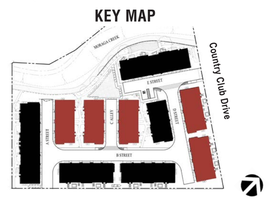
Second Floor



Third Floor



First Floor



BUILDING 200

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A7

0 4 8 16

SCALE: 1/8"=1'-0"

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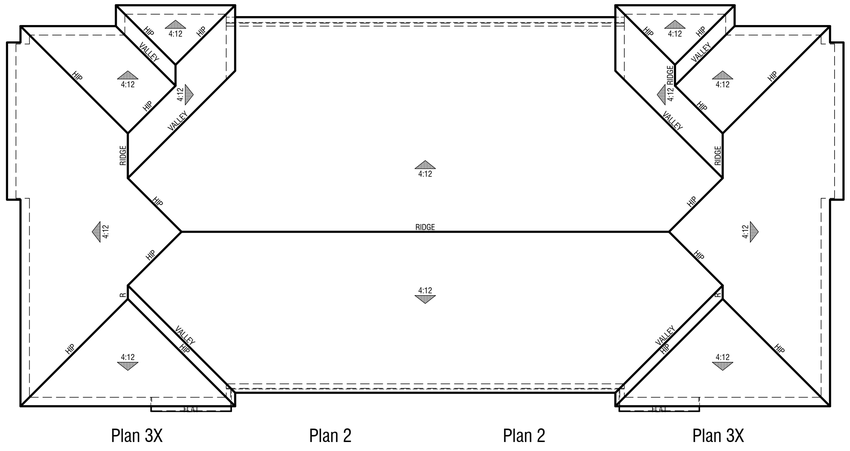
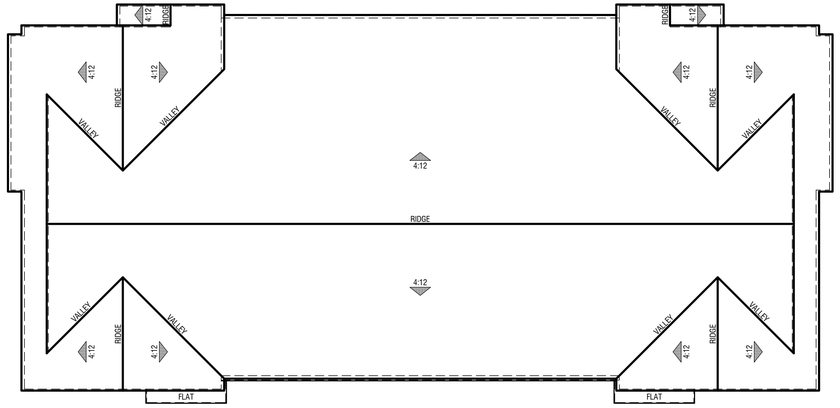


Elevation B



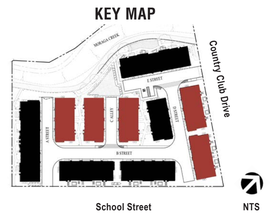
Elevation A

Primary ridge heights

Building 2	522.6
Building 5	523.4
Building 6	524.1
Building 8	525.7
Building 9	526.0

Eave dimensions

	Eave Length	Rake Length
Elevation A	4"	tight
Elevation B	12"	tight



BUILDING 200

Roof Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A8

0 4 8 16

SCALE: 1/8"=1'-0"

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ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

8 Plan 3X | 4 Plan 2 | Plan 2 | 3 Plan 3X

Rear Elevation

Plan 3X

Left Elevation

Plan 3X | Plan 2 | Plan 2 | Plan 3X

Front Elevation

Exterior Materials

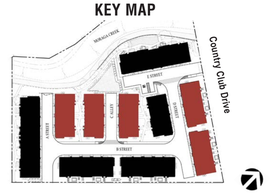
1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

BUILDING 200

Elevation A

Color Scheme #2

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A9

0 4 8 16

SCALE: 1/8"=1'-0"

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WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

8 Plan 3X | 4 Plan 2 | Plan 2 | 3 Plan 3X

Rear Elevation

Plan 3X

Left Elevation

Plan 3X | Plan 2 | Plan 2 | Plan 3X

Front Elevation

Exterior Materials

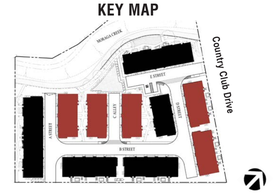
1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

BUILDING 200

Elevation B

Color Scheme #1

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A10

0 4 8 16

SCALE: 1/8"=1'-0"

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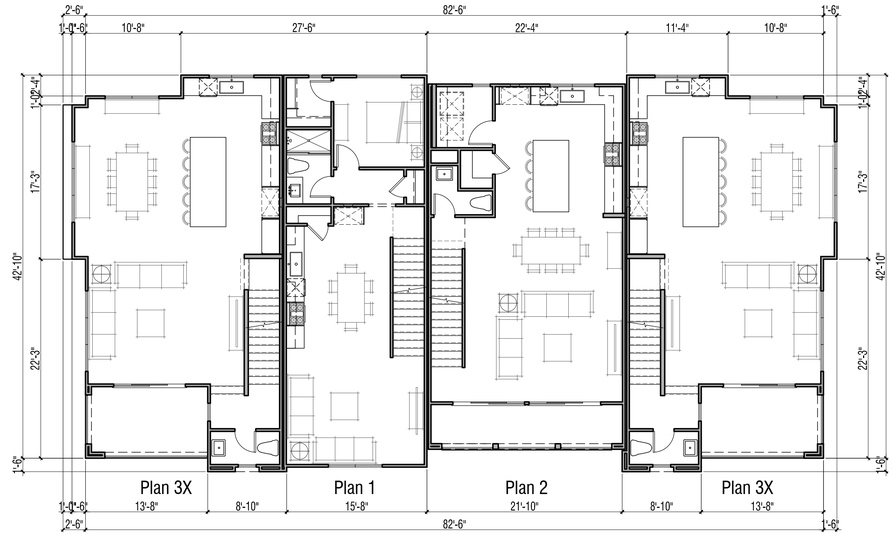
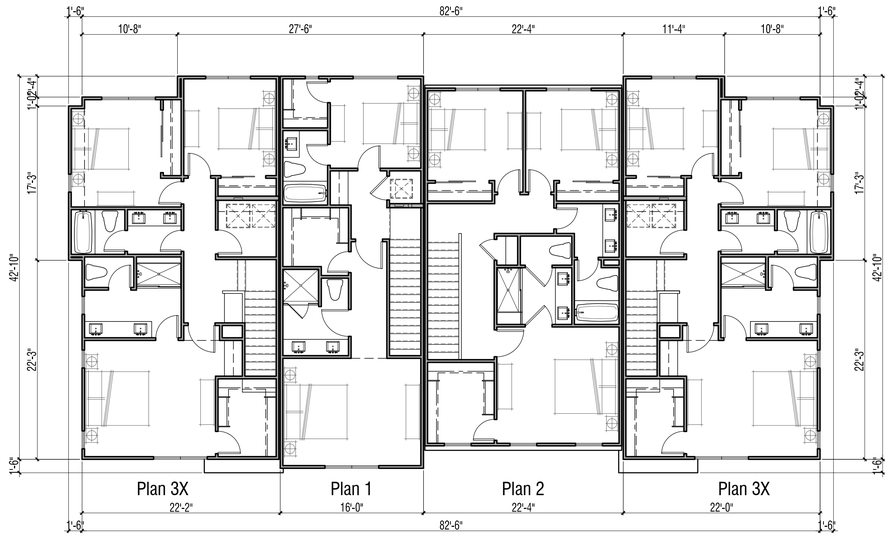
WHA.

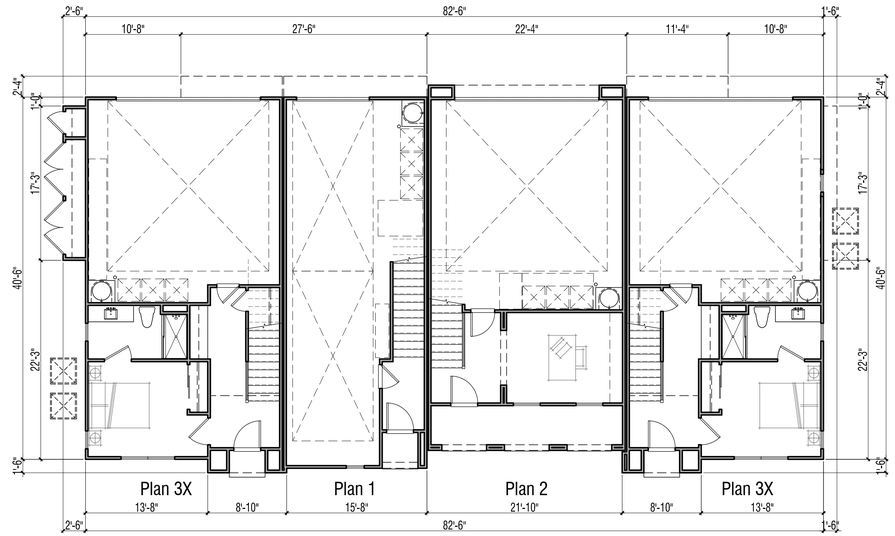
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



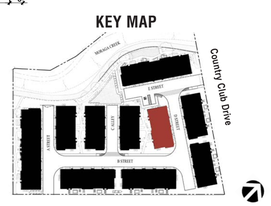
Second Floor



Third Floor



First Floor



BUILDING 300

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A11

0 4 8 16

SCALE: 1/8"=1'-0"

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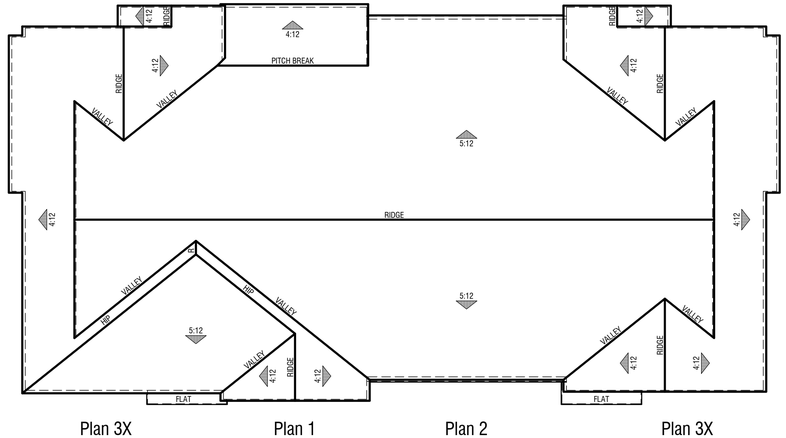
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Elevation A

Primary ridge heights

Building 7	526.7
Building 10	527.0

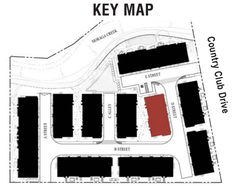
Eave dimensions

	Eave Length	Rake Length
Elevation A	4"	tight
Elevation B	N/A	N/A

BUILDING 300

Roof Plan

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A12

0 4 8 16

SCALE: 1/8"=1'-0"

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WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

8 Plan 3X | 4 Plan 2 | Plan 1 | 3 Plan 3X

Rear Elevation

Plan 3X

Left Elevation

Plan 3X | Plan 1 | Plan 2 | Plan 3X

Front Elevation

Exterior Materials

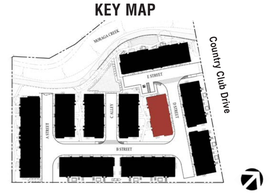
1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

BUILDING 300

Elevation A

Color Scheme #2

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A13

0 4 8 16

SCALE: 1/8"=1'-0"

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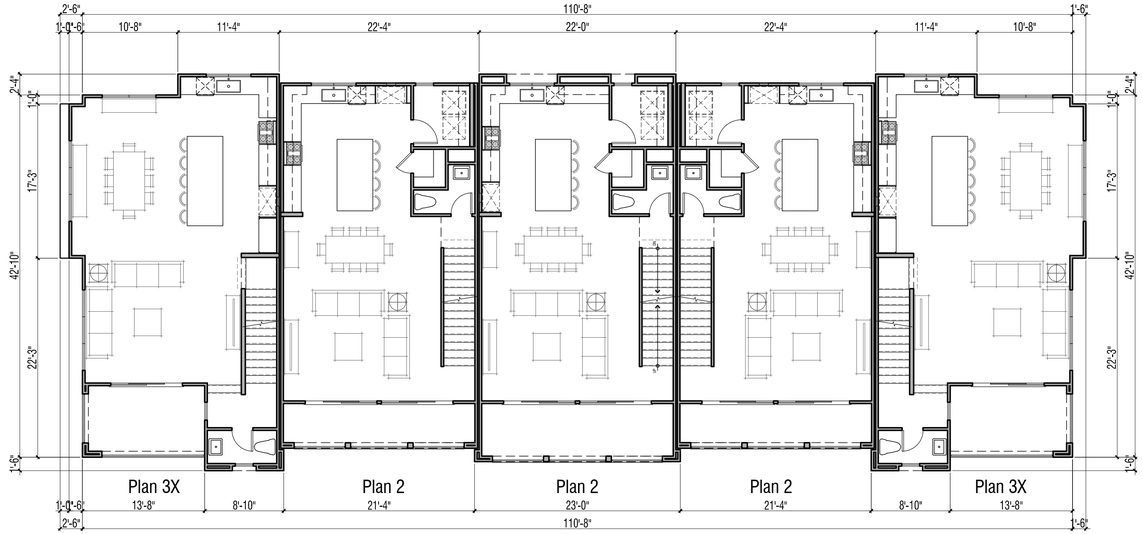
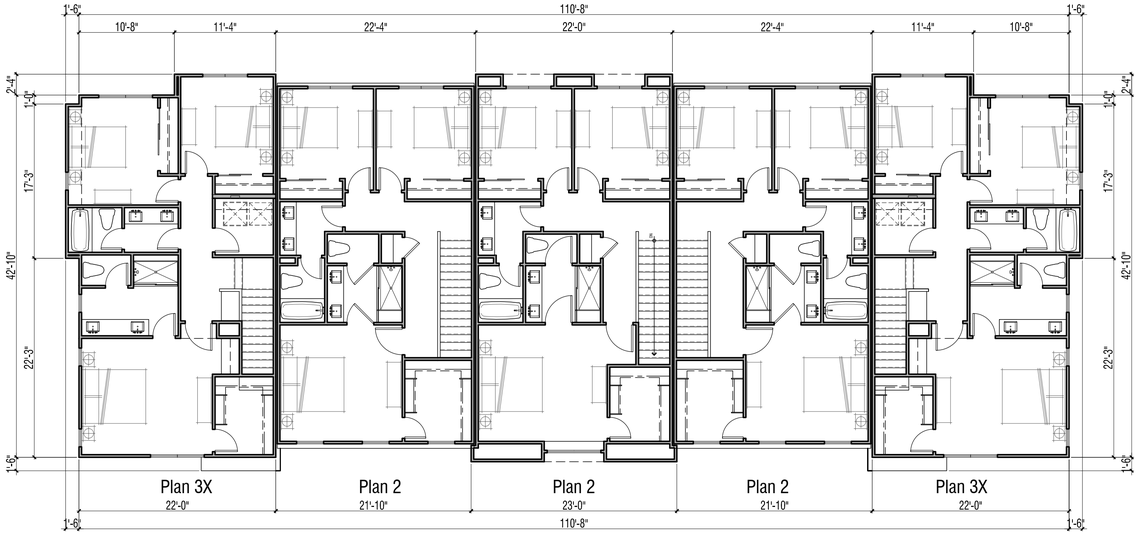
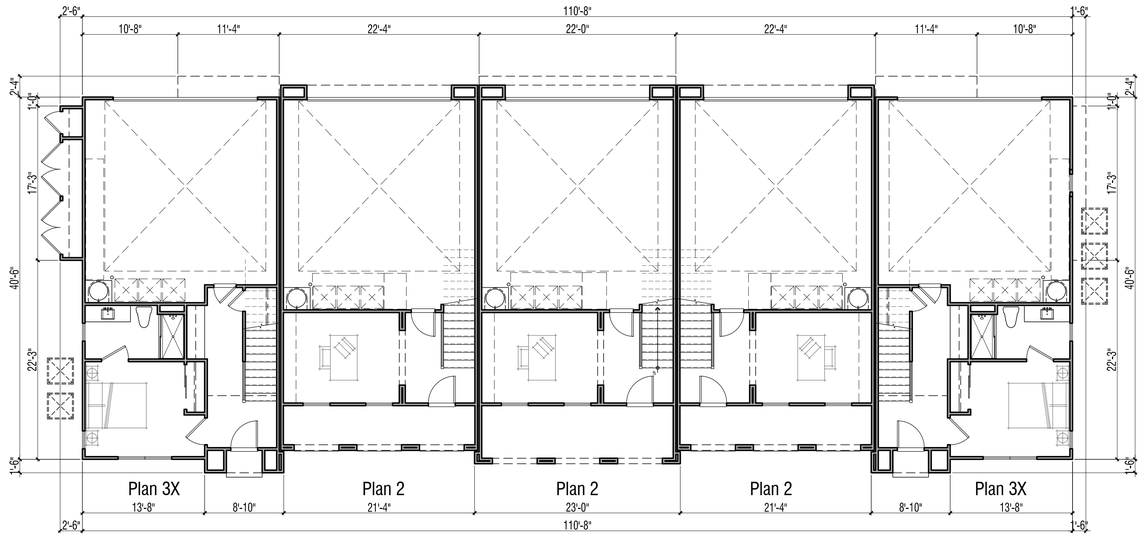


Second Floor

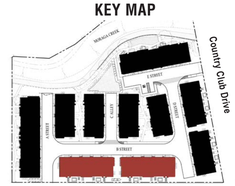


Third Floor



First Floor

KEY MAP



BUILDING 400

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A14

0 4 8 16

SCALE: 1/8"=1'-0"

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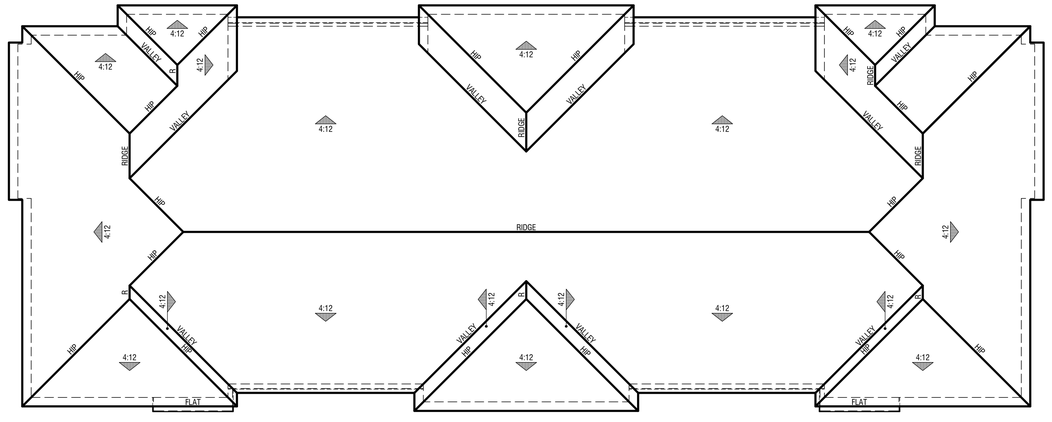
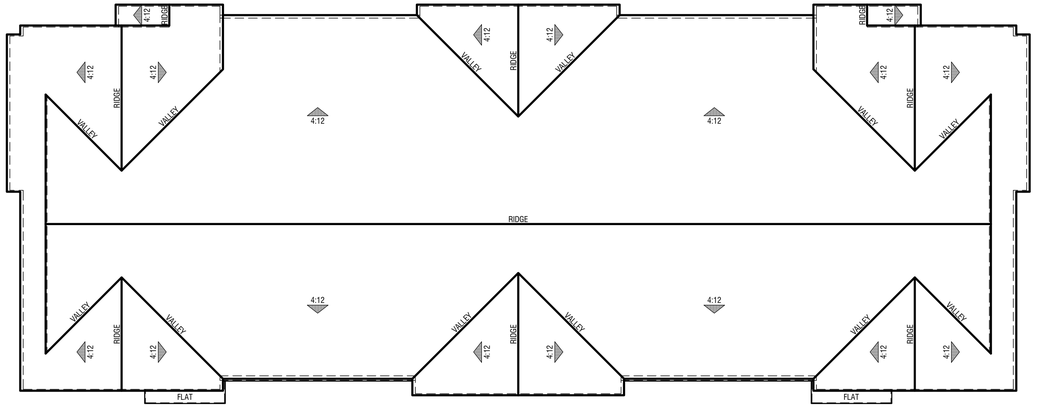
WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Plan 3X | Plan 2 | Plan 2 | Plan 2 | Plan 3X

Third Floor



Plan 3X | Plan 2 | Plan 2 | Plan 2 | Plan 3X

Third Floor

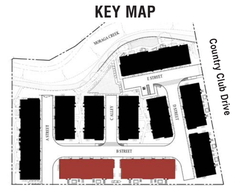
Primary ridge heights

Building 3	524.7
Building 4	525.1

Eave dimensions

	Eave Length	Rake Length
Elevation A	4"	tight
Elevation B	12"	tight

KEY MAP



BUILDING 400

Roof Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A15

0 4 8 16

SCALE: 1/8"=1'-0"

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ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

Plan 3X | 8 | Plan 2 | 4 | Plan 2 | Plan 2 | 3 | Plan 3X

Rear Elevation

Plan 3X

Left Elevation

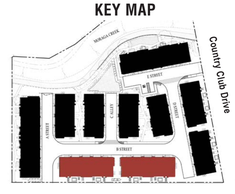
Plan 3X | Plan 2 | Plan 2 | Plan 2 | Plan 3X

Front Elevation

Exterior Materials

1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

KEY MAP



BUILDING 400

Elevation A

Color Scheme #1

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A16

0 4 8 16

SCALE: 1/8"=1'-0"

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ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

Plan 3X | 8 | Plan 2 | 4 | Plan 2 | Plan 2 | 3 | Plan 3X

Rear Elevation

Plan 3X

Left Elevation

Plan 3X | Plan 2 | Plan 2 | Plan 2 | Plan 3X

Front Elevation

Exterior Materials

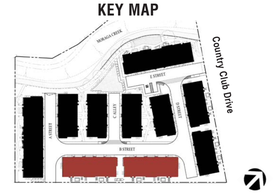
1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

BUILDING 400

Elevation B

Color Scheme #2

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A17

0 4 8 16

SCALE: 1/8"=1'-0"

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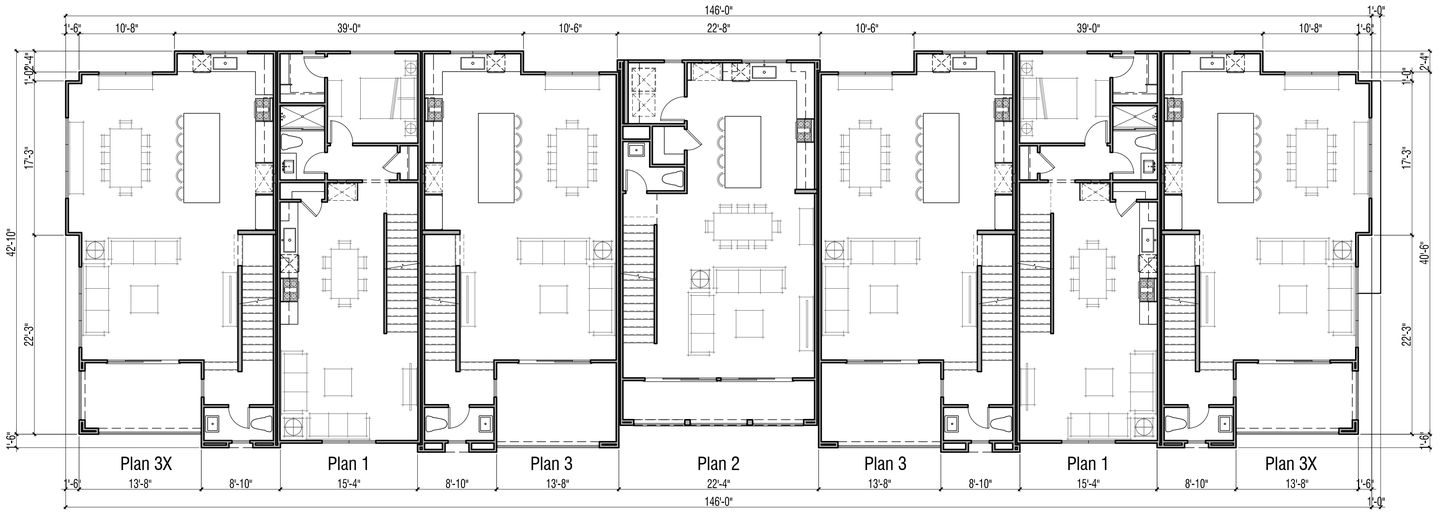
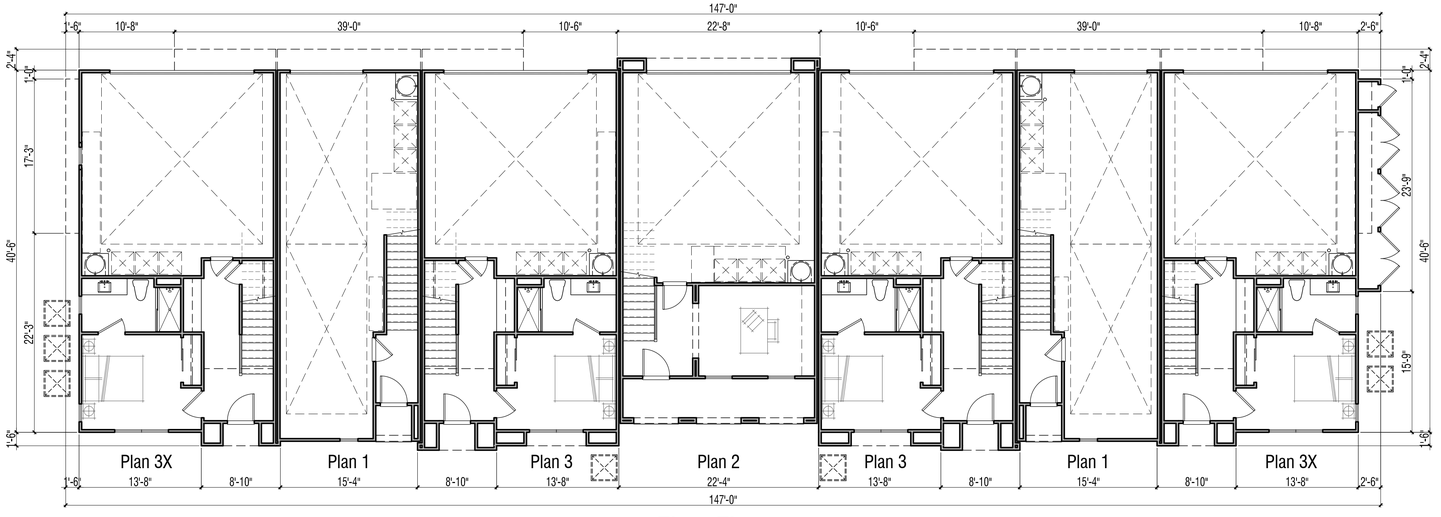
WHA.

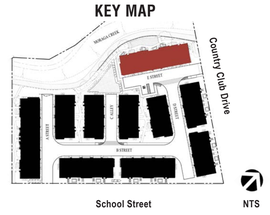
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Second Floor



First Floor



BUILDING 500

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A18

0 4 8 16

SCALE: 1/8"=1'-0"

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WHA.

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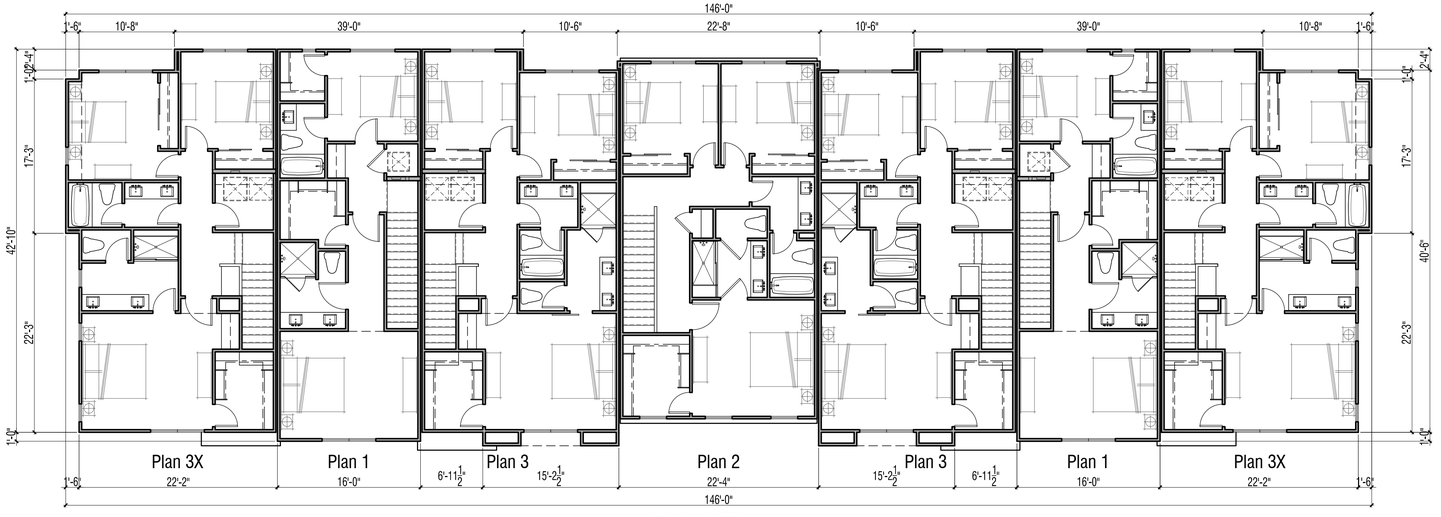
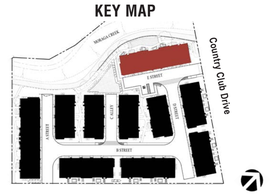


Third Floor

BUILDING 500

Building Plans



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A19

0 4 8 16

SCALE: 1/8"=1'-0"

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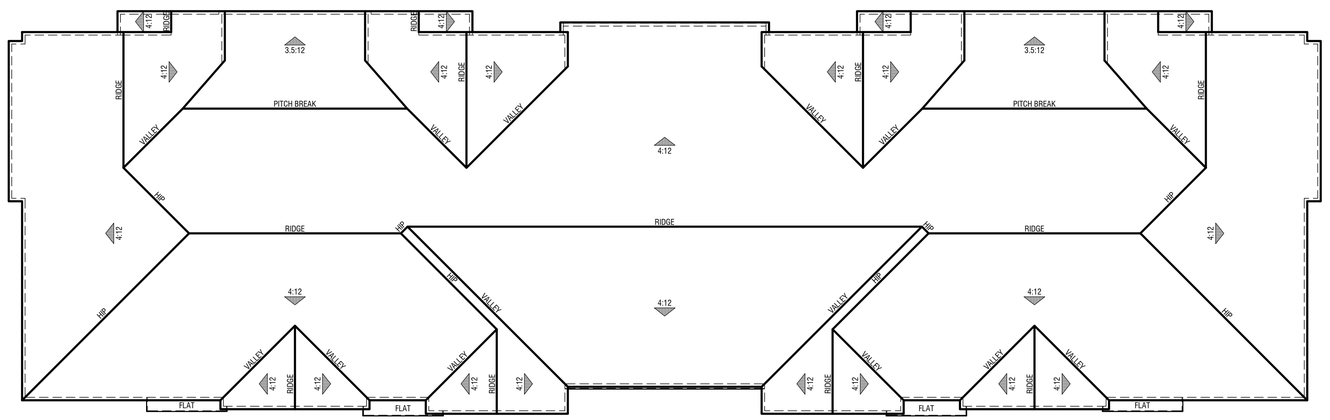


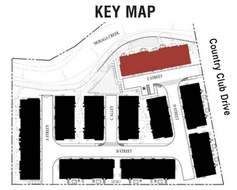
Primary ridge heights

Building 1	525.3

Eave dimensions

	Eave Length	Rake Length
Elevation A	4"	tight
Elevation B	N/A	N/A

KEY MAP



BUILDING 500

Roof Plan

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A20

0 4 8 16

SCALE: 1/8"=1'-0"

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ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

Plan 3X

Right Elevation

Plan 3X | Plan 1 | 8 Plan 3 | Plan 2 | 4 Plan 3 | 3 Plan 1 | Plan 3X

Rear Elevation

Plan 3X

Left Elevation

Plan 3X | Plan 1 | Plan 3 | Plan 2 | Plan 3 | Plan 1 | Plan 3X

Front Elevation

Exterior Materials

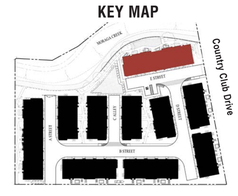
1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

BUILDING 500

Elevation A

Color Scheme #2

KEY MAP



OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A21

0 4 8 16

SCALE: 1/8"=1'-0"

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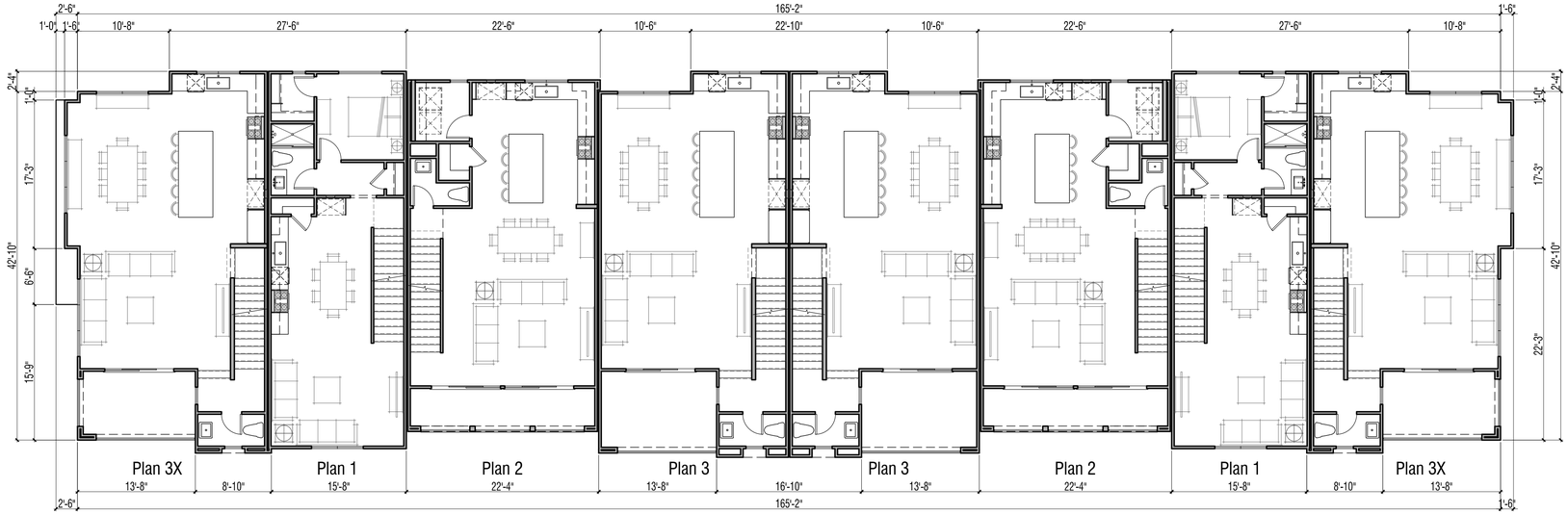
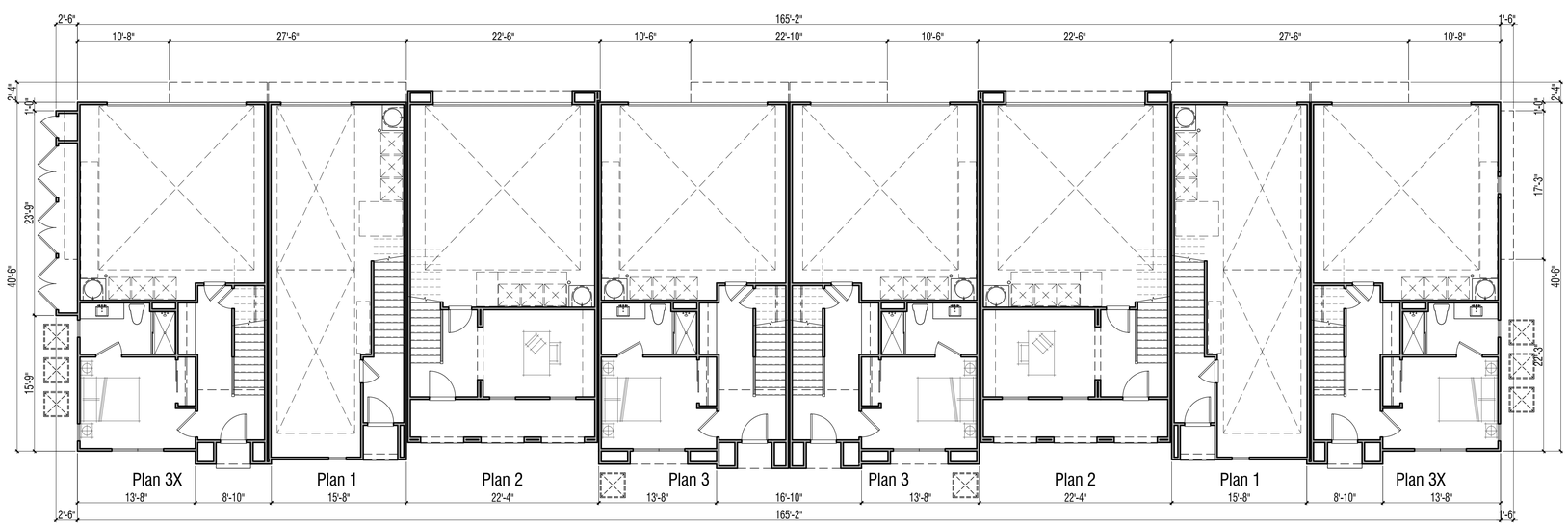
WHA.

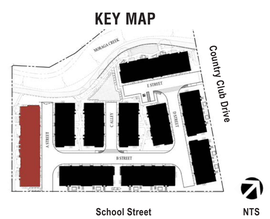
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Second Floor



First Floor



BUILDING 600

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A22

0 4 8 16

SCALE: 1/8"=1'-0"

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WHA.

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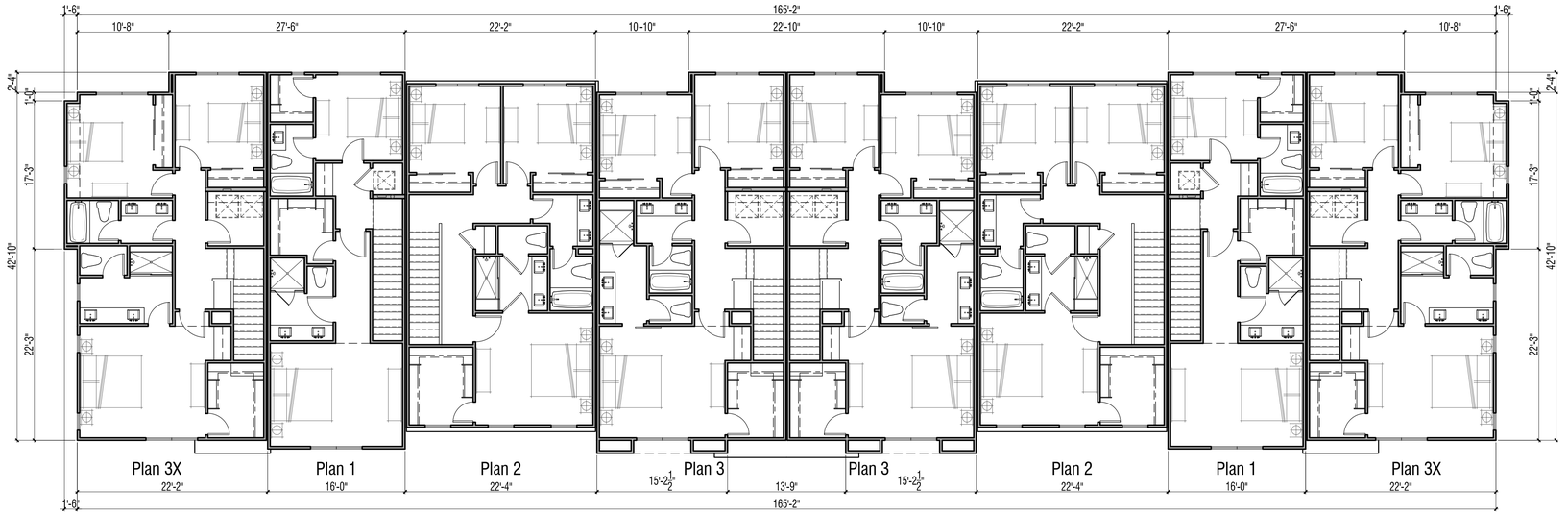
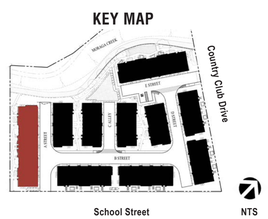


Third Floor



BUILDING 600

Building Plans

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A23

0 4 8 16

SCALE: 1/8"=1'-0"

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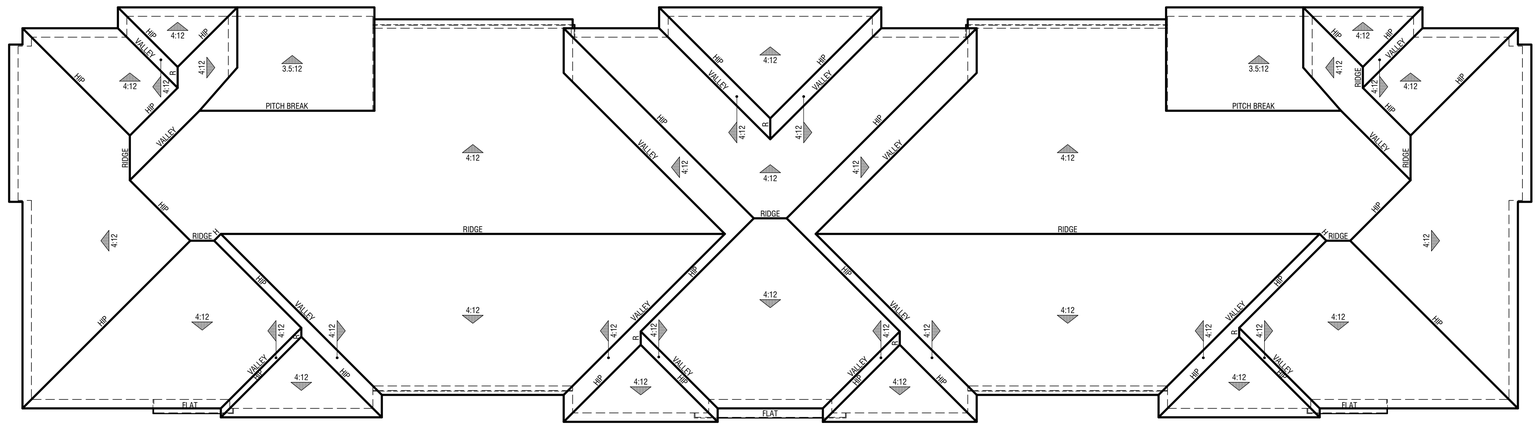


Elevation B

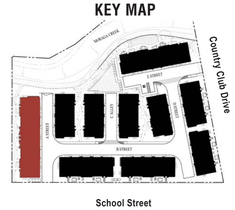
Primary ridge heights

Building 1	524.0

Eave dimensions

	Eave Length	Rake Length
Elevation A	N/A	N/A
Elevation B	12"	tight

KEY MAP



NTS

BUILDING 600
Roof Plan

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

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SCALE: 1/8"=1'-0"

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Plan 3X

Right Elevation

Plan 3X | Plan 1 | Plan 2 | 8 | Plan 3 | 4 | Plan 3 | Plan 2 | 3 | Plan 1 | Plan 3X

Rear Elevation

Plan 3X

Left Elevation

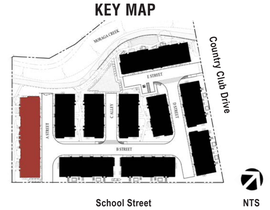
Plan 3X | Plan 1 | Plan 2 | Plan 3 | Plan 3 | Plan 2 | Plan 1 | Plan 3X

Front Elevation

Exterior Materials

1. Low Profile Concrete Tile Roof
2. Insulated Vinyl Windows
3. Stucco
4. Stucco over Foam Trim
5. Fiberglass Entry Door
6. Manufactured Brick Veneer
7. Manufactured Brick Cap
8. Sectional Roll-Up Garage Door
9. Metal Railing
10. Lighting Fixture

KEY MAP



BUILDING 600

Elevation B

Color Scheme #1

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A25

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SCALE: 1/8"=1'-0"

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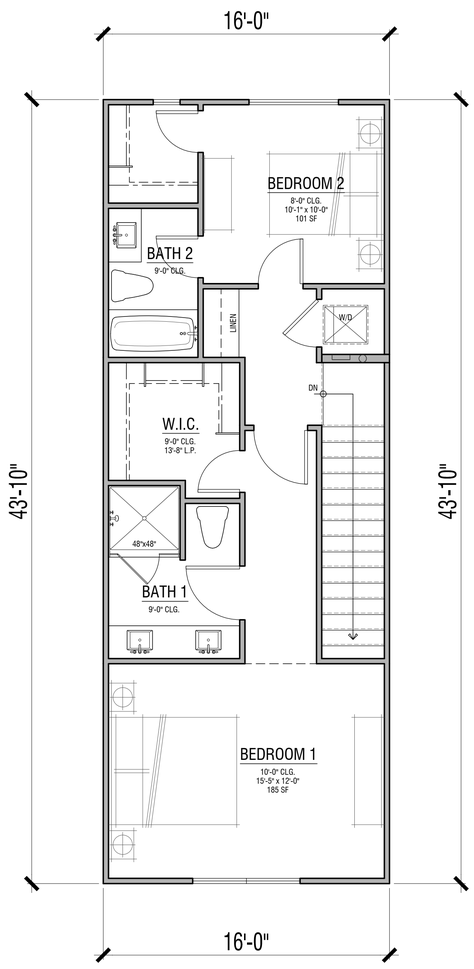
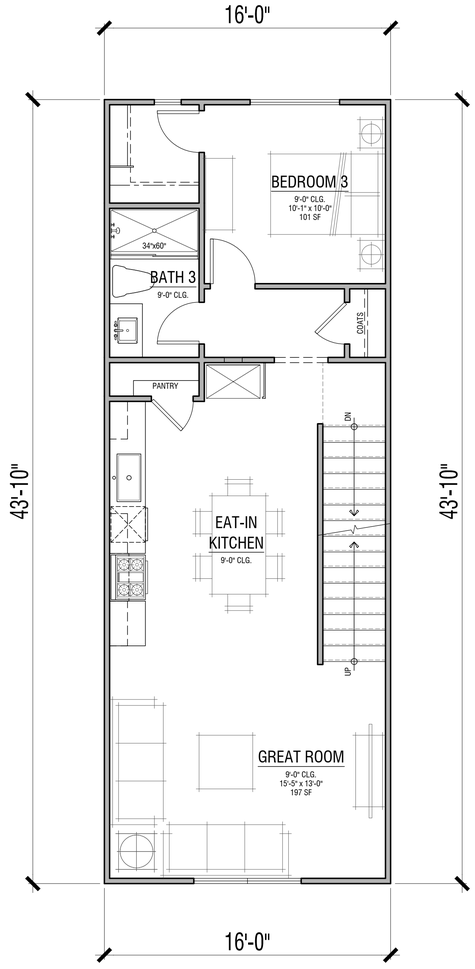
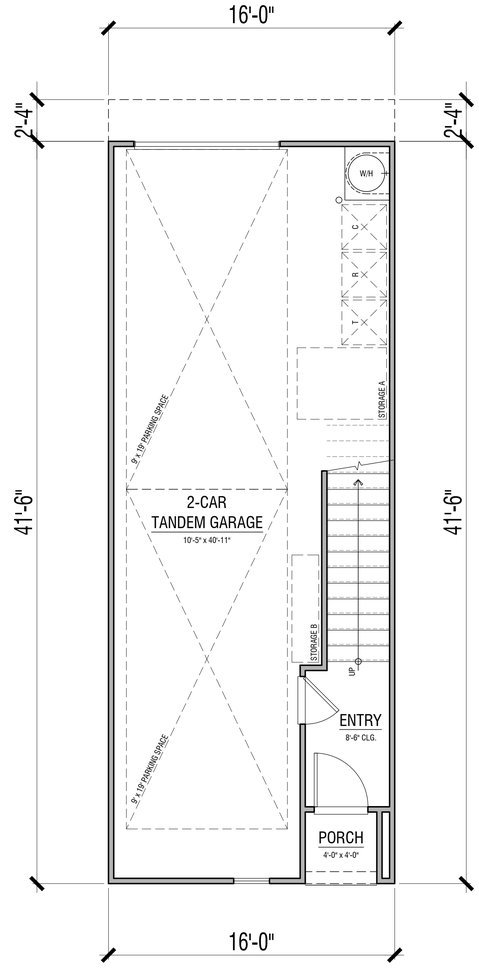


Third Floor 639 SF



Second Floor 701 SF



First Floor 98 SF

PLAN 1

1,438 SF
3 Bdrm | 3 Bath
2-Car Garage

Storage

	LxWxH	Volume
Storage A	5.0'x4.0'x8.5'	170 CuFt
Storage B	1.5'x6.0'x8.5'	76 CuFt
Total		246 CuFt

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A26

0 4 8 16

SCALE: 1/4"=1'-0"

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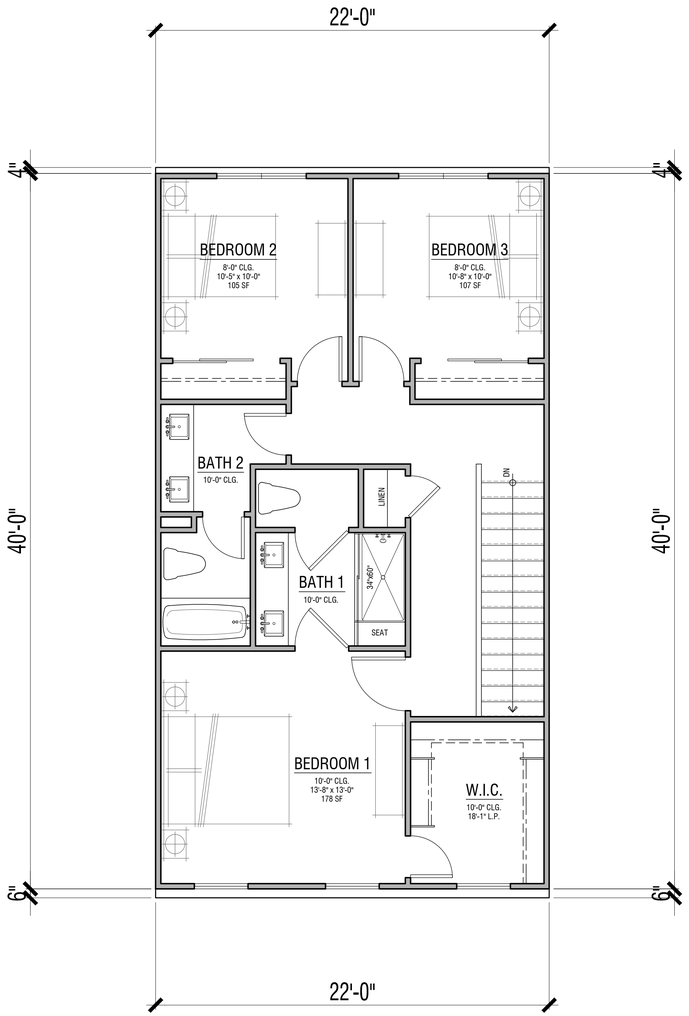
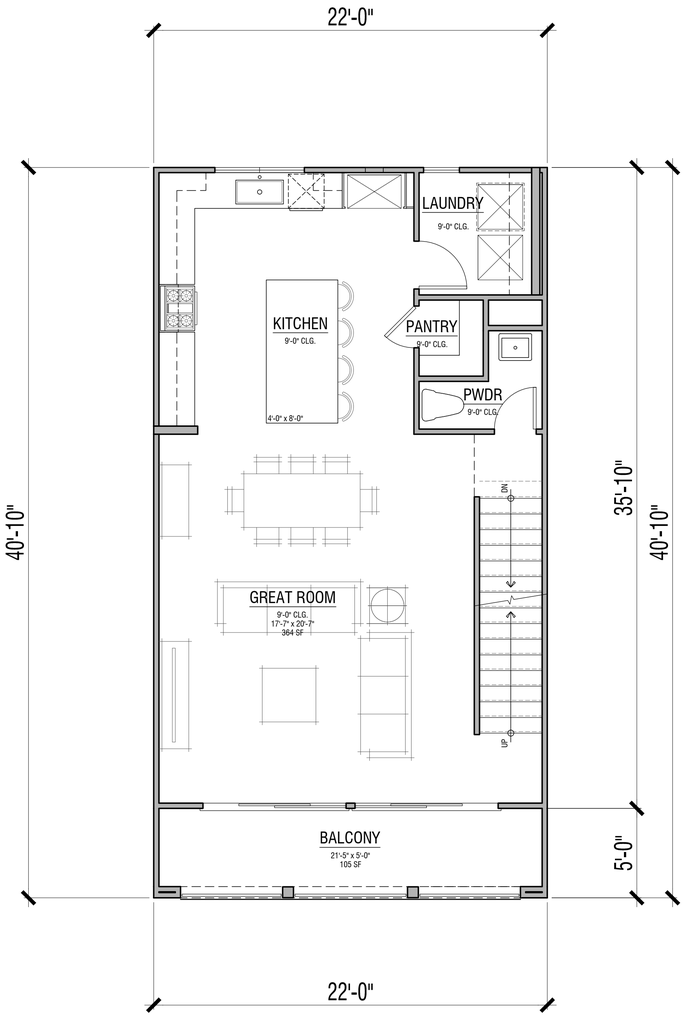
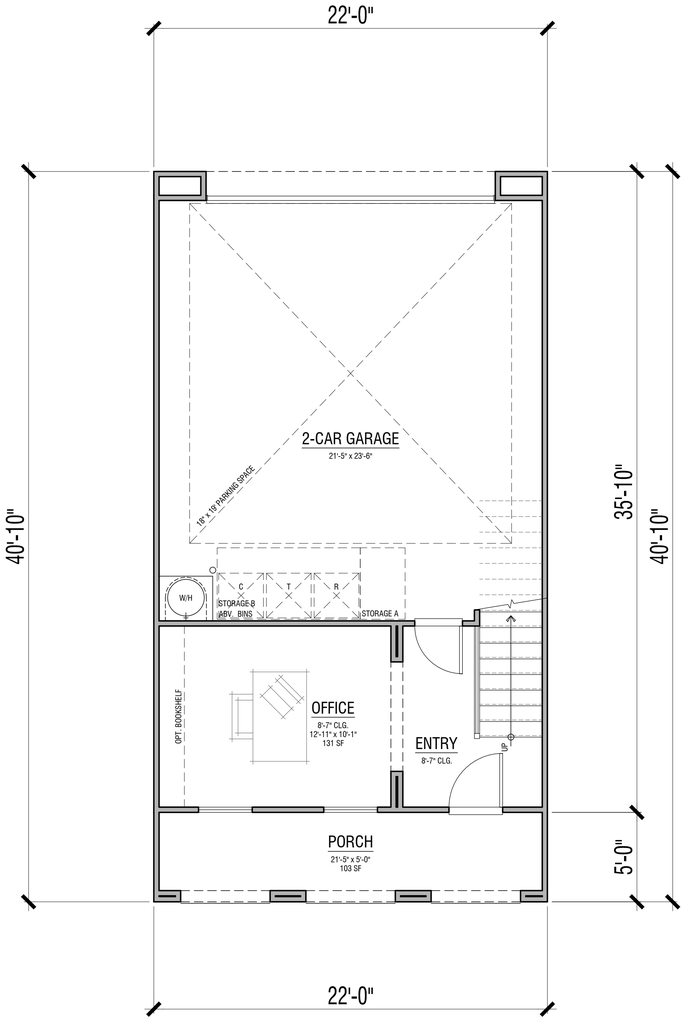


Third Floor 830 SF



Second Floor 788 SF



First Floor 263 SF

PLAN 2

1,881 SF
3 Bdrm | 2.5 Bath | Office
2-Car Garage

Storage

	LxWxH	Volume
Storage A	2.5'x4.0'x8.5'	85 CuFt
Storage B	8.0'x4.0'x4.0'	128 CuFt
Total		213 CuFt

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A27

0 4 8 16

SCALE: 1/4"=1'-0"

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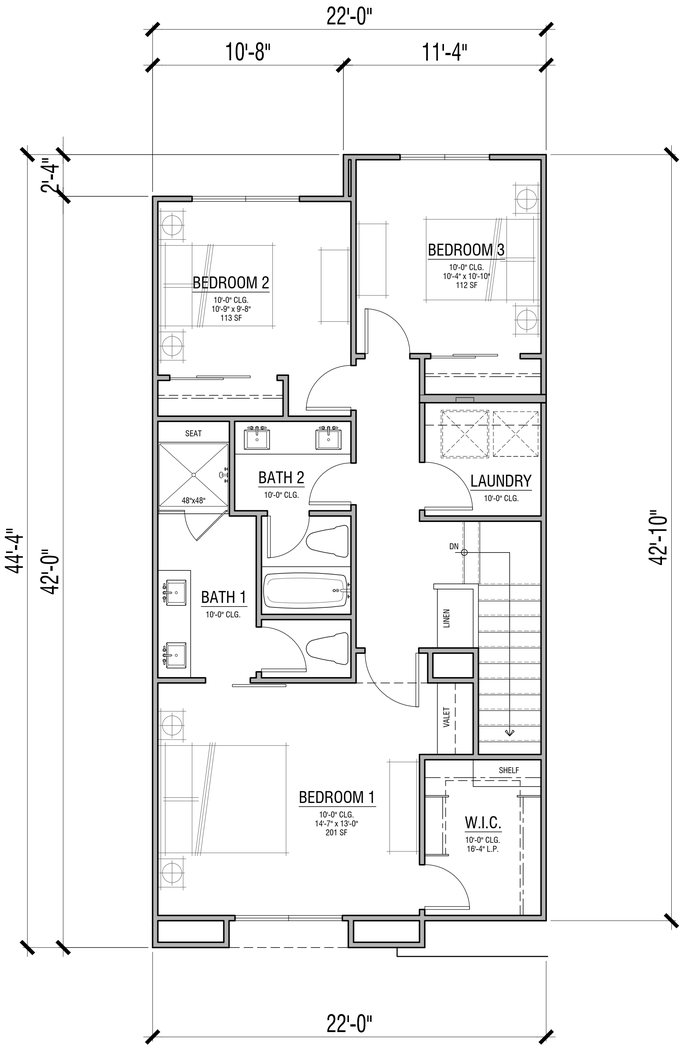
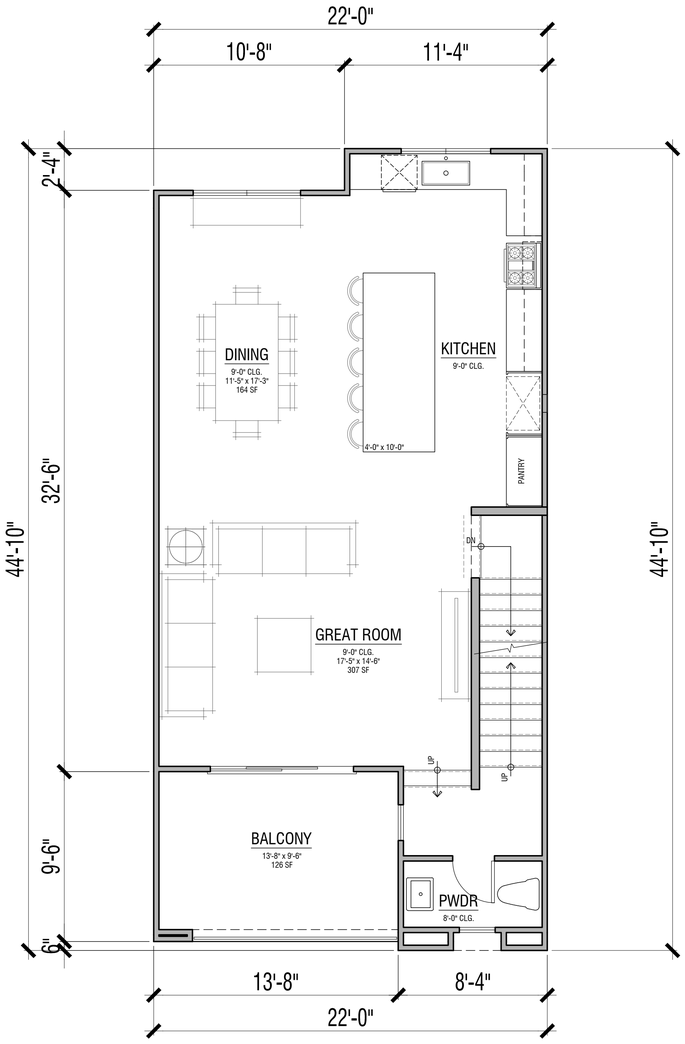
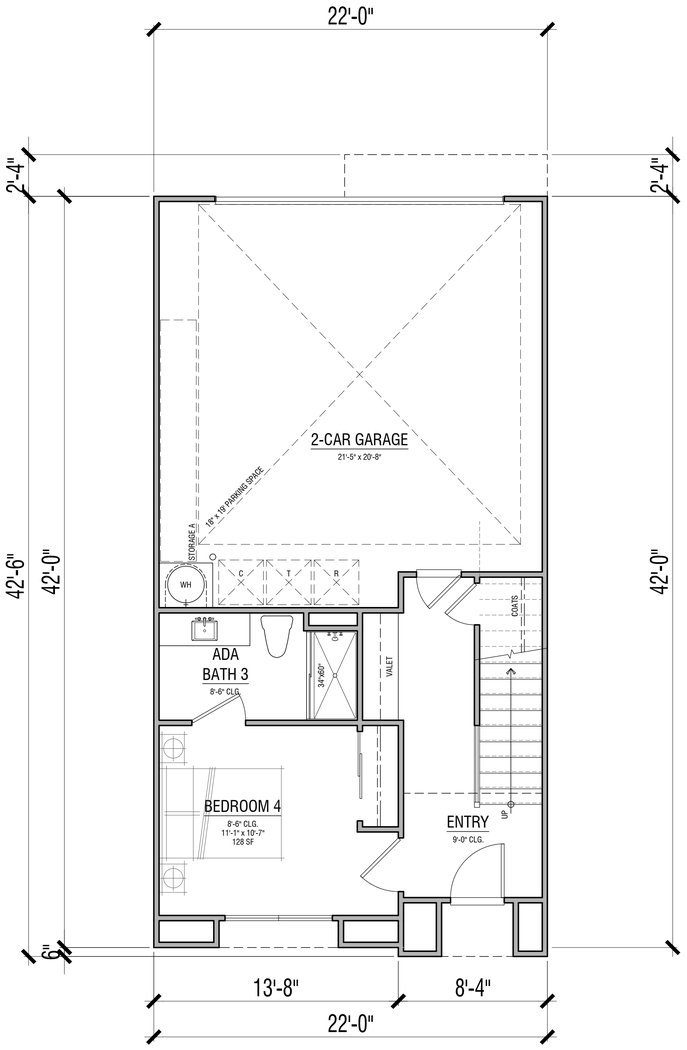


Third Floor 865 SF



Second Floor 816 SF



First Floor 394 SF

PLAN 3

2,075 SF
4 Bdrm | 3.5 Bath
2-Car Garage

Storage

	LxWxH	Volume
Storage A	2.0'x13.5'x8.5'	229 CuFt
Total		229 CuFt

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A28

0 4 8 16

SCALE: 1/4"=1'-0"

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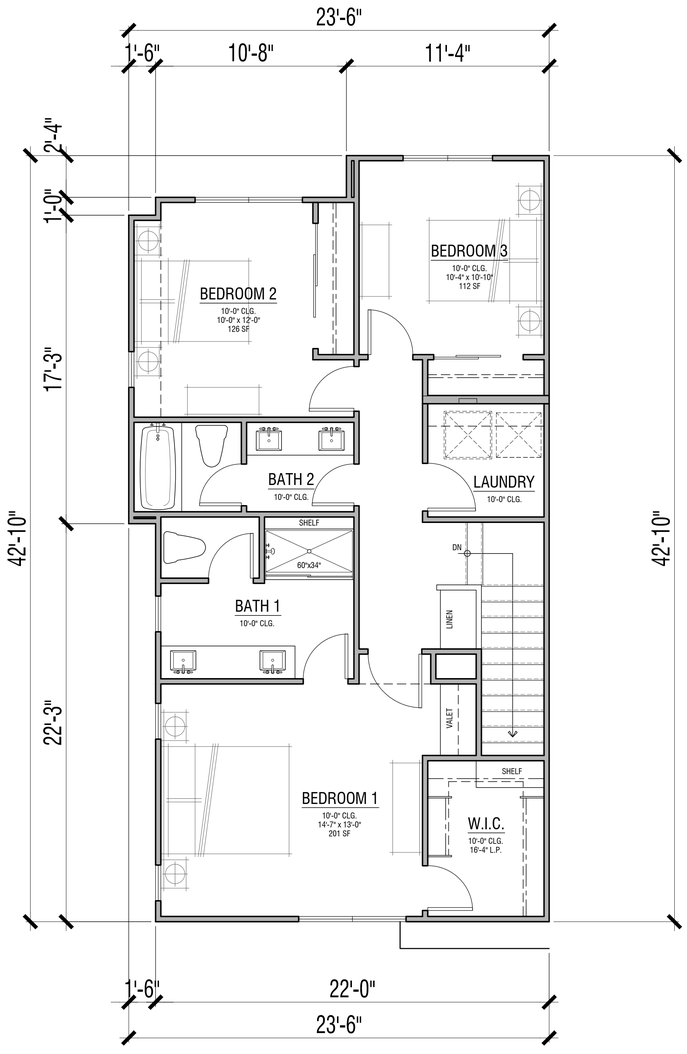
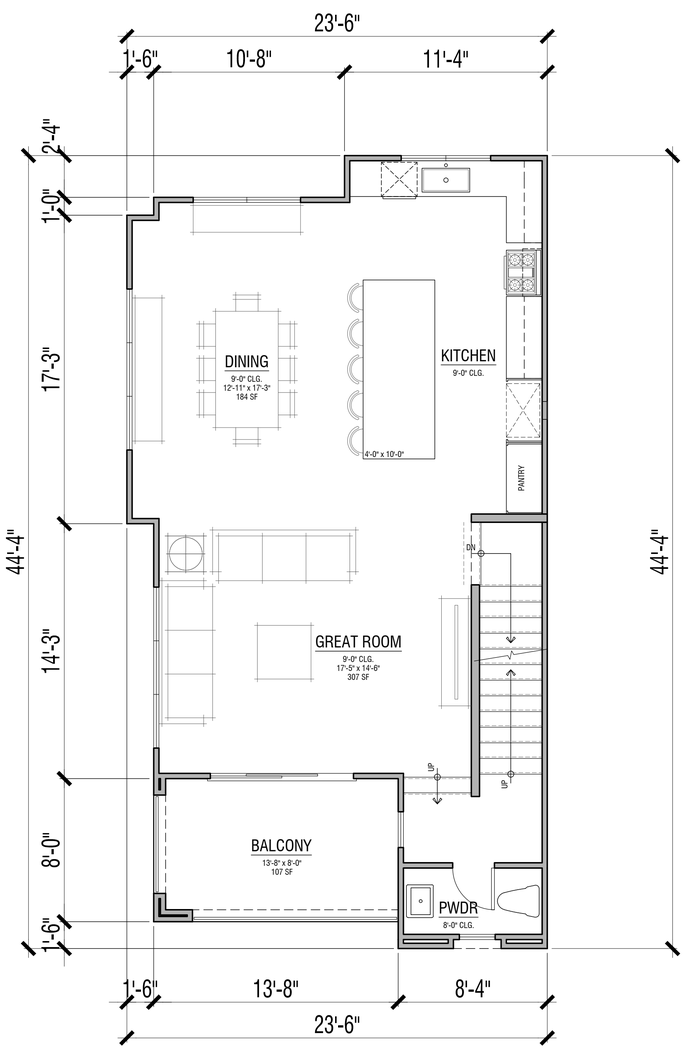
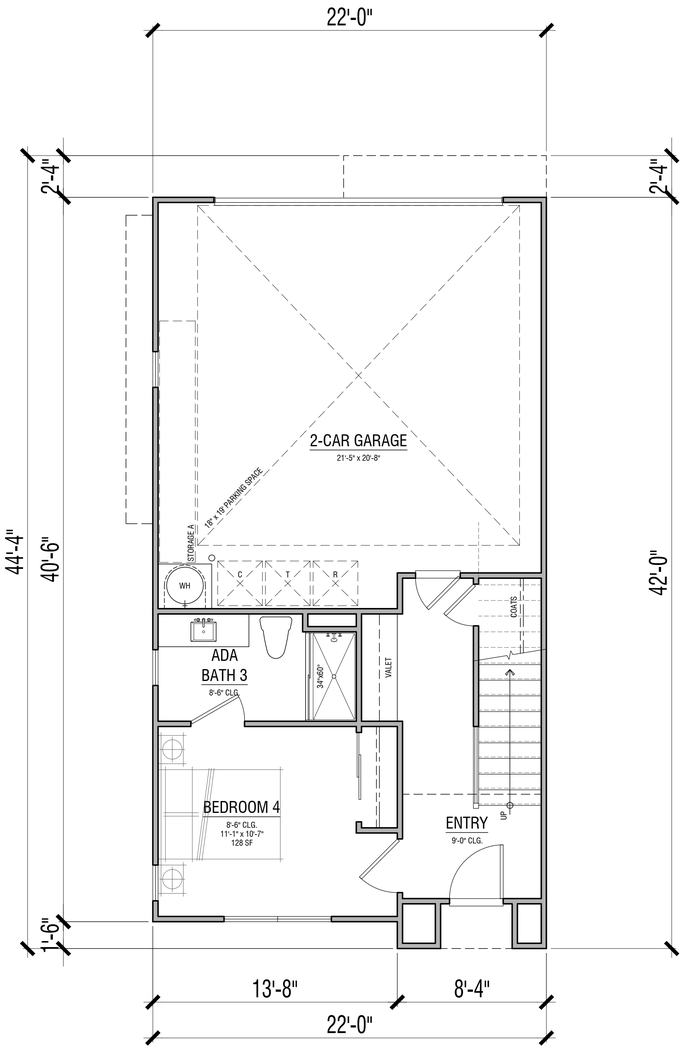


Third Floor 891 SF



Second Floor 842 SF



First Floor 394 SF

PLAN 3X

2,127 SF
4 Bdrm | 3.5 Bath
2-Car Garage

Storage

	LxWxH	Volume
Storage A	2.0'x13.5'x8.5'	229 CuFt
Total		229 CuFt

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

A29

0 4 8 16

SCALE: 1/4"=1'-0"

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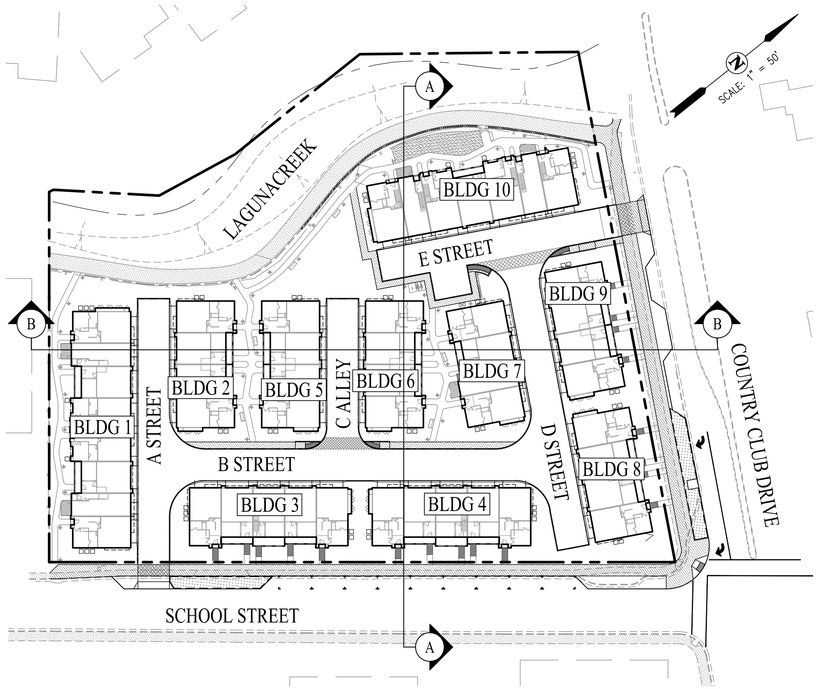
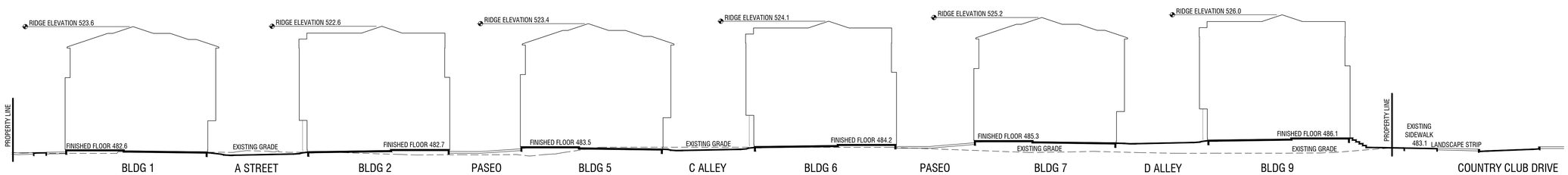


Section A



Section B

SITE SECTIONS

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

OUTDO COUNTRY CLUB DRIVE, LLC

MOFD STAMP

A30

0 8 16 32

SCALE: 1/16"=1'-0"

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Color Scheme #1

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SCHOOL STREET SITE

Moraga, California
OUTDO COUNTRY CLUB DRIVE, LLC
October 15, 2025 | 2025182

Exterior Color & Materials

SCHEME 1 OF 2 — ALL BUILDINGS

Material	Color	Manufacturer
Roofing: Low Profile Concrete Tile	1VICS5537 Pueblo Sienna Blend Ref: .17 Emi: .90 A.SRI: 17 CRRC: 0942-0222	Westlake
Metal Bird Stop @ 'S' Tile *(factory finish)*	Match to Roof	Westlake
Vinyl Windows *(factory finish)*	Bronze	Milgard
Manufactured Brick *(standard raked joints)*	Beachfoam Craft Novarra Brick	Creative Mines
Grout @ Brick	Khaki	Orco
Gutters & Downspouts	Match Adjacent Color	Sherwin Williams
Stucco Color	SW 7005 Pure White	Sherwin Williams
Trim Color #1 *(applied to):* Barge Boards, Beams, Eaves, Fascia, Garage Door, Posts, Rafter Tails, Unit Doors	SW 9183 Dark Clove	Sherwin Williams
Trim Color #2 *(applied to):* Trim	SW 7507 Stone Lion	Sherwin Williams
Metal Railing	SW 6991 Black Magic	Sherwin Williams

NOTE: Notify WHA if any variation occurs between these schemes and the construction documents prior to purchase.
Contact: Corie Rath (925) 463-1700.

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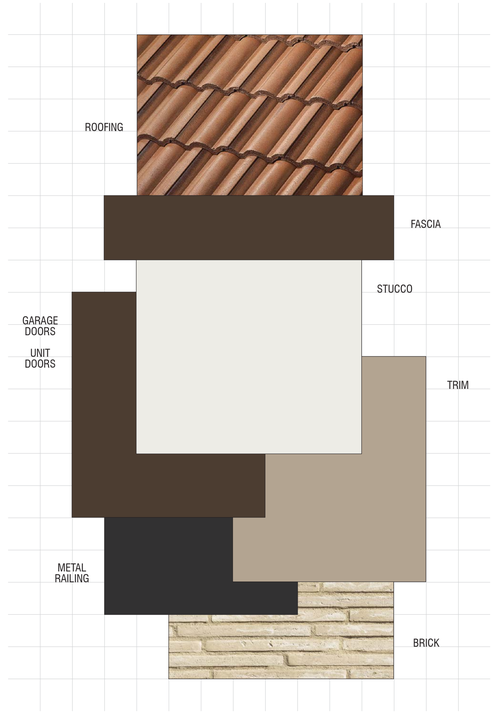

SCHOOL STREET SITE
Moraga, California
OUTDO COUNTRY CLUB DRIVE, LLC
October 15, 2025 | 2025182

SCHEME 1
All Buildings

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For exact color refer to manufacturers' actual samples.
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Color Scheme #2

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WHA.
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SCHOOL STREET SITE

Moraga, California
OUTDO COUNTRY CLUB DRIVE, LLC
October 15, 2025 | 2025182

Exterior Color & Materials

SCHEME 2 OF 2 — ALL BUILDINGS

Material	Color	Manufacturer
Roofing: Low Profile Concrete Tile	1VICS6330 Salerno Clay Ref: .17 Emi: .93 A.SRI: 22 CRRC: 0942-0012	Westlake
Metal Bird Stop @ 'S' Tile *(factory finish)*	Match to Roof	Westlake
Vinyl Windows *(factory finish)*	Bronze	Milgard
Manufactured Brick *(standard raked joints)*	Moonveil Craft Novarra Brick	Creative Mines
Grout @ Brick	Soft White	Orco
Gutters & Downspouts	Match Adjacent Color	Sherwin Williams
Stucco Color	SW 7005 Pure White	Sherwin Williams
Trim Color #1 *(applied to):* Barge Boards, Beams, Eaves, Fascia, Garage Door, Posts, Rafter Tails, Unit Doors	SW 9183 Dark Clove	Sherwin Williams
Trim Color #2 *(applied to):* Trim	SW 7507 Stone Lion	Sherwin Williams
Metal Railing	SW 6991 Black Magic	Sherwin Williams

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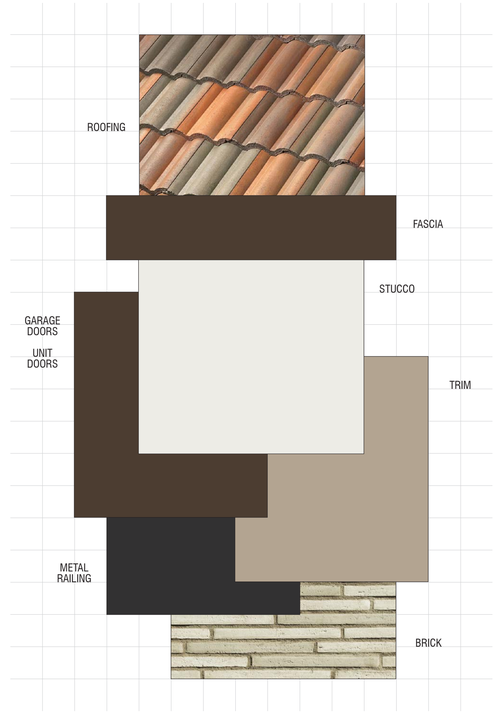

SCHOOL STREET SITE
Moraga, California
OUTDO COUNTRY CLUB DRIVE, LLC
October 15, 2025 | 2025182

SCHEME 2
All Buildings

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For exact color refer to manufacturers' actual samples.
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Exterior Light Fixture

Manufacturer: Generation Lighting
Product: Wilburn Medium Wall Lantern
Product Number: 8690901-12
Finish: Black / Glass Satin Etched
Dimensions: W: 8" H 13.5"
Dark Sky Compliant: Yes

Exterior Light Fixture @ Garages

Manufacturer: AFX Lighting
Product: Dexter LED Outdoor Wall Sconce
Product Number: AFX2091006
Finish: Black
Dimensions: W: 5.52" H 5.52"
Dark Sky Compliant: Yes

EXTERIOR COLORS & MATERIALS

OUTDO COUNTRY CLUB DRIVE, LLC

1600-1660 SCHOOL STREET SITE

TOWN OF MORAGA, CA

MOFD STAMP

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School Street Townhomes
Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision for Condominiums (Sub-01-26) and Density Bonus

Planning Commission | July 7, 2026

Presented by:
Brian Horn, Principal Planner

Applicant:
Outdo Country Club Drive, LLC

Requested Action

Project summary

49-unit townhome condominium development, including five moderate-income inclusionary ownership units and associated site improvements at 1600, 1620, 1640 and 1660 School Street.

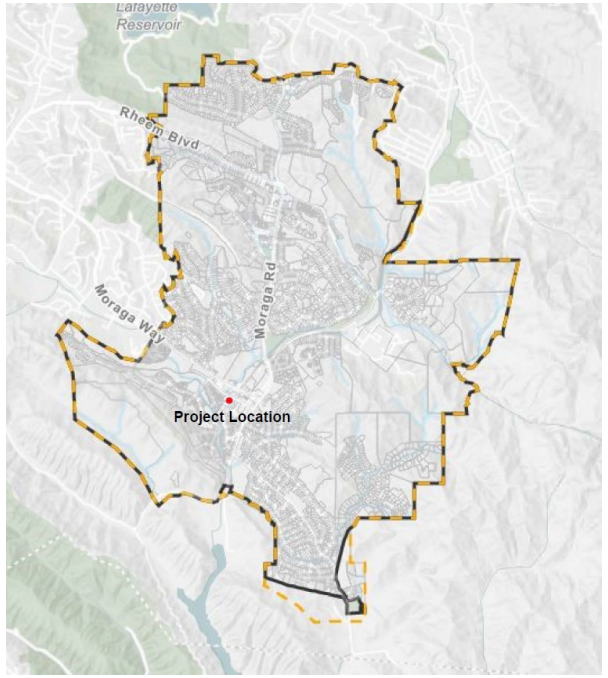
Approvals before the Planning Commission

- Design Review (DR-05-25)
- Grading Permit (GR-01-26)
- Subdivision Map for Condominiums (SUB-01-26)
- Density Bonus concession and waiver requests

Staff Recommendation

Adopt the resolution approving the project, subject to conditions of approval.

Project Location



Vicinity Map

Aerial view of project area

Site context

- Four parcels at 1600, 1620, 1640, and 1660 School Street
- Approximately 2.95 acres
- Within Moraga Center Specific Plan (MCSP) Area
- Site is bounded by School Street to the east and Country Club Drive to the North.
- Adjacent to The Saklan School (South), Moraga Country Club residences, Laguna Creek, and the Lafayette-Moraga Regional Trail (West)

No work is proposed in Laguna Creek or to the Lafayette Moraga Trail segment along the creek.

Existing Office Development

View from School Street

View from Country Club Drive

Trail access / rear area

Office building near trail

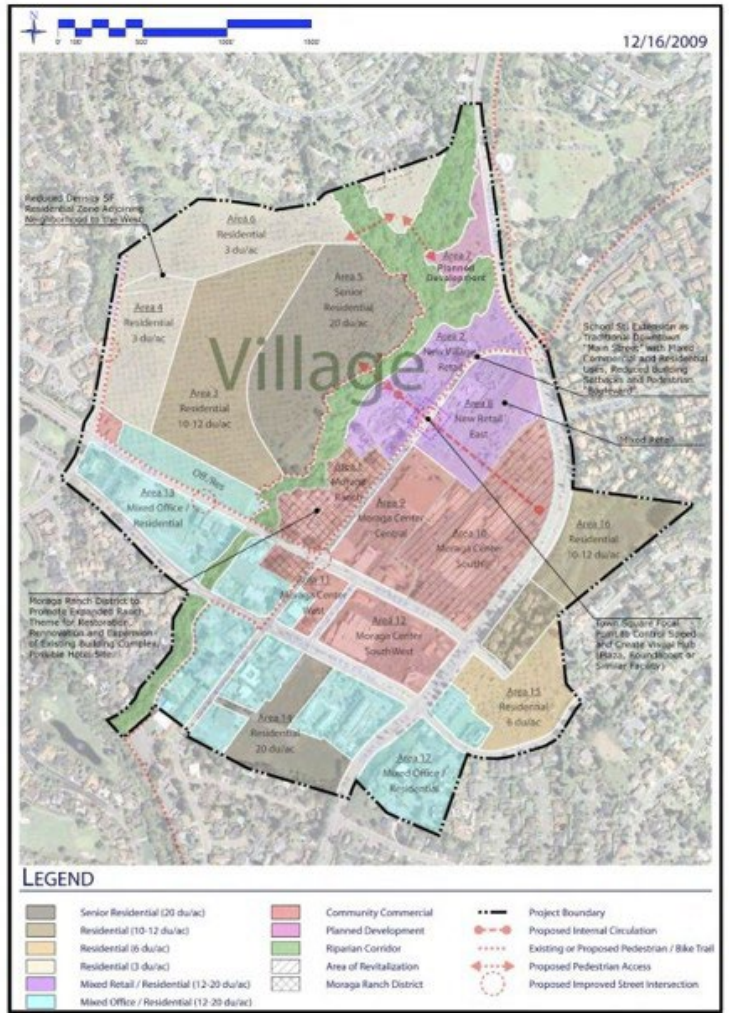
- Four single-story office buildings with a shared parking lot
- Site includes existing mature trees, including 13 redwoods, and landscaping planted as part of the office development
- Laguna Creek and the Lafayette Moraga Regional Trail are along the western portion of the property
- Existing buildings and associated site improvements would be removed

Background

2010	Moraga Center Specific Plan (MCSP) designates site for Mixed Office/Residential use.
2020	MCSP implementing zoning establishes the MCSP MU-OR district.
2023	Housing Element update increases maximum density to 24 du/ac and identifies the site as Housing Opportunity Site F-3.
2025	Town approves a 66-unit multifamily project on a portion of the project site; only one project can be built.
2025–26	Current 49-unit townhome application is reviewed under objective standards and state housing law.

Current zoning permits residential development at 12–24 dwelling units per acre; proposed density is 16.6 du/ac.

Figure 4-2: MCSP Illustrative Land Use and Circulation Plan



State Housing Law Framework

Housing Element / Regional Housing Needs Allocation (RHNA)

- State law requires the housing element to be updated every eight years
- As part of that process, a jurisdiction must demonstrate how it will accommodate its assigned RHNA across all income levels

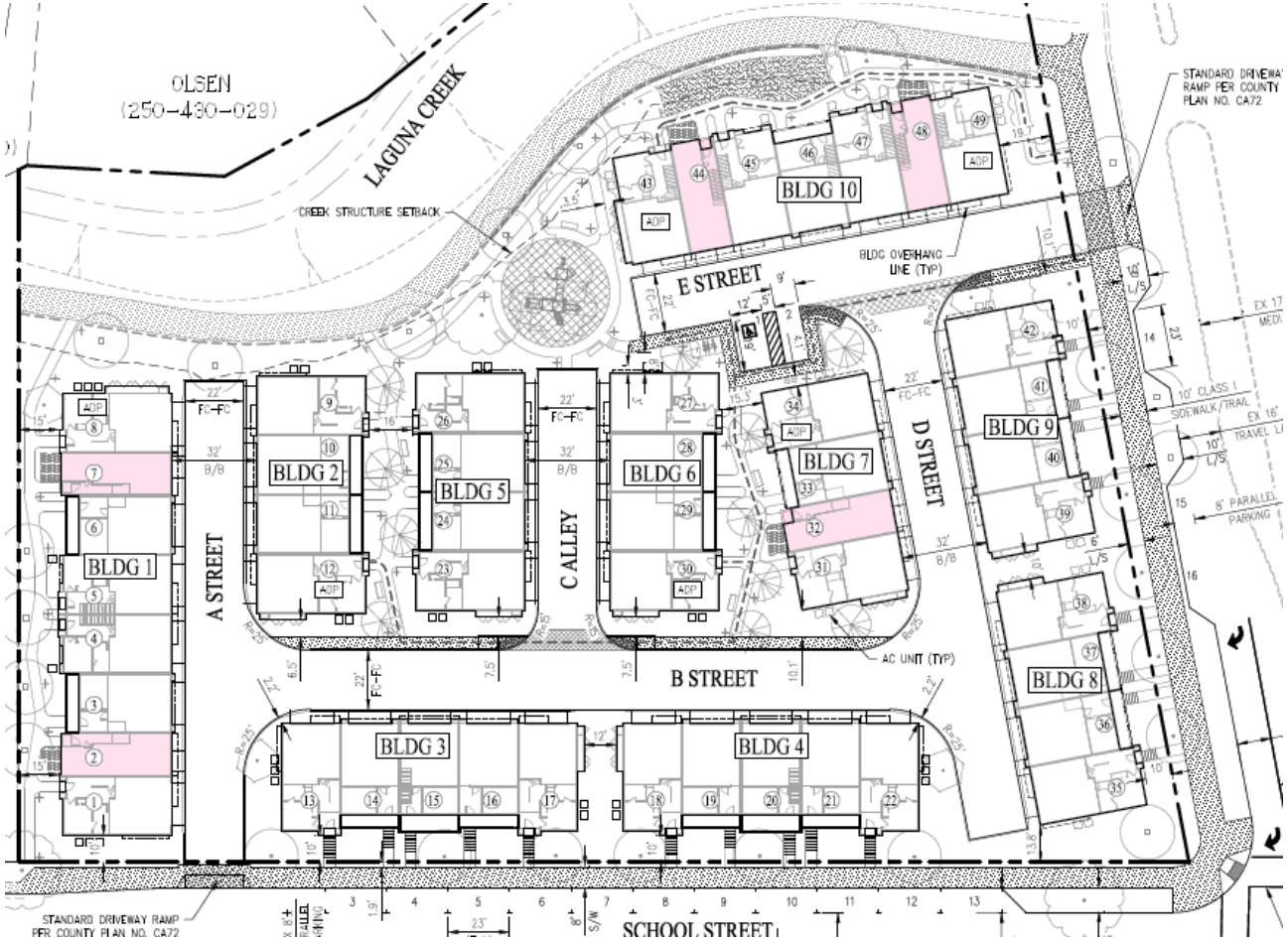
SB 330

- Limits the number of public hearings to five
- Restricts the Town's ability to deny housing projects consistent with zoning and the General Plan
- No Net Loss findings required when a project produces fewer units than anticipated for the site

Housing Accountability Act

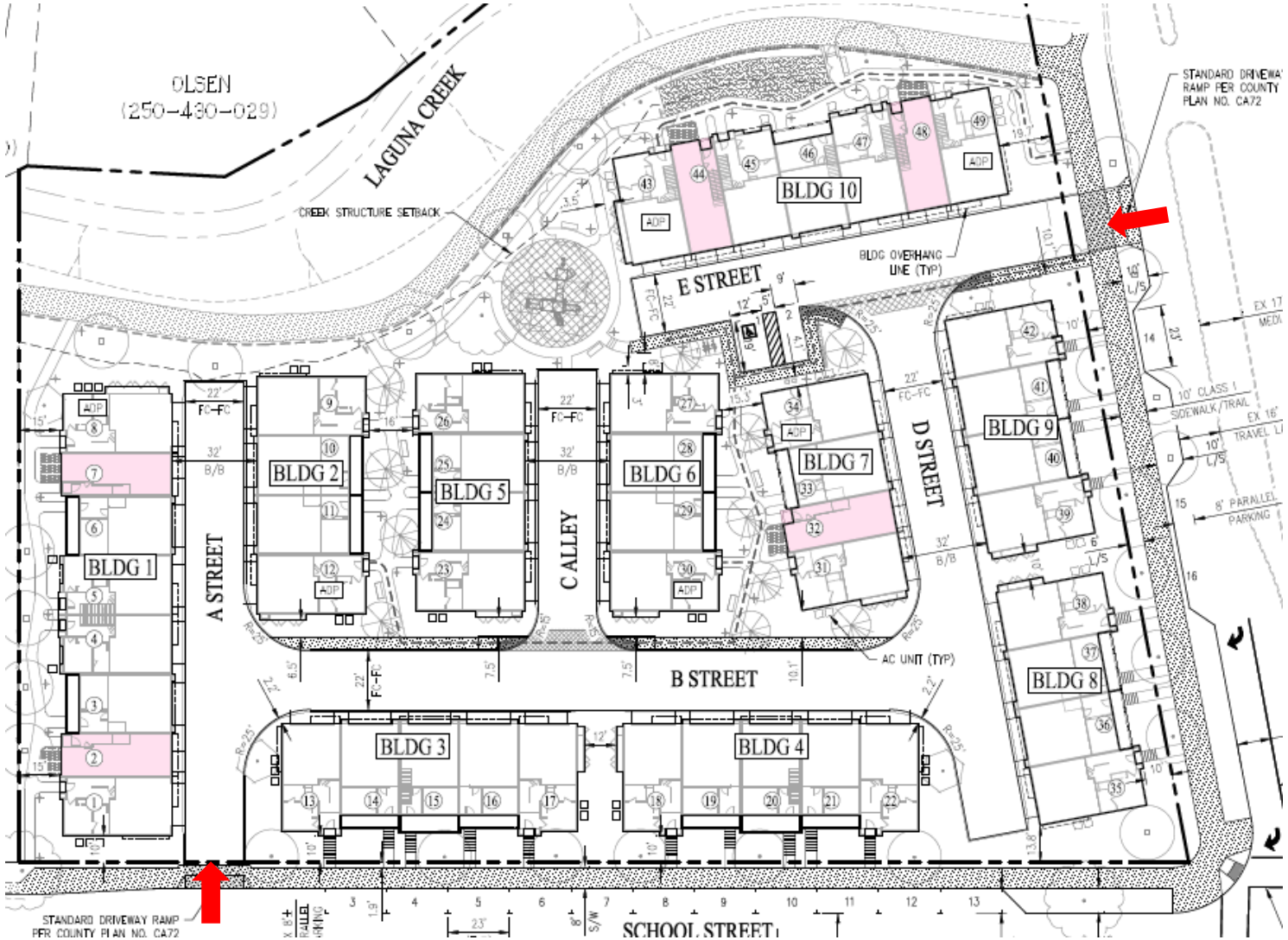
- A housing project that complies with objective design standards generally may not be denied or reduced in density
- Denial requires specific written findings supported by substantial evidence
- Staff does not believe denial findings can be made

Site Plan and Project Details



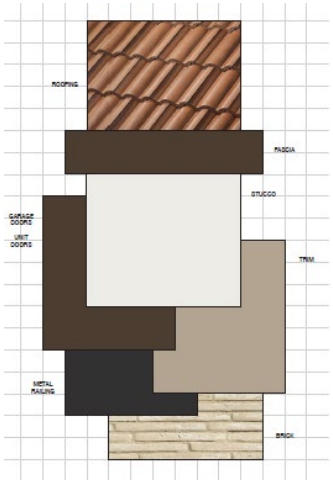
Total units	49
Affordable units	5 moderate-income (units shown in pink)
Setbacks	10’ from Country Club Dr. and School St. 15’ from The Saklan School P/L 66’ to rear property line Approx 8’6” to improved Lafayette Moraga Regional Trail
Buildings	10 buildings, 4–8 units each (Five building types)
Height/Stories	39’ 11” to 41’ 8” (3 stories)
Unit mix	25 three-bedroom; 24 four-bedroom
Unit size	1,881 to 2,127 sqft for market rate units 1,438 sqft for moderate income units
Parking	114 spaces provided; 111 required 98 garage spaces (two per unit) 2 on-site spaces 14 on-street spaces

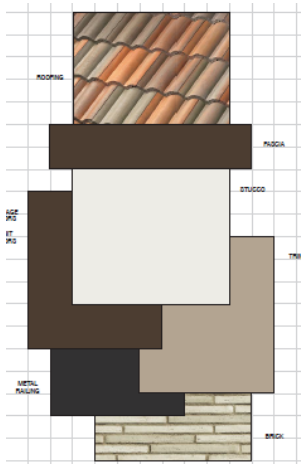
Site Plan and Circulation



- Two access driveways: School Street and Country Club Drive
- Five internal streets
- Circulation reviewed by Public Works and MOFD
- Flexible lawn space behind Building 10 and a play structure
- Play structure at end of E Street and C Alley
- Pedestrian walkways and landscaping throughout the site

Architecture and Design





- Five building designs
- Spanish-style architecture
- Stucco walls, manufactured brick accents, concrete tile roofs
- Primarily hip roofs with smaller gables
- Patios and decks with black metal railings
- Dark-sky compliant exterior lighting

Trees, landscaping, grading, and stormwater

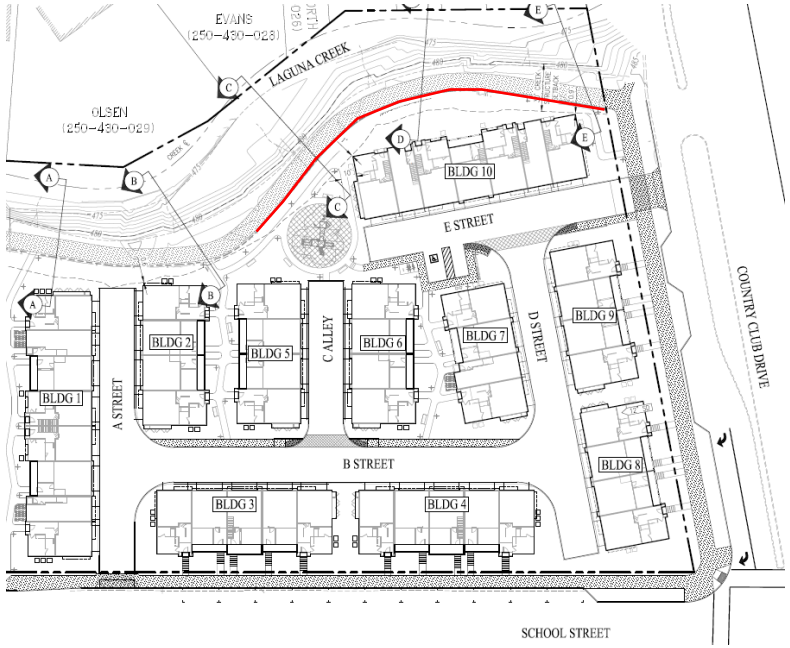
Trees and landscaping

- 41 trees removed, including 13 redwoods planted as part of the office development
- 38 replacement trees proposed
- Plant palette is generally consistent with Town Design Guidelines; plants are noninvasive and fire resistant
- Additional screening along The Saklan School property line, including four strawberry trees and flowering plum.

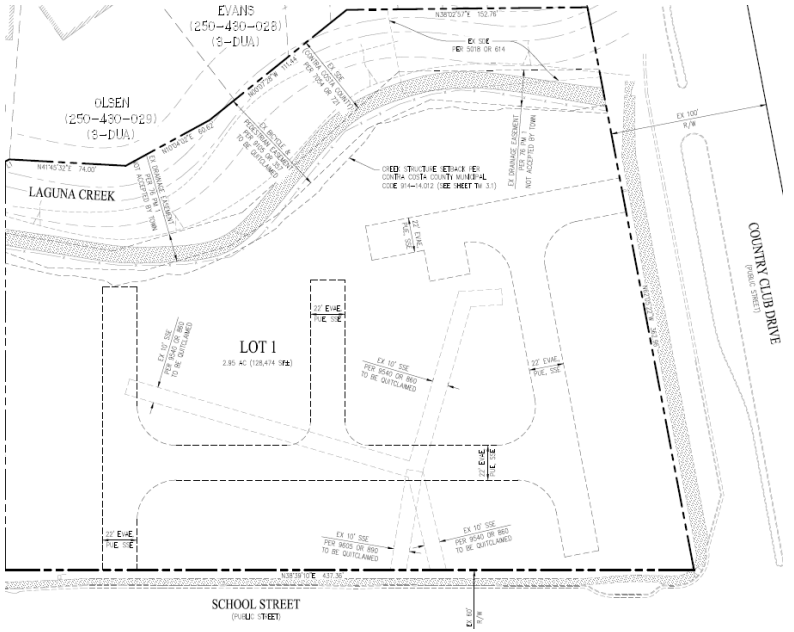
Grading and stormwater

- 6,600 cubic yards total: 750 cy cut / 5,850 cy fill
- Geotechnical Report prepared for previous project at site (2024). Geotech provided memo confirming previous recommendations are applicable to this project
- Site remains generally level
- Stormwater facilities to comply with C.3 requirements
- Treatment through Contra Costa County Regional Alternative Compliance System (RAC)

Condominium Map, Creek Setback and Trail Easement



Creek Setback and Retaining Wall



Condominium Map

Creek setback

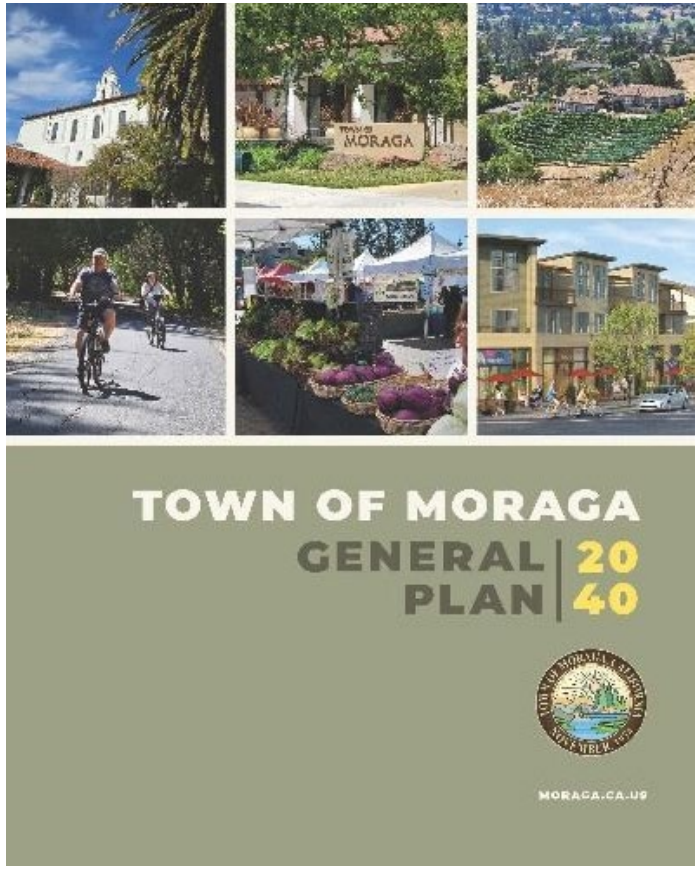
- 30-foot creek structure setback recorded on Final Map
- Buildings, driveways, and parking outside setback
- Low retaining wall up to 3 feet high within setback; supported by geotechnical and biological review to be located within the setback.

Condominium Map

- Final Map establishes, common area, access and easements
- Trail easement to be re-recorded to align with the physical trail
- No trail modifications proposed

Policy Consistency

The project implements General Plan and MCSP housing and infill policies.



General Plan 2040

- Directs growth and higher-density residential development to Moraga Center (Policies LU1.1, LU4.3, LU4.4 and CD4-6)
- Supports housing variety and “missing middle” housing, such as townhouses. (Policy H2.1)
- Encourages infill housing on underutilized sites (Policy H1.2)

Moraga Center Specific Plan

- Supports a mixed commercial/residential neighborhood around Moraga Center
- Allows higher-density infill and mixed-use development
- Emphasizes pedestrian, bicycle, and transit connections

Objective Design Standards and Density Bonus

Objective Design Standards

- MCSP MU-OR development standards
- Moraga Center design requirements
- Affordable housing standards
- Moraga Design Guidelines Chapters 7 and 11
- Objective Design Standards Analysis is in Attachment C of staff report
- Project does not comply with two ODS

State Density Bonus Law

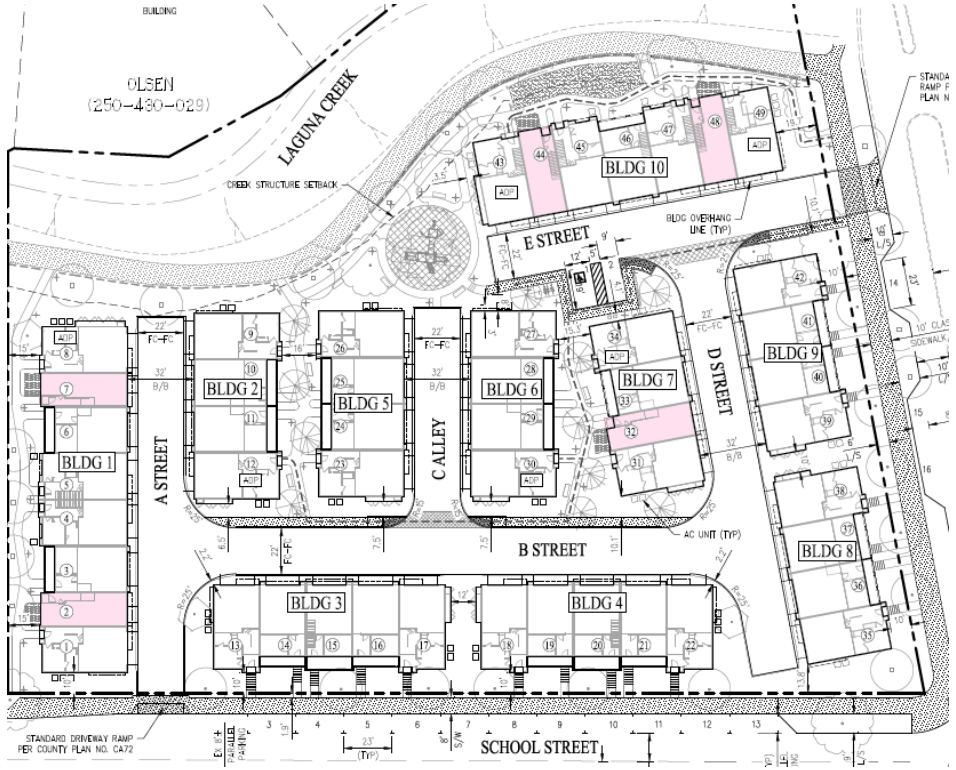
- By providing five moderate-income units, the project qualifies for one concession and unlimited waivers

Concessions and Waivers Requested

1. Inclusionary bedroom-count comparability
   → Density Bonus concession requested

2. Minimum building separation for three-story buildings
   → Density Bonus waiver requested

Density Bonus Concession and Waiver



Concession: Inclusionary unit bedroom mix

A concession is a modification of a development standard that reduces the cost of providing affordable housing

Standard: Inclusionary units must be comparable to market-rate units in bedroom count

Request: All five moderate-income units would be three-bedroom units

Applicant states this reduces project cost by approximately $362,300

Must be granted unless the concession would:

- Not result in a cost reduction
- Cause a public health or safety problem
- Cause an environmental problem
- Harm historical property
- Be contrary to law

Staff does not believe findings can be made to deny the concession.

Waiver: Building separation

A waiver is a modification of a development standard that would otherwise preclude construction of a project at its permitted density

Standard: 35-foot separation between three-story buildings

Request: Waiver of building separation requirements ranging from approximately 10 to 32 feet

Waiver must be granted unless it would:

- Cause a public health or safety problem
- Cause an environmental problem
- Harm historical property
- Be contrary to law

Staff does not believe findings can be made to deny the waiver

- The project will be producing less units than anticipated for the site in the 6th Cycle Housing Element.

- Housing Opportunity Site F-3:
  - Realistic capacity of 56 units
  - 28 Lower income units
  - 28 Above moderate-income units

- Proposed:
  - 49 units
  - 44 Above moderate-income units
  - 5 Moderate income

- RHNA Buffer:
  - 114 Low-income units
  - 87 Moderate-income units
  - 483 Above Moderate units

Table 4-3: Capacity to Meet the RHNA by Income Category

Site Type	Income Category: Low/ Very Low	Moderate	Above Moderate	TOTAL
Entitled Projects (Development Pipeline)	0	15	210	225
Housing Opportunity Sites				
Vacant, zoned for Low Density Residential	0	0	242	242
Vacant, zoned for Medium Density Residential	0	18	182	200
Vacant, zoned for High Density Residential	109	210	98	417
Vacant, zoned for Mixed Use	154	0	61	215
Non-Vacant, zoned for Mixed Use	341	0	130	471
Accessory Dwelling Units	11	16	5	32
TOTAL	**615**	**259**	**928**	**1,802**
RHNA	501	172	445	1,118
Buffer	+114	+87	+483	+684
Percent Buffer for Lower Income Sites	23%			

Source: Barry Miller Consulting, 2022. See Appendix B for detailed inventory

No Net Loss

- Findings:
  - Reduction is consistent with GP/HE:
    - Project is within 12-24 density range and consistent with GP/HE policies.
  - Adequate sites remain to meet housing need at each income level:
    - Other entitled low-income units would increase the 114-unit RHNA buffer by 12, however, even without additional entitled units, the loss of 28 units at this site would be covered by the RHNA buffer.
    - 28 above moderate-income units were anticipated for the site and 44 will be provided.

No Net Loss findings are included in the Resolution

Transportation

• A Traffic Impact Study was prepared in 2024 for the previous 66-unit apartment project, and a supplemental transportation memorandum was prepared assessing the townhome project in 2026

• Project is in a Traffic Analysis Zone (TAZ) where home-based Vehicle Miles Traveled (VMT) is at least 15% below the countywide average

• Intersections studied are expected to operate at acceptable Level of Service (LOS) after project construction

• School drop-off/pick-up conditions were studied, and the project is not expected to substantially affect existing school circulation

Frontage improvements (Conditions of Approval)

• Red curb near School Street driveway for sight distance

• Class I shared-use path along Country Club Drive

• Revised right-turn lane at Country Club Drive / School Street

• Curb extension, median refuge, and high-visibility crosswalk

• Construction traffic control and school coordination during construction

CEQA Section 15183 and CAPI Program EIR

The School Street Townhomes Project is consistent with a community plan and zoning as defined in CEQA guidelines, Section 15183, and does not require additional CEQA review because it is covered by the Comprehensive Advanced Planning Initiative (CAPI).

The following mitigation measures from the CAPI EIR will apply to the project, based on the 15183 Consistency Analysis.

Topic	Mitigation Measure	Conclusion
Air Quality	AQ-1; Tier 4 Final equipment will be used, and Air District construction measures will be implemented during construction	Less than significant with mitigation
Biological Resources	BIO-1, BIO-2, BIO-3; California Red Legged Frog, nesting bird, and bat avoidance measures will apply to the project.	Less than significant with mitigation
Noise	NOI-1; 12-foot temporary noise barrier at Saklan School boundary	Less than significant with mitigation
Wildfire	WFR-2 and WFR-3, construction wildfire risk reduction and project design wildfire risk reduction apply to the project; MOFD determined Fire Protection Plan not required (WFR-1) Emergency response and emergency evacuation would remain a significant and unavoidable impact as determined in the CAPI EIR.	No new or more severe impact

Conditions of Approval and Mitigation Measures

Housing and subdivision

- Affordable Housing Agreement (COA 10)
- Final Map showing common area, easements, trail easement alignment, and creek setback (COA 29-34)
- Condominium subdivision and maintenance responsibilities

Site and public improvements

- Transportation and frontage improvements (COA 35-46)
- Construction traffic control and school coordination (COAs 70-90)
- Stormwater / C.3 compliance and alternative compliance requirements COAs 52 – 66)
- Trail easement standards (COAs 21 - 24)
- Landscape installation and maintenance (COA 89)

Environmental and safety

- CAPI EIR mitigation measures
  - Air quality measures
  - Construction noise controls
  - Biological resource protection measures
  - Wildfire risk reduction measures
- MOFD, Public Works and Building Department requirements.
- Construction hours (COA 92)
- Permit timing and extension provisions (COA 100)

Planning Commission Action and Staff Recommendation

Recommended Action

Staff recommends that the Planning Commission adopt the resolution approving Design Review, Grading Permit, Subdivision for Condominiums, and Density Bonus for the development of 49 townhomes, including five moderate-income inclusionary units and associated improvements at 1600–1660 School Street.

Alternatives

- Adopt the Resolution with modifications; or
- Do not adopt the Resolution and provide direction to staff

Questions

TOWN OF MORAGA

PLANNING COMMISSION MEETING

July 7, 2026

Addendum(s) to Published Agenda

6: School Street Townhomes – Design Review (DR-05-25), Grading Permit (GR-01-26), Subdivision (Sub-01-26), and Density Bonus for the Development of 49 Townhomes Including Five Moderate Income Inclusionary Units and Associated Site Improvements Located at 1600, 1620, 1640, and 1660 School Street (APN 257-190-049, 050, 051, and 052)

Update Includes:

- Public Communications received as of 4:30 before the Meeting.

From: Susan Mele
To: Susan Mele
Subject: FW: Proposed new development
Date: Monday, July 6, 2026 1:20:13 PM

From: Mary Hotten <mjhotten@gmail.com>
Sent: Sunday, July 5, 2026 1:24 PM
To: Planning <planning@moraga.ca.us>
Subject: Proposed new development

You don't often get email from mjhotten@gmail.com. Learn why this is important

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the contents is safe.

To the planning commission,

My name is Mary Hotten and I am a resident of Moraga. I'm writing with regard to the proposed townhouse/condominium project on the corner of School street and Country Club Drive.
I have no objection to this project. I simply wish to ask that you consider saving the redwood trees that border the trail leading from Country Club Drive. There are four, and they are about 80 to 90
Feet tall. These trees are beautiful specimens and provide shade, ambience, wildlife protection, and help clean the air we breathe. They would also provide a privacy screen for future residents as well as trail walkers. They are living very close to the trail, and the posted plan says that the future structures will be 65 feet from the trail. I would hope that would mean the trees will be preserved.
However, the posted plan does not offer that information. Many redwoods will be lost due to their position on the existing property. But the four I refer to should be saved. I am asking you to make every effort to preserve these trees. They are not replaceable. And the developers should take responsibility for their preservation. You on the planning commission can make this happen.

Thank you for taking the time to read this request.

Most Sincerely

Mary Hotten
46 San Pablo Court.

Moraga.
925-482-7196
mjhotten@gmail.com

From: Jeff Lipsett
To: Planning
Subject: School Street Townhomes project (covering 1600, 1620, 1640, and 1660 School Street)
Date: Tuesday, July 7, 2026 12:52:11 PM

You don't often get email from jeff.lipsett@gmail.com. Learn why this is important

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Jeff Lipsett

12 Carnoustie

Moraga, CA 94556

415-517-4015

July 7, 2026

Moraga Planning Commission

Town of Moraga Planning Department

335 Rheem Blvd.

Moraga, CA 94556

Sent via email to: planning@moraga.ca.us

Subject: Serious Concerns Regarding Traffic Impact and Evacuation Safety for the Proposed School Street Townhomes Project

Dear Members of the Planning Commission,

I am writing to express my strong reservations and deep concerns regarding the proposed School Street Townhomes project (covering 1600, 1620, 1640, and 1660 School Street), which is scheduled for consideration by the Planning Commission this evening. While I understand the ongoing need for housing, the scale and design of this 49-unit development pose significant, unaddressed risks to local traffic circulation and public safety—specifically regarding wildfire and emergency evacuation routes.

1. Significant Increase in Localized Traffic Congestion

The introduction of 49 multi-bedroom, family-oriented townhomes will inevitably add a substantial volume of daily vehicular trips to a localized area already heavily utilized by residents, commuters, and recreationists.

- **Proximity to Key Corridors:** The project site sits immediately off Country Club Drive and School Street. This intersection is already a critical junction, and adding an estimated 114 parking spaces (including private garages and guest parking) will

severely degrade the level of service at nearby intersections.

- **Pedestrian and Cyclist Safety:** The site is immediately adjacent to the Lafayette-Moraga Regional Trail. With proposed structures planned as close as 1.9 feet from the trail, the influx of vehicle traffic turning into and out of the complex poses an elevated safety risk to the hundreds of pedestrians, runners, and cyclists who utilize this trail daily.

2. Critical Need for a Comprehensive Evacuation Route Study

Living in a high-fire-danger region like Moraga, emergency preparedness must be a foundational element of any major land-use decision.

- **Choke Points during an Emergency:** School Street and Country Club Drive serve as primary neighborhood pathways feeding into major arteries like Moraga Road and Saint Mary's Road. In the event of a fast-moving wildfire requiring a sudden, large-scale evacuation, these roads will quickly become dangerous choke points.

- **Compounding Density:** The town already approved a 66-unit apartment proposal in this same immediate vicinity, which remains in pre-construction. Whether this new townhome proposal is an alternative or an addition, the cumulative impact of such high-density residential development on our limited egress routes has not been safely vetted.

Conclusion and Requests

Before any votes are cast or approvals are granted for the School Street Townhomes project, I respectfully urge the Planning Commission to mandate the following:

1. **A Comprehensive Traffic Impact Analysis (TIA):** This study must evaluate the real-world impact of the multi-bedroom units on peak travel times, intersection delays, and the specific safety risks posed to the adjacent Lafayette-Moraga Trail.

2. **An Independent, Data-Driven Evacuation Route Study:** This study must simulate a worst-case emergency evacuation scenario, accounting for the cumulative density of all approved and proposed projects in the immediate area, to ensure that existing infrastructure can handle a rapid egress without trapping residents.

We cannot afford to prioritize development at the expense of community safety and mobility. I urge the Commission to defer a final decision on this project until these critical safety and infrastructure studies are completed and thoroughly reviewed by the public.

Thank you for your time, service, and dedication to keeping Moraga safe and livable.

Sincerely,

Jeff Lipsett

Subject: 49 units on School St./Country Club Dr.
From: Linda Reidt <lindareidt@comcast.net>
Date: 7/6/2026 1:54 PM
To: PlanningDepartment@Moraga.ca.us

Dear Planning Department:

Please reconsider not allowing 49 townhouse units on School St. for our semi-rural town. That project would greatly impact and clog School St., Country Club Dr. and Moraga Way, especially in an emergency evacuation. That many more people would not be able to get out as would many people south of there. You already know that some people will die and be unable to evacuate if we would have a large fire with wind.

This appears to be a bad choice for Saklan School plus the crowded parking already on School Street--go see; it's usually already full daily.

Many of us moved to Moraga for the semi-rural setting and space, and we do not want to lose that. By incorporating many years ago, we expected to control high density growth like this project. Please re-consider voting down this project for many reasons.

Sincerely,

Linda Reidt Linda Reidt

Moraga resident for 60 years.

July 7, 2026

By Email

Chair and Members, Planning Commission
c/o Town Clerk
Town of Moraga
329 Rheem Boulevard
Moraga, CA 94556
townclerk@moraga.ca.us
planning@moraga.ca.us

Re: School Street Townhomes (DRB-05-25, GR-01-26, SUB-01-26); CEQA Exemption Determination

Dear Chair and Members of the Planning Commission:

This office continues to represent the Saklan School, a pre-K through 8th grade independent school located at 1678 School Street, immediately adjacent to and south of the proposed School Street Townhomes Project ("Project"). The School writes to object to the staff's June 2026 "Environmental Consistency Checklist Pursuant to CEQA Guidelines Section 15183" and the associated determination that "no further review" under CEQA is required. As described further below, the revised Project still does not qualify for that exemption because the Town has again declined to perform the site-specific health risk assessment ("HRA") it requires. The Commission should decline to adopt the determination and direct a project-specific analysis and the appropriate CEQA document.

I. The Revised Project Still Lacks a Site-Specific HRA.

The School's January 14, 2025 appeal of the Project's original iteration, with its attached technical memorandum, established that a project-specific HRA is

required here. The memorandum found construction-related cancer risk and NOx concentrations at the School exceeding applicable thresholds, even assuming CARB Tier 4 Final equipment. We incorporate that analysis by reference. Not its central point is unchanged: Tier 4 equipment alone does not dispense with the need for a quantitative, project-specific HRA at a sensitive receptor immediately adjacent to the site.

The revisions to the Project do not cure that defect. Although changed from a 66-unit apartment to 49 townhomes, it still entails demolition, excavation, fill import, and roughly 33 months of construction immediately adjoining an operating school. The June 2026 Checklist again declines to perform a project-specific HRA, reasoning that because Tier 4 equipment will be used, "a project-specific HRA is not required." That restates the position challenged in 2025, without any modeling or risk calculation to support it. Yet CAPI EIR Mitigation Measure AQ-1 directs that construction TAC impacts be addressed "on a case-by-case basis" in light of project-specific characteristics and proximity to off-site receptors. The Town has not done so.

II. Section 15183 Streamlining Does Not Apply.

CEQA Guidelines Section 15183 dispenses with further review only absent project-specific significant effects "peculiar to the project or its site." (Guidelines § 15183.) The immediate adjacency of an operating elementary school, with a nearest building approximately ten feet from a shared property line, is such a condition. The CAPI EIR addressed air quality and health risks only at a programmatic level and never analyzed cancer risk or NOx at the School. The 2025 memorandum is substantial new information showing impacts more severe than the program-level analysis, supporting a fair argument of significance. (Sierra Club v. County of Sonoma (1992) 6 Cal.App.4th 1307.) The Checklist's own pages compound the defect: its air quality and hazards sections place the School "approximately 180 feet south of the project site," while its noise section models the School "approximately 10 feet" from the property line. An analysis that cannot consistently locate the adjacent sensitive receptor cannot support a no-further-review finding.

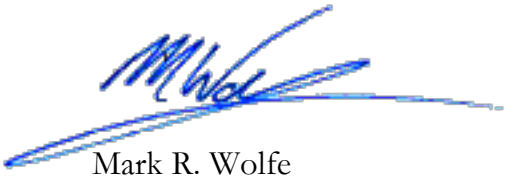
The Saklan School therefore requests that the Commission decline to adopt the Section 15183 determination and instead to direct a Project-specific HRA and the

appropriate CEQA document before any future action on the requested entitlements. The School is not opposed to residential development, and indeed welcomes the occupants of the affordable units; but it owes a duty to its students and faculty to ensure adequate CEQA compliance before two years of construction occurs immediately adjacent to its campus.

We appreciate the Commission's consideration of these issues.

Most sincerely,

M. R. WOLFE & ASSOCIATES, P.C



Mark R. Wolfe
On behalf of the Saklan School

MRW:

From: Susan Mele
To: Susan Mele
Subject: FW: Proposed townhome development on School Street X Country Club Drive
Date: Tuesday, July 7, 2026 2:17:41 PM

-----Original Message-----
From: Robin Siefkin <rwsiefkin@gmail.com>
Sent: Tuesday, July 7, 2026 1:48 PM
To: Brian Horn <bhorn@moraga.ca.us>
Cc: Robin W Siefkin <RWSiefkin@gmail.com>
Subject: Re: Proposed townhome development on School Street X Country Club Drive

[You don't often get email from rwsiefkin@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

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Re-sending
Sent from my iPad

> On Jul 7, 2026, at 12:55 PM, Robin Siefkin <rwsiefkin@gmail.com> wrote:
>
> Dear Mr. Hom,
>
> As I am aware that the issues of environmental and fire safety concerns have like been adequately addressed by others, I write to express deep concern about the commute issues that will be caused by this project.
>
> Moraga Way is already a huge challenge at commute hours. As you no doubt are aware, it can take 45 minutes to travel from Moraga Way X Moraga Road to the Orinda BART Station during the morning “slog.” If the developer truly cares about the community, it (they) will take steps to mitigate the long term impact of 49 additional housing units, which potentially will be occupied by 98+ drivers. A community shuttle, admittedly administered by the HOA, may help a lot. If such a shuttle could be made available to other residents (for a reasonable fee) the improvements to the situation would multiply. An increase in County Connection service would also helpful. However, I have little hope that will happen quickly.
>
> Of course, there are many other issues that come to mind: including the safety of school children commuting to JM and CP during the period of construction. I trust others will address those issues.
>
> Thank you.
>
> Robin Siefkin
> 30 year resident of Moraga
> Sent from my iPad

From: Susan Mele
To: Susan Mele
Subject: FW: Town houses
Date: Tuesday, July 7, 2026 12:04:30 PM

-----Original Message-----
From: JIM TASKER <joanjim10@aol.com>
Sent: Tuesday, July 7, 2026 9:41 AM
To: Planning <planning@moraga.ca.us>
Subject: Town houses

[You don't often get email from joanjim10@aol.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

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I don’t think Moraga is can handle 49 Moraga road and Moraga way is mot prepared for that kind of traffic most of those people will be driving out for their jobs, plus many other problems , we are a small town. Of course builders who don’t live here would love it amen Sent from my iPhone